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A Phenomenological Exploration of Academic Mediation and Modifiability: The Progression from GED® to PhD

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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by

Heather Hoyt

MS, Walden University, 2015

BS, Walden University, 2013

AA, Central Carolina, 1996

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

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Abstract

Researchers have identified the importance of academic mediation and modification within a student's thought process as it encourages academic achievement in early education, college, and advanced degrees. However, there is a gap in the research regarding the academic mediation and modification in individuals who have progressed from GED to PhD. The purpose of this study was to (a) explore the personal experiences of doctoral alumni on their achievement during the progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification which led to doctoral success; and (c) to contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD. Sociocultural theory and the theory of structural cognitive modifiability (SCM-MLE) were used to guide the study. Research questions were created to focus on the lived experiences of those who progressed from GED to PhD and any academic mediation and modification they experienced. Using a hermeneutic phenomenological design, the interviews of six doctoral alumni were analyzed using Hycner's phenomenological analysis. Results showed that each participant had the desire to make a change in their lives which led to passion and determination and that success depended on social connectedness. This study will be useful for mentors, educators, and policy makers in understanding how to best guide the GED student toward greater success. When the student progresses academically, self-confidence and self-esteem increase and society sees an improvement in unemployment rates, political stability, decreased crime rates, and lower public health care costs.

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Dedication

This research is dedicated to all individuals who began their path in a different way than the norm. Many factors lead to why you dropped out of high school, but you don't have to spend your life identifying with your actions early in life. This research shows that you can accomplish any goal with a change in your social environment and by allowing for an adjustment of your mindset, whether internal or by your circle of friends, family, and academic motivators. Each participant in this study radiated the courage and fight it took to show that it could be done, and they found a way to do it. If they can do it, you can do it, too.

I would also like to dedicate this research to my daddy, my stepfather Cecil Gregory (Greg) Alford. You were the only constant I had in my life growing up. Without you, I am unsure how my life would have been. You created a fire in me, even though I didn't realize it until well into adulthood. You've been gone for ten years, and it feels like yesterday because the pain will never fade. Your career later in life, as an oncology nurse, filled you with a passion for life every day. Watching you achieve this and achieve it well was the best example for me. I hope I make you proud. I will never forget "the man he didn't have to be."

Acknowledgments

I would like to first thank God for leading me through this life. Whether I saw my experiences in life as good or bad, every occurrence has led me to this point. Without the challenges, we would never appreciate success.

Second, I would like to thank my wonderful husband of seventeen years. He always encourages me and supports me no matter what goal I set for myself. When I fall short, he reminds me of my why and pushes me to get up and keep going. Les, you are such an amazing individual, and I am so blessed that God put you in my life. I would never want to do this life with anyone else. Thank you for being exactly who I need when I need you.

Thank you, Karen Thompson, PhD and James (Jim) Giffin. Years ago, Karen told me I should return to school to teach psychology. She saw something in me that, at the time, I could have never seen in myself. Karen, thank you for being my role model. I hope our friendship lasts a lifetime. Jim, you have been in my life for over 30 years. You encouraged me in my first career and have been a core supporter in this career. When I was discouraged, you pushed me, and I cannot thank you enough.

Last but certainly not least, thank you to every single friend near and far. I have such an amazing group of supporters. Though some of us may communicate solely on social media, even if you have congratulated me on this path once, that statement means so much to me.

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Chapter 1: Introduction to the Study

In 2019, 85% of high school students graduated nationally with a high school diploma, counting for the adjusted cohort graduation rate (Digest of Education Statistics, 2019). Though the number of high school dropouts has decreased steadily over the last 50 years, the needs of General Education Development (GED) recipients and their motivation to succeed further still exist. There are assorted reasons for dropping out of high school, but the core reasons are a loss of interest in education and a lack of parental and peer support (Camper et al., 2019).

Kozlin (2002) recognized two theories that have contributed most to the development of a mediational approach to learning: Vygotsky's sociocultural theory and Reuven Feuerstein's theory of structural cognitive modifiability using a mediated learning experience (SCM-MLE). Vygotsky believed that individuals learn through the encouragement of more knowledgeable members of society (Aslam et al., 2017). Feuerstein believed that all cognition, regardless of personality or behavior, can be adjusted or mediated by a teacher or mentor with purposeful intent specifically focused on the student or mentee (Andriola, 2021).

In this study, my goal was to understand the academic mediation and modification that occurred within individuals who accomplished the highest level of education despite dropping out of high school. Through qualitative hermeneutic phenomenological inquiry and analysis, I drew upon Vygotsky's sociocultural theory and Feuerstein's SCM-MLE to interpret and connect any academic mediation and modification which occurred in individuals who earned their GED then progressed to earn their PhD.

In this study, I developed greater insight into the value of academic mediation and modifiability in students who are at risk of, or who have already dropped out of high school. It showed the academic community that, though a student may seem lost to academia once they drop out, there is always a way to modify their belief system in a way that will lead to furthering their education, sometimes to the point of obtaining a PhD.

Social implications of the study affect students and society. When educators and mediators are able to guide the student toward a better educational outcome, the student shows increased self-confidence, which leads to increased self-esteem. As the student progresses academically, this self-confidence and self-esteem only increases (Cohen, 2014; Wienclaw, 2021). When society improves the education of its members, lower unemployment rates, political stability, decreased crime rates, lower public health care costs, and environmental improvement are more likely to occur (McMahon, 2009).

In this chapter, I will introduce the GED, along with the importance of academic mediation and modifiability, and I will focus explicitly on progressing from GED to PhD. I will introduce the current knowledge of the progression from GED to PhD. I will discuss the only scholarly research conducted thus far on the progression from GED to PhD. I will discuss the current literature and how it relates to this research and introduce the story of a student who made this progression. I will also examine the purpose of the research, research questions, and theoretical framework. I will describe how the research and data analysis took place, along with assumptions, scope and delimitations, and limitations. Finally, I will discuss the significance of the study and the social change that

could be created by gaining a deeper understanding of academic mediation and modifiability and the social implications of the adjustment of GED recipients.

Background

High school dropouts comprise approximately 15% of students (Digest of Education Statistics, 2019). One significant risk factor for dropping out of high school is when the parents quit high school (McDermott et al., 2019). Other reasons tend to be associated with either the need to become more responsible, poor performance in school, or social issues (Doll et al., 2013). Knowing that academic achievement offers more possibilities to students, educators and mentors need to know how to reach students who may be at risk of not completing their education. The further the academic community can encourage the student to go in higher education, the more the student will thrive and, in turn, offer positive societal change (Cohen, 2014, NCSES, 2020; Wienclaw, 2021).

In this study, I focused on the academic mediation and modification that occurs when the student is unsure of their ability to succeed. Focusing on individuals who progressed from GED to PhD may indicate what is needed to produce the most success. The current literature regarding the progression from GED to PhD is severely lacking. Through an exhaustive search in scholarly databases, I found no scholarly research on the theoretical descriptions of academic mediation and modification that impacted doctoral alumni who progressed from earning a GED to earning a PhD. In fact, the progression from GED to PhD seems to be a subject that has not been considered in the scholarly research area except for one study (Chaney et al., 2020), leaving a gap in the research.

Chaney et al. (2020) conducted a qualitative study that included one individual who had advanced from GED to PhD. The study focused on an interview that occurred the day Dr. Eric Thomas graduated with his PhD in Education from Michigan State University. Within the interview, which included an examination of the factors that led to Dr. Thomas' motivation to be successful, there were themes of avoiding challenges, facing challenges, being encouraged, accepting help, and work-life balance.

Chaney et al. (2020) did not discuss the academic mediation and modification perspective and only interviewed one person. Though this study was an interesting and important introduction to what it takes to progress from GED to PhD, there is a wide gap in the knowledge addressed in this study. Details within this research may add valuable knowledge to the literature regarding the use of academic mediation and modification practices by educators and mediators as they work with students who are at risk of dropping out of high school or not continuing their education.

Problem Statement

Students who did not complete high school may experience obstacles along the path toward higher education because they tend not to be straight out of high school and may have jobs and families (Rossi & Bower, 2018). While the GED is a step toward higher education, Jepsen et al. (2017) explained that it may not lead to a college degree. There is limited research on the progression from GED to PhD; therefore, more research is needed to understand the academic mediation and modification that occurred in individuals who started with a GED and progressed to a PhD. Educators and mediators

may use this knowledge to understand the need for continuous modification of the student's mindset while helping them understand that they can succeed academically.

Many students who drop out of high school arrive at a point in their lives where they understand the need to further their education in order to gain adequate employment (Liu, 2021). The GED tests for general knowledge but also for critical thinking skills, which are crucial in the growth and development of the individual throughout their career and adult life (Cohen, 2014). According to the Department of Education, in 2015, 540,535 students passed the GED test.

Several articles have been published related to the guidance of college entry by GED recipients (Jepson et al., 2017; Liu, 2021; Rossi & Bower, 2018; Trekson et al., 2020). Strategies used by educators in the transition from GED to college for adult learners and the demographics of students who enroll in college within 5 years after obtaining the GED have been the focus of the research (Hector-Mason et al., 2017; Rossi et al., 2018). Jepson et al. (2017) conducted a 5-year study on GED recipients. They found that even though obtaining a GED does lead to an increase in college enrollment, overall credits obtained are usually not enough to produce a degree and therefore does not make a significant difference in better employment or income. Hewitt et al. (2019) demonstrated why the GED is not equivalent to a high school diploma based on neuropsychological performance levels.

Difficulties experienced by the GED recipient in maintaining the desire for higher education assumes that progressing from GED to PhD is a nearly impossible feat (Hewitt et al., 2019; Jepson et al., 2017). On the subject of GED to PhD, one primary concern is

there is no statistical data on those who obtained a GED and progressed to a PhD (Kang, 2021). A doctorate is something that takes dedication and years to achieve (McBrayer et al., 2018). Research on those who progressed from GED to PhD will add to the literature by highlighting that academic success is possible and that the GED recipient should never be overlooked in academia.

Chaney et al. (2020) conducted a qualitative phenomenological study on one GED to PhD story. Chaney et al. (2020) focused on motivation, challenges, encouragement, accepting help, and work-life balance. The researchers did not view the experiences through a specific sociocultural lens. Instead, they used a wide lens, focusing on all aspects of the experience, leaving a wide gap in the research.

Within my research, I reviewed news articles and books written by or about individuals who had not completed high school for various reasons (Lebrun, 2013; La Luz, 2010). Still, at some point, they experienced the academic mediation and modification of their thought process that allowed them to realize that they could reengage with their education to the point of obtaining their GED and earning a PhD. Learning through a more knowledgeable member of society and modifying cognition within belief systems is especially important for individuals who need encouragement (Andriola, 2021; Aslam et al., 2017). This encouragement produces the understanding and self-acceptance that the student can be more successful and become confident to start the process from GED to PhD.

One example of GED to PhD is the story of Krista Lebrun, PhD (Lebrun, 2013). Krista dropped out of high school in the ninth grade. As she navigated life working jobs

that were either physically exhausting or paid little, her friends were having fun at parties, prom, and just being teenagers. People assumed Krista had quit school because she was a poor student or had gotten pregnant; neither was the case. She began to realize that she needed to improve her situation. Krista went to Meridian Community College to test for the GED. There she met Browning Rochefort, Director of Adult Education. Ms. Rochefort believed in Krista and made her believe in her potential. After obtaining her GED, she went back to work. Krista remembered how people reacted to her education and referred to the GED as the "good enough diploma." Again, she found herself looking to Ms. Rochefort, who encouraged her to take a few college classes to find out what she wanted to do. The 2 years it took Krista to get her associate's degree showed her how much she loved school and learning. She wanted to teach, so she kept going to college. After a BS in elementary education and teaching for a few years, she completed a master's degree in curriculum and instruction. She took extra classes in distance education, leading her to a higher-education career just as eLearning was becoming more prevalent. The encouragement of her then dean led her to complete her educational path with a PhD in instructional leadership and technology. Today Krista is the Director of eLearning at Meridian Community College, where she started her GED process many years ago.

An exploration of academic mediation and modification of doctoral alumni who obtained their GED but continued throughout the doctoral process may be used by educators and mediators to best to adjust the student's belief system to encourage them to continue their education. Krista's story is an example of the stories I sought within this

phenomenological study to discover each participant's experiences as they encountered academic mediation and modification.

Purpose of this Study

The purpose of this hermeneutic phenomenological study was to (a) explore the personal experiences of doctoral alumni on their achievement during the progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification, which led to doctoral success. This research will contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD.

Research Questions

The research questions that I used to guide this study were:

Research Question 1 (RQ1): What are the lived experiences of those who progressed from GED to PhD?

Research Question 2 (RQ2): What, if any, academic mediation and modification occurred within these lived experiences, based on Vygotsky's zone of proximal development and Feuerstein's SCM-MLE?

Theoretical Framework

According to Kozulin (2002), two theories that have contributed most to the development of a mediational approach to learning are the Vygotskian sociocultural theory and Feuerstein's SCM-MLE. Khanahmadi and Sarkhosh (2018) blend the two theories and suggested that guiding students to advance past what they would achieve on their own involves the intentional act of mediation.

Sociocultural theory states that individuals learn through the encouragement of more knowledgeable members of society or a mediator (Aslam et al., 2017; Vygotsky, 1978). Daneshfar and Moharami (2018) described Vygotsky's sociocultural theory as using psychological tools to mediate mental activities where these tools are internalized interactions resulting from cooperation with others. Karpov (2017) explained how this process creates student motivation, where they will seek out new information on their own and, in turn, become more intrinsic thinkers (Wetsch, 1985). Within Vygotsky's (1978) zone of proximal development (ZPD), the mediator uses scaffolding to guide the student when the student is ready to advance in order to help the student internalize the information more so than if the student is not ready to move beyond their current knowledge (Eun, 2018). It has been found that scaffolding produces more knowledge than traditional instruction involving lectures (Aslam et al., 2017). Cohen (2014), Liu (2021), and Treskon et al. (2020) all describe GED students as needing specific guidance in order to advance educationally. I used a sociocultural framework in this study to understand the mediation present within the participants' experiences during their progression from GED to PhD.

Feuerstein's SCM-MLE stated that all cognition, regardless of personality or behavior, can be adjusted or modified by a teacher or mediator with purposeful intent specifically focused on the student or mentee (Andriola, 2021; Feuerstein et al., 1988). Tzuriel (2021) explained that Feuerstein's SCM-MLE deals with the interaction between individuals and their social and cultural environment and its effects on intellectual development and cognitive modifiability. The basic assumption of SCM-MLE is that

plasticity and modifiability make up the human cognitive system. The main population that Feuerstein (1988) worked with were “severely culturally deprived” (Goldberg, 1991, p. 37) children who were Holocaust survivors. He chose this population because he wanted to help these children do more than simply survive; he wanted to prove that they could actually thrive (Feuerstein et al., 1988). Instead of waiting for the student to be prepared for learning, SCM-MLE teaches educators to offer opportunities to the learner for encouraged growth (Cornea & Todor, 2019; Todor & Gomoescu, 2019). SCM-MLE is a trainable and measurable device that can lead to success within the academic community (Andriola, 2021; The Feuerstein Institute, 2022). I used Feuerstein’s (1988) SCM-MLE framework in this study to understand further how the mediation of GED students and the modification of mindset can lead to enough academic success to lead to a PhD.

The social aspect of learning considers peer relationships and the student's relationship with the teacher or mediator, which is particularly important for the GED recipient to pursue further education (Hector-Mason et al., 2017; Jepson et al., 2017; Rossi et al., 2018). Understanding the student's abilities and readiness to learn, the mediator can position themselves between the stimuli and the student until they can accomplish a goal independently (Todor & Gomoescu, 2019). Khanahmadi and Sarkhosh (2018) brought the two theories together, mentioning that mediation is the core interest in guiding students to advance past what they would have achieved without the mediator, which is critical for the GED student in helping them advance to college and potentially seek the highest degree possible. In this study, I asked participants to describe their

experiences as they progressed from GED to PhD. I used data analysis of these experiences to determine if any academic mediation and/or modification occurred during this time, directly relating to Vygotsky's (1978) sociocultural theory and Feuerstein's (1988) SCM-MLE.

Nature of the Study

I conducted semistructured individual interviews with six doctoral alumni who have completed the capstone process. I used a hermeneutic phenomenological design. While a phenomenological design is used to understand by making sense of the data obtained, the hermeneutic phenomenological design is used to focus on participants' feelings (Dangal & Joshi, 2020). Dangal and Joshi (2020) described the hermeneutic circle as interpreting individual experiences, then moving to the whole experience and back again repeatedly until a deep interpretation is obtained. They explain that without each experience, the whole cannot be complete, and understanding each part separately and together gives a deeper meaning. Once a deep understanding is obtained, a phenomenological data analysis process can be conducted. Listening to doctoral alumni's oral accounts regarding themes of academic mediation and modification followed the phenomenological tradition. By conducting this research in that manner, I was able to understand how the adjustment in thinking, based on the theoretical perspectives of Vygotsky's (1978) sociocultural factor and Feuerstein's (1988) SCM-MLE, assisted in their progression from GED to PhD (Tzuriel, 2021). I conducted interviews using the Zoom platform. I used these face-to-face conferences to have a personal conversation while audio recording the interviews for later access. I manually transcribed the data

analysis, so the richness of each experience remained intact. After transcription, creating meaning and coding consisted of going back and forth to the interviews or transcribed data to ensure the interpretation remained consistent. During coding, themes emerged, and I used them to evaluate the similarities and differences of the participants' experiences guiding the research results.

Definitions

Adjusted cohort graduation rate: The graduation rate in students who entered the school in the ninth grade but minus students who left the school because of transfers, immigration, or death and plus students who transferred to the school (McFarland, 2017).

Doctoral Alumni: An individual who has completed all requirements within their program of study to achieve one of the highest academic degrees (Merriam-Webster, 2022a; Merriam-Webster, 2022b).

GED: The General Education Development is a series of tests taken by an individual who dropped out of high school and desires to further their education. The testing allows the student to display applied knowledge and skills, and when earned, the certificate is generally considered the equivalent of completing high school (Kaplan, n.d.)

Mediation: Mediation, within this research, refers to the Vygotskian view on learning with the help of a more knowledgeable other (Moll, 1990; Vygotsky, 1978). Mediation includes learning methods associated with scaffolding within the ZPD.

Modification: Modification, within this research, refers to Feuerstein's Structural Cognitive Modifiability using a Mediated Learning Experience (SCM-MLE), where any

individual has the potential to improve academically with the help of a mentor (Falik, 2019; Feuerstein, 1988).

PhD: PhD stands for Doctor of Philosophy and is the highest educational achievement, also referred to as a doctorate (Merriam-Webster, 2022c).

Assumptions

Reaching the goal of a doctorate must produce a great sense of satisfaction, especially for an individual who started with a GED. I assumed that doctoral alumni would be interested in talking about their journey, not only as a source of accomplishment but as an example of achieving a goal that may have seemed so out of reach. I also expected that by obtaining open and honest interview answers with detailed descriptions from doctorate alumni, the interviews would reveal any academic mediation and modifiability that may have occurred throughout their college journey. These assumptions were important to the study as I used them to guide the discussion, which produced a greater understanding of the academic mediation and modification which occurred for each participant and was important to their progression from GED to PhD.

Scope and Delimitations

The scope of this study included individuals who did not complete high school, earned a GED, and then completed a PhD. Age was not a concern as a person can experience the academic mediation and modification necessary to complete the progression from GED to PhD at any time in their lives. I attempted to obtain a balance of men and women to get the perspectives of both genders. Participation was limited to U.S. citizens who have lived in the United States since birth to ensure that each student's

educational experience was similar. Limiting participants to U.S. citizens also validated a cultural significance, as growing up in another country leads to additional considerations of the tradition of success, which can vary and produce different results. Following Amankwaa's (2016) recommendation to produce clear transferability, participants' stories included thick descriptions rich enough for the reader to envision themselves in the participant's position as they experienced it.

Limitations

A potential barrier when collecting primary data and interpreting the results came from my bias within the subject, as I am also accomplishing the goal of GED to PhD. However, no one story is the same, and every individual who achieved this goal has a very different narrative (Chaney, 2020; La Luz, 2010; Lebrun, 2013). Keeping in mind Roberts (2019) epoché/bracketing of preconceptions, it was vital to listen to my participant's perspectives in a neutral manner to obtain valid responses and interpretations. Threats to validity within phenomenological research can be credibility, transferability, dependability, and neutrality (Dangal & Joshi, 2020); therefore, I ensured that my interpretation was correct with follow-up confirmation of the interpretation of the substance of the interviews.

Sensitivities, at times, arose when discussing the participants' past and overcoming their obstacles. Though the ending result was positive, questions were relevant to their past, leading to somewhat uncomfortable feelings. Revealing the sensitive subjects came naturally through telling their story. I ensured that the participant

was safe and, if necessary, had access to someone who could assist them in working through those memories.

As recommended by Peoples (2021), I established dependability with verification emails in which the participants had the opportunity to ensure that what I had translated was what they genuinely felt and said. As recommended by Florczak (2021), I kept detailed notes to include all correspondence, transcripts, forms, journals, analyses, and any research-related documents, which also ensured confirmability. Amankwaa (2016) suggested that research questions be constructed to elicit rich responses that should produce strong interpretations and paint a vivid picture of the participant's experiences to ensure transferability.

Significance

To increase the population of higher education achievers, especially for high school dropouts, it is necessary to know the experiences of individuals and how to offer academic mediation and modification in a way that alters their belief system in their ability to achieve further academically (Goldberg, 1991; Kozulin, 2002). Within this study, my goal was to produce more knowledge relating to academic mediation and modifiability as they influence the progression from GED to PhD. This study may be useful for mentors, educators, and policy makers in understanding how to guide the student best, as academic mediation and modification may lead to increased academic participation, success, and completion.

Within higher education, certain benefits arise within society. McMahon (2009) points out that when more individuals within a community obtain a higher learning

degree, it will lead to the socio-economic betterment of that society as this change produces lower societal unemployment rates, political stability, decreased crime rates, lower public health care costs, and environmental improvement. Knowledge of this research may bring to light what a person can achieve with the help of academic mediation and modification.

Summary

The notion that one can obtain a PhD does not come easily, especially for a high school drop-out. In this study, my goal was to understand the academic mediation and modification that become present within individuals who accomplished the highest level of education despite dropping out of high school. The study results will be important to the academic community from early childhood through the doctoral level. The results of this study show an understanding of how critical academic mediation and modifiability are in making adjustments in the student when needed.

In Chapter 2, I will look at the literature relevant to the GED and the academic mediation and modifiability that it takes to progress from GED to PhD. Though there is almost no research on the subject, specifically, I will look at related theories and how they have worked with students in general. This chapter will begin with academic mediation and modifiability theories, including Vygotsky's (1978) sociocultural theory and Feuerstein's SCM-MLE (1988). Within each theory, I will look at the theory in general, then how it relates to youth, college, and doctorate students. I will examine key related variables and concepts related to the GED and the assistance required for individuals who begin with a GED and pursue and reach the highest educational level.

Chapter 2: Literature Review

The path to higher education often leads to greater financial success and the socioeconomic betterment of society (Wienclaw, 2021). The 15% of students who did not complete high school may have a more difficult time generating the courage needed to begin that path (Digest of Education Statistics, 2019; McMahon, 2009).

The primary focus of existing literature regarding GED recipients and higher education includes college enrollment and retention in the early college years. Hector-Mason et al. (2017) discussed strategies used by educators transitioning students from GED to college, and Rossi et al. (2018) researched the demographics of similar students. A 5-year longitudinal study showed that even though obtaining a GED does lead to an increase in college enrollment for GED holders, overall credits obtained are usually not enough to produce a degree and therefore does not make a significant difference in better employment or income (Jepson et al., 2017). Hewitt et al. (2019) demonstrated why the GED is not equivalent to a high school diploma based on neuropsychological performance levels.

The needs of the student who obtained the GED must be considered when working with students. Individuals who drop out of high school tend not to see the importance of academia (McDermott et al., 2019). Camper et al. (2019) pointed out that even intelligent students suffer from several risk factors that lead to dropping out of high school, including becoming bored, negative peer influences, and a desire to be independent. One major factor in the literature was the lack of cohesive support at home and school, where the parents and teachers work together to see student progress (Camper

et al., 2019). This lack of support intensified when the parents did not graduate high school (McDermott et al., 2019). These factors are addressed in existing literature focusing on college entry and early retention but not in the literature on later college retention, specifically in the bachelor's, master's, or doctorate levels (Hector-Mason et al., 2017; Jepson et al., 2017; Liu, 2021; Rossi & Bower, 2018; Trekson et al., 2020).

The only existing literature that I found on the progression from GED to PhD was conducted by Chaney et al. (2020). In this qualitative phenomenological study, researchers focused on an individual who had accomplished the progression of GED to PhD. Researchers conducted this study by using an interview with one participant. The themes presented in the interview analysis included avoiding and facing challenges, being encouraged, accepting help, and work-life balance. Many factors discussed within the interview could produce motivation for those who did not complete high school but are interested in obtaining the GED and pursuing further education. A gap was recognized within the study because the interview only focused on the general experience without a specific focus.

Although there is little research on what it takes to progress from GED to PhD, I found a discussion of general themes of success in academia, including sociocultural theories, specifically academic mediation and modification within the literature (Asmali, 2018; Khanahmadi et al., 2018). As displayed in the previous literature, academic mediation and modification give a platform for success in high school graduates throughout college, so it is understandable how they can assist in the progress of GED

recipients, though the focus on the reasons for dropping out of high school will create a greater need for guidance.

The purpose of this hermeneutic phenomenological study was to (a) explore the personal experiences of doctoral alumni on their achievement during the progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification, which led to doctoral success. This research will contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD.

Within this literature review, I will present a complex examination of supporting literature on the GED and the academic mediation and modifiability that it takes to progress from GED to PhD. After describing the strategy used to conduct an exhaustive literature review, I will look at the theories related to academic mediation and modifiability, including Vygotsky's (1978) sociocultural theory and Feuerstein's SCM-MLE (1988). I will explore each theory as it related to youth, college students, and doctorate program students. Then I will discuss several related key variables and concepts with the consideration of the GED and theories related to advancing toward and through the PhD. I will explore these topics to understand what it takes for a person who did not complete high school to achieve the highest level of education, a PhD. Finally, I will provide a summary of the literature review and key concepts, along with an introduction to the next chapter.

Literature Search Strategies

To research related literature, I used the Walden University Library. Databases within the library included PsycInfo, PsycArticles, Education Source, ERIC, Sage Journals, and Thoreau. I included a limited search of research dated back to 2016 to keep within eight years of completing this review; however, I expanded the search criteria for the theoretical and historical aspects of the GED.

Keywords included all aspects of moving from GED to PhD, stories of individuals, the mediation and modifiability involved, and sociocultural aspects. I searched for reasons for non-completion, motivation to restart their education and the resilience it took to complete the doctoral program. The keywords *GED* and *high school dropout* were primary search criteria along with *doctoral completion, higher education, college, university, graduate students, doctoral, doctorate, master's, post-secondary,* and *postsecondary*.

Theory searches involve *sociocultural theory, modifiability, persistence,* and *resilience* or *resiliency* or *resilient*. I adjusted the search to include *dynamic assessment, mediated learning, doctoral completion, higher education, college, university, graduate students, doctoral, doctorate, master's, post-secondary,* and *postsecondary*. General search terms are *success or achievement or performance or outcome or efficiency, success or achievement or performance or outcome or efficiency, encouragement, determination, college-bridge, locus of control, self-determination theory, scaffolding,* and *hermeneutic phenomenology*.

Since there were limited academic resources, I also found it necessary to use Google as a search tool when looking for news articles and social media posts to find individuals who have gone through the progression of dropping out of high school, completing their GED, and continuing to obtain their PhD. The keywords *GED to PhD* in a Google search produced many articles, either written about or by those who have progressed from GED to PhD. Although there was readily available access to these stories, there was only one scholarly research article regarding the progression from GED to PhD. This led to further research into GED to college entry. Although there were no available data on the college graduation rates of GED holders, only GED holders and their college enrollment (Jepson et al., 2017; Trekson et al., 2020), there was research on sociocultural factors and how they impact college advancement in general (Hector-Mason et al., 2017; Liu, 2021; Rossi & Bower, 2018). I reviewed the articles in the following theoretical framework to gain insight into what impact academic mediation and modification had on those who progressed from GED to PhD.

Theoretical Framework

Learning occurs when experiences lead to permanent changes in behavior and capability (Ambrose et al., 2010). The usage of learning theories assist in this change as they offer a way to predict and control these behaviors (Lefrancois, 2019). According to Kozulin (2002), two theories that have contributed most to the development of a mediational approach to learning are the Vygotskian sociocultural theory and Feuerstein's SCM-MLE. Sociocultural theory states that individuals learn through the encouragement of more knowledgeable members of society (Aslam et al., 2017;

Vygotsky, 1978). Daneshfar and Moharami (2018) described Vygotsky's sociocultural theory as using psychological tools to mediate mental activities where these tools are internalized interactions resulting from cooperation with others. Feuerstein's SCM-MLE states that all cognition, regardless of personality or behavior, can be adjusted or mediated by a teacher or mentor with purposeful intent specifically focused on the student or mentee (Andriola, 2021). Tzuriel (2021) explained that Feuerstein's SCM-MLE deals with the interaction between individuals and their social and cultural environment and its effects on intellectual development and cognitive modifiability. The basic assumption of the SCM-MLE is that the human cognitive system is characterized by plasticity and modifiability. Khanahmadi and Sarkhosh (2018) brought the two theories together, mentioning that mediation is the core interest in guiding students to advance past what they would achieve without the mediator.

Sociocultural Theory

Vygotsky (1978) denied that genetics and conditioning lead to learning, development, or exploration. Sociocultural theory suggests that learning comes from the mediation of a more knowledgeable role model, and when the more knowledgeable role model guides the learner into acquiring the tools needed to motivate, they become intrinsic thinkers (Wertsch, 1985). Once this occurs, the learner is motivated to seek out new information on their own (Karpov, 2017). Language is the center of all mediation; without language and the mediator's knowledge, higher learning cannot occur (Daneshfar & Moharami, 2018; Moll, 1990). Vygotsky believed that the individual's experience in the social world determines the thought process and individual's existence within society,

where group interaction leads to interpretations and perceptions (Jaramillo, 1996; Vygotsky, 1978). Luis Moll (1990) described schools as social settings that are specifically designed to modify thinking, as it takes this social setting and mediation by a more knowledgeable role model (the teacher) to develop the mind of the learner. Vygotsky's theory is not simply a social theory but an educational theory. His career as an educator turned psychologist influenced him to write about teaching methods and increasing comprehension when teaching disabled children (Moll, 1990; Vygotsky, 1978)

Vygotsky's ZPD occurs when a more knowledgeable person purposefully guides or uses scaffolding with the learner until the stage where they are ready to advance to the next step (Vygotsky, 1978). When the learner is prepared to learn, they will internalize the information on a grander scale than if they are not ready for the information (Eun, 2018; Vygotsky, 1978). Each individual will receive a different learning experience based on their specific needs. Daneshfar and Moharami (2018) described the difference between standardized mediation and non-standardized mediation, where standardized means to teach the students the same information simultaneously, whereas nonstandardized means to teach based on the needs of the individual. Focusing on specific needs can lead to different levels of instruction at various times, as needed by the individual. Jaramillo (1996) described this as a bottom-up teaching method as the teacher or mediator guides the student instead of demanding the instruction, and teaching in this manner depends on "cognitive, emotional, and external interactions" (p. 137).

An excellent example of the impact of this bottom-up teaching is displayed in a study conducted to determine the comparative effect of scaffolding versus traditional

lecture method instruction (Aslam et al., 2017). Results showed that students who received scaffolded instruction could understand and retain the information better than traditional lecture instruction. Aslam et al. (2017) agree that, with the guidance of a more experienced mentor, tasks that a learner cannot accomplish are attainable.

When a researcher applies a sociocultural framework to a study, they can discover the impact that academic mediation could have on participants. The guidance required by GED recipients as they progress in their academic goals involves a more significant consideration than that of a high school graduate who may have the skills required to advance in their education (Cohen, 2014; Liu, 2021; Treskon et al., 2020).

Sociocultural Theory in Youth

Throughout childhood, there are certain developmental stages that people pass through. Jean Piaget's theory of cognitive development states that a child will pass through set stages of mental development, and while some children will advance faster than others, the steps through each stage remain the same (Tisdall, 2019). These stages do not allow for learning when the child is not advanced enough to understand. Piaget's theory of cognitive development is much like Vygotsky's ZPD. To advance to the next step, the student needs to fully understand the prior learning stages (Vygotsky, 1978). While this is important to know for all stages of learning, it is essential in the early stages of life as the brain's physical development occurs (Vygotsky & Kozulin, 2011).

The ability to learn is associated with trust and attachment style (Bosemans et al., 2020; Bretherton, 1994). According to Vygotsky (1978), sociocultural aspects lead to learning; therefore, introducing Bowlby and Ainsworth's attachment theory is necessary.

Within attachment theory, there are four types of attachment: secure, avoidant, ambivalent-resistant, and disorganized-disoriented (Bretherton, 1994). Hertenstein (2013) described secure attachment as a child's trust in their mother. During Ainsworth's strange situation research, when the separation between the child and mother occurs, the child may be upset, but when the mother returns and soothes the child, the child is confident to explore the world (Bretherton, 1994). Bosmans et al. (2020) discussed how a child's bonds to their caregiver create the individual's future "interpersonal behavior" and the ability to relate to others.

The socioemotional state of the child learner is first and foremost since the student's trust in the educator and the desire to learn depends on peer empathy and encouragement (Leighton et al., 2018). When the child is connected and trusting, they desire to learn and open themselves up to the learning process (Lemkin et al., 2018). Leighton et al. (2018) point out that children want to be like their peers, and when they trust the process presented to them by the teacher, they can be more successful in learning. Within the learning aspects of attachment, it is important to be aware that attachment can shift from secure to insecure and back again based on occurrences within the individual's life (Bosmans et al., 2020); therefore, the educator should be aware that the ability to reach the student will vary accordingly leading to necessary adjustments to interacting with the student. Lemkin et al. (2018) followed up with research pointing to the risk factors for maltreated youth when graduating high school. Because maltreated youth tend to have less trust within their social arena, they lose the connectedness needed to succeed. The authors suggest that academic intervention can help these students meet

the challenges required to graduate high school. School clubs are one of the most remarkable interventions available in a high school setting. They can encourage maltreated youth to trust themselves and others and believe that they can meet their challenges (Lemkin et al., 2018).

Sociocultural Theory in College

Students who drop out of high school and subsequently obtain their GED are within a wide range of ZPD (Goggin et al., 2016). Some students get their GED with no desire to continue their education, as they may still be working through the reason(s) that they left high school (Camper et al., 2019; Doll et al., 2013; McDermott et al., 2019). Other students may get their GED because they have overcome the reason(s) they left high school and are ready to take their career or education further (Rossi & Bower, 2018). It is essential to be aware of this stage of development when encouraging the student to pursue further education since it is within this zone that mediation is best accomplished (Goggin et al., 2016).

Vygotsky understood that standard testing did not display the future educational success of the student but that ZPD focuses on teaching just above the ability level when the mediator guides the student to learn independently (Vygotsky, 1978). Goggin et al. (2016) described a program that does just this, as it takes at-risk high school seniors, adjusts their mindset, and prepares them for college. Within the study, the student is taught and assessed on critical thinking throughout the senior year during the program. Using ZPD, the program aims to focus on the ability of the student to move from one concept to another and help that student along the way with one-on-one learning. The

program also helps the student see the importance of and get excited about college. In the end, the student has guidance as they prepare for college (Goggin et al., 2016). This intervention program considers that students from low socioeconomic backgrounds may not be motivated to attend college. Reasons can be the lack of college graduates in the family, the lack of college importance within their peer group(s), or the feeling that college is unreachable and difficult. They may not do well with the standardized assessment leading to not qualifying for college entry. Many of these students may not attend college and may not even complete high school without this program (Goggin et al., 2016). Participants of the program have a retention rate similar to those on a standard college path. Using Vygotsky's ZPD, this program helps the mediator guide the student into the next steps to prepare them for a brighter future than once considered. This concept is similar to that found by other studies suggesting academic mediation encourages the enrollment of GED students; however, as the problem statement of this research addresses, there is no data to determine long-term enrollment or degrees obtained for GED recipients (Hector-Mason et al., 2017; Jepson et al., 2017; Rossi & Bower, 2018).

Critical thinking is paramount to the success of the college student. Researching with a critical thinking mindset determines success within upper-level college courses. Green (2018) called this "information literacy" and discussed the intermediate level of the first-year college student when it comes to research. To produce a more advanced-level researcher, the mentor must teach to the level of the student or meet them in their proximal zone. Again, Vygotsky's ZPD will assist the intermediate-level student in

gaining a solid foundation of learning while allowing the student to progress slowly through learning critical thinking during research and finding their scholarly voice.

Sociocultural Theory in a Doctorate Program

A doctorate or PhD requires the student to research a subject extensively. The dissertation is not a collaborative research project but one produced by motivation, determination, and grit (Walsh, 2020). The steps required to complete a PhD are numerous and complicated. A person cannot simply decide to do a writing project like a dissertation and tackle it independently (Breitenbach, 2019). Though it is a very individual project, it requires the guidance and leadership of a committee of individuals trained in the subject and methodology (Studebaker & Curtis, 2021). It also requires a social network of individuals supporting and encouraging the student (Meschitti, 2019).

Vygotsky's ZPD is extremely important within the relationships between committee members and students. Aslam et al. (2017) compared doctorate students taught with lectures and doctorate students taught using scaffolding. Students taught using scaffolding accomplished more than students taught through lectures. It is not only committee members that make this difference. Meschitti (2019) explored the doctoral experience and how peer support can make a difference in success. Often, individuals work on their dissertation research in groups within the doctoral community. Most times, these groups consist of students at different stages of their writing. Since it can take years to complete the dissertation process, these students can get to know each other well, leading to the support of new dissertation writers in a way they would not have been without the group. Since, as Vygotsky (1978) determined, the learner must learn from a

more knowledgeable mentor; peers who have been through what the new student is going through can give good advice and help the new student. Meschitti (2019) shared that this type of learning happens in small groups and that there is a constant transition of peer entry and peer exits based on the completion of the dissertation. As peers determine the student's state, they can assist that student in advancement by offering resources and encouragement.

Chaney et al. (2020) is the only study found relevant to the specific research of progressing from GED to PhD. While the authors did not specifically discuss sociocultural theory and ZPD, the association with encouragement and accepting help would lead to the assumption that the participant did experience mediation of his mindset. The authors describe this theme as the participant receiving specific forms of assistance from others where the participant stated that he accepted the need for help and acknowledged the areas where he was weak. This opened the participant to receive the mediation necessary for him to succeed both by his peers and the leadership in his program (Mechitti, 2019; Studebaker & Curtis, 2021).

Sociocultural theory was chosen for this research because, as stated by Aslam et al. (2017) and Goggins et al. (2016), with help from others, an individual can achieve more than they could alone. The reasons GED recipients become high school dropouts often lead to the inability to see that they can achieve more (Camper et al., 2019; Doll et al., 2013: McDermott et al., 2019). There is no existing literature on the progression from GED to PhD, with the exception of the Chaney et al. (2020) study. Understanding and using the socioemotional nature of development in learning and academic mediation

using scaffolding and ZPD could increase the confidence and self-efficacy needed for the GED recipient throughout the college journey.

SCM-MLE

Reuven Feuerstein believed that all things are possible, even when someone thinks they are not (Falik, 2019; Feuerstein et al., 1988). Feuerstein worked with children from poverty-stricken areas throughout his life, some of which were survivors of the Holocaust. These children suffered what Goldberg (1991, p. 37) described as "severely culturally deprived." Intelligence and the ability to learn are directly related to the sociocultural well-being of the individual (Jaramillo, 1996). Feuerstein chose this population to work with because he knew that they needed mediation to thrive in a world where they had learned to do little more than survive, much less thrive (Feuerstein et al., 1988). This work is the backbone of SCM-MLE, which shows that one can accomplish anything through a change in mindset (Falik, 2019). Feuerstein's SCM-MLE considers both contemporary and historical theories of the development of intelligence, which separates him from those before him (Sternberg, 2014). He stated, "When people say to me that it cannot be done, that it is impossible, that is when I start to work. I fight to show that it can be done and find a way to do it." (Falik, 2019, p. 10). Like Vygotsky's sociocultural theory of learning, SCM-MLE focuses directly on the social environment in which the individual grew up (Todor & Gomoescu, 2019). Feuerstein even considered this social development as early as birth, as learning starts as life begins (Cornea & Todor, 2019). As children develop, they are presented with situations that can facilitate learning or hinder it. When considering the delayed child, SCM-MLE can intervene to

encourage the individual to obtain skills that were never taught when they should have been (Cornea & Todor, 2019). Cognitive modifiability can change the way a person sees themselves intellectually. This thought process does not come from an external source but gently encourages internal changes, leading to a different view of the world and our place in it (Todor & Gomoescu, 2019).

One thing that differs from Vygotsky's ZPD is that modifiability does not wait for the individual to enter the time frame for which they are ready to learn but creates an environment that will encourage the learner to enter the time frame when the mediator is ready (Cornea & Todor, 2019). The Feuerstein method has two goals: to educate the mediator on encouraging cognitive growth and developing those skills by offering the learner opportunities for growth, leading to modification, acceptance, and educational optimism (Todor & Gomoescu, 2019). To meet these goals, the mediator intentionally creates stimuli but gently offers them in a creative way while filtering them, arranging them, adjusting them, and changing their frequency until the learner actively and naturally reacts to the stimuli (Todor & Gomoescu, 2019).

There are twelve components of Feuerstein's SCM-MLE, including having intentionality and reciprocity; transcendence; discovering meaning; feeling competent; knowing how to regulate and control one's behavior; learning to share; promoting individuation and psychological differentiation; seeing, establishing, and conquering goals; seeking innovation and complexity; being aware of modifiability; choosing for the optimistic alternative; and creating a sense of belonging (Andriola, 2021). Andriola (2021) described four of these components as universal, including intentionality and

reciprocity, transcendence, meaning, and modifiable awareness, stating that when these components are present between mediator and student, there is already “authentic mediation.”

Vygotsky’s dynamic assessment is the measuring tool used to determine mediation and ZPD (Daneshfar & Moharami, 2018). According to Feuerstein, there are three phases of the mental act: input, elaboration, and output. These three phases are represented in the steps of dynamic assessment where 1) input represents a pretest to see where the student is currently, 2) elaboration represents teaching using MLE, and 3) output represents a post-test to see where the student is currently after intervention (Daneshfar & Moharami, 2018; Yeomans, 2008). This measurement allows the mediator to analyze the student's ability, adjust instruction, and continue when the student has reached advanced ZPD and is ready to move on to the next step. The Feuerstein Institute offers training on dynamic assessment and Instrumental Enrichment (The Feuerstein Institute, 2022).

SCM-MLE in Youth

Most parents are excited to see their child's development to the point where they ensure the child meets developmental milestones set by theories like Erikson’s psychosocial development and Piaget’s cognitive development (Thomas, 2018). These are the children who typically come into school with the necessary vocabulary, skills, and emerging personalities to succeed (Cornea & Todor, 2019). However, the structure needed for success is not always present in the child's development. The child's initial learning is not always ideal for school entry. In this case, modification is necessary to

adjust the child's ability to learn and keep up with their peers. SCM-MLE was developed to help this child reframe their learning capability. A comfortable environment is the most crucial first step for this modification. As Cornea and Todor (2019) discussed, awareness of the child's ability is essential as preschoolers are not ready for abstract concepts but learn more through feelings and activities. The student's capability increases, allowing for more abstract concepts as the child advances and ages, creating the ability to make adjustments.

In their research, Cornea and Todor (2019) tested the changes in development and skills in preschool students using the Feuerstein method. The mediator observed the students during the research and discussed the task with them. It is noted that the mediator is there to encourage independence and self-confidence, leading to the children assessing themselves. When a child mastered the task, they were encouraged to help others. In the end, students were reevaluated. Compared to the control group, there was a noticeable increase in language comprehension, phonological ability, and how fast the students completed the tasks because of decreased impulsiveness (Cornea & Todor, 2019). The results of this study display the need for mediation at a young age.

SCM-MLE in College

College professors have a goal of leading the student toward finding solutions independently. Within SCM-MLE, the goal is for the student to react to external stimuli naturally (Todor & Gomoescu, 2019). When necessary, the mediator will position themselves between the stimuli and the student to guide the student toward the solution;

and by leading the student, it becomes a more natural reaction for the student to respond to the stimuli in the future, in the appropriate manner (Pruitt, 2011).

In contrast to high school, the college student prepares for a more complex ability to research and report. Modifiability considers that more complex tasks are needed to progress through college. College students are more intrinsically motivated to do well in their classes when working toward a goal (Goldman et al., 2017). Intrinsic learning is one of SCM-MLE's first steps, as it opens the students' eyes to what can be.

Goldberg (1991) described this as "purposeful direction" where the modification can lead to the student going "beyond himself." The teacher's responsibility is to present the course content with intentionality. According to Pruitt (2011), "by selecting, framing, and interpreting certain points of interest" (p. 228), the student will learn most effectively by creating a stretch of cognitive capacity in the student's mind. This stretch of cognitive capacity leaves the mind open to learning the next step, much like Vygotsky's ZPD (Eun, 2018).

Andriola (2021) evaluated the quality of an instrument to measure mediation, focusing on the four universal dimensions of Feuerstein's mediation, including intentionality and reciprocity, transcendence, meaning, and awareness of modifiability. The instrument was found to work in this study to measure these dimensions. Within this study, the importance of academic mediation and its ability to be measured was verified.

SCM-MLE in a Doctorate Program

The doctorate program is a process that requires the student to conduct independent research (McBrayer et al., 2018). This program differs from any previous

educational experience in that the student works alone to find their scholarly voice. The hard work that mediators have put in throughout will be on full display among the doctorate student; as the mediators helped the student develop, the students can now learn independently based on the stimuli provided by the outside world. Todor and Gomoescu (2019) describe mediating the self-change process as the student being aware of and able to see the potential for what can be. The dissertation process puts that to its ultimate test (Asmali, 2018).

Typically, the student has a committee of scholars who works with them throughout the process. One core committee member, typically the doctoral chair, acts as a mediator and guides the student throughout the process. The mediator's job is to teach the student to move from coursework to scholarly work (Asmali, 2018). The dissertation is a long process, and the relationship between the mediator and the student can determine success and completion. As Vygotsky's ZPD suggests, the mediator ensures that they guide the student when they are ready (Vygotsky, 1978). Within the doctorate program, the student is typically educationally and mentally prepared to proceed with the steps necessary to become a scholar. Therefore, the mediator's goal is to guide the student through the steps to completion. Asmali (2018) determined modifiability variables, based on Feuerstein's twelve components, necessary for success within the doctorate program. A few good suggestions are providing the student with examples of previous work to know what is expected, assistance with the dissertation topic, consistent feedback, and preparation for what is expected. One main issue found within the relationship between the mediator and student is the lack of availability to meet because of schedule conflicts.

Timing for the choice of doctoral mediator may not include getting to know the mediator during course work, so the relationship is new when the writing process begins. Asmali (2018) suggested that choosing the mediator during course work will allow the mediator and student to get to know one another before the dissertation begins. This connection encourages the trust that is necessary for the relationship.

Though the relationship between mediator and student is very different in the doctorate program, Feuerstein's SCM-MLE is important as it helps students advance from college student to scholar (Asmali, 2018). The student is more prepared to accept the modifications to their thinking than in their earlier educational years. The process is more methodological in that expectations are the same for each student. Ultimately, the student will have produced research they could not have created before mediation.

Chaney et al. (2020), again, the only study relevant to the specific research of progressing from GED to PhD, associates encouragement and accepting help with success. When a mindset modification occurs, the individual can see things differently. Since academic modification is a branch off of academic mediation, the same themes apply when the authors describe the participant as receiving specific forms of assistance from others and the participant stating that he accepted the need for help and acknowledged the areas where he was weak (Mechitti, 2019; Studebaker & Curtis, 2021).

SCM-MLE was chosen for this research because of its direct support of Vygotsky's sociocultural mediation theory and because, as described by Andriola (2021) and The Feuerstein Institute (2022), SCM-MLE is a trainable and measurable device within the academic environment. While Vygotsky's theory focuses on mediation using

scaffolding and ZPD, Feuerstein introduces a more complex view of the modification which occurs when the student experiences academic mediation. SCM-MLE does not wait for the student to be ready for instruction but creates the environment in which the student wants to learn (Cornea & Todor, 2019). The need for the GED student to experience mediation within the GED learning environment is crucial (Hector-Mason et al., 2017; Jepson et al., 2017; Rossi & Bower, 2018), as the mediator may not have the opportunity for the relationship after the learning is over; however, college professors, academic advisors, and others who are available to the student throughout their college careers face the same importance as they are the mediators who will be present as the student progresses throughout their college journey.

Literature Review Related to Key Variables and Concepts

General Education Development (GED)

The GED is commonly pursued by students who did not complete high school to seek employment, become promotable, or enter college to further their education. Most higher education institutions require that the student either have a high school diploma or a high school equivalency certificate, like the GED, to be admitted to their school (Jepson, 2017). The GED is the most widely accepted document of this sort as it tests for the four content areas of mathematical reasoning, reasoning through language arts, social studies, and science. Though the GED tests for general knowledge, it also tests for critical thinking skills, which are crucial in the growth and development of the individual throughout their career and adult life (Cohen, 2014).

Today you can choose to take the test at a testing site or, in some states, online (GED testing service, 2018). Currently, scores are given on a scale. If a passing grade is earned, there are three categories of passing grade 1) passing score 2) college-ready 3) college-ready + credit, where you may qualify for up to ten credits toward your college degree consisting of three credits in math, science, and social studies, and one credit in humanities based on your score in each content area (GED testing service, 2018). GED.com has accessibility to find GED classes and offers online classes, practice tests, flash cards of questions, a prep program, and sample tests (GED testing service, 2018).

History of the General Education Development (GED) Test

The Roosevelt administration created the GED in 1942 to assist military personnel returning from World War II, as many of them were not given the opportunity to complete high school prior to entering the military and after being deployed (Cohen, 2014; Quinn, 2003). It also eased the public's minds as they were less concerned during the drafting of teenagers as they had something to fall back on when they returned from the war. Upon returning, the test would show whether these individuals displayed the skills needed to gain employment or seek higher education (Ezzelle et al., 2009). Though military personnel who graduated from high school faced less unemployment, those who completed the GED experienced a more significant impact after their military career. They were more likely to obtain employment with higher pay than those who did not complete the GED test (Beusse, 1972). Colleges saw the GED as a positive and allowed entry into their programs because the GED was a sign that the GI Bill would pay student fees (Cohen, 2014). The test became available to civilians in 1947 but was not widely

accepted by every state until 1959 (Cohen, 2014). Historically, the GED has been a tool for those who do not finish high school to show that they are competent in the educational skills that a high school diploma would represent.

Drop Out Risks and Reasoning

Though the number of high school dropouts has decreased nearly steadily over the last 50 years, the needs of GED recipients and their motivation to succeed further still exist (Digest of Education Statistics, 2019). There are many reasons an individual chooses to drop out of school. Doll et al. (2013) suggested a few of these reasons, including gaining full-time employment at an early age, raising a family, getting into trouble, having poor grades, having a disability, or feeling like they do not belong in the high school world. McDermott et al. (2019, p. 276) determined that the four top reasons for dropping out of high school were “I had to make money to support my family,” “I was bored,” “School wasn’t relevant to my life,” and “I was failing too many classes.” Medium frequency responses included “Peer bullying,” “I was held back,” “No one cared if I attended,” “Mental health,” “Pregnancy,” and “I got into drugs.”

Camper et al. (2019) suggested that even gifted and talented students can fall into the category of high school dropouts. Though the student may be intelligent, the dissatisfaction with school often begins in elementary school. Risk factors include not being challenged in school, becoming bored, issues within the family, and negative influences within their social environment. The authors consider that puberty is also a factor leading to risk-taking behaviors such as dropping out of high school as the student desires to become independent and make decisions on their own (Camper et al., 2019).

Family participation in the child's education throughout grade school can contribute to academic success or lack thereof. When a parent, guardian, or role model is positively invested in the child's education, the child is encouraged in both the home and the classroom. Many students who drop out do not have the benefit of support in both areas working together (Camper et al., 2019). McDermott et al. (2019) added that when parents do not finish high school themselves, their children are at risk of repeating the same action. One other factor in dropping out is failing or being held back a grade. Berry (2019) suggested that when a student is held back, their self-image is damaged, leading to a negative view of their academic ability and other challenges that may arise in life.

GED Preparation

A community college in Chicago found that individuals who decide to take the GED test tend to be unemployed, 25 years or older, and minorities (Lui, 2021). As discussed, these individuals typically desire to obtain their GED to seek employment, become promotable within their current career, or further their education. Preparing for the GED consists of three options, adult education classes, practice tests, and self-study. In some states, it is a requirement that classes are taken, and many times, this consists of practice tests. Many public schools, community colleges, or adult education centers offer adult education classes (Cohen, 2014; McLaughlin et al., 2009). McLaughlin et al. (2009) found that those who participated in practice tests scored higher on the official test than those who did not take any practice tests, with the most significant correlation associated with the mathematical portion of the test.

Prison

More than 10% of the GEDs issued each year are earned by those serving in prison, and of those who have served prison time, the GED is the highest education for 30% of the previously incarcerated (Darolia et al., 2021). Individuals in prison can attend evening classes in both English and Spanish, and there are pre-GED classes for those with a less than ninth-grade level education to prepare them for GED programs (Cohen, 2014). Darolia et al. (2021) explained that education is one of the most beneficial rehabilitation programs available to prisoners. It leads to a better quality of life post-incarceration, less recidivism, less reliance on government programs, and more connection to the community. Fabelo (2002) agreed that the more a person earns post-incarceration, the lower the recidivism rates.

Military

Though the GED was developed for military members to show their ability to thrive in the workplace and further their education, today, the military has limited entry for those with a GED. GED.com explains the three tiers of entry regarding the GED.

Tier One Recruits. Tier one recruits have a minimum of either a high school diploma or a GED with 15 college credits. This tier makes up the majority of military personnel (GED testing service, 2020).

Tier Two Recruits. Tier two recruits have a GED only. Tier two recruit entry is limited to a very small percentage, and each branch sets its limits for this demographic. Tier two recruits can increase their chances of entry into the military by scoring more than 50% or higher on the Armed Services Vocational Aptitude Battery (ASVAB). Since

the ASVAB tests on certain areas and specific jobs, the higher the recruit scores in a particular section, the chances increase for recruitment if there is a need in that position (GED testing service, 2020).

Tier Three Recruits. Tier three recruits do not have a high school diploma or a GED. Though the GED began as a resource for military members, today, it is rare for tier three recruits to enter the military (GED testing service, 2020).

Post-GED to College Bridge

The GED is a path to further education. Obtaining the GED and not enrolling in college may not get the individual's desired results, as the GED holder may not see greater career opportunities than one who dropped out and did not obtain their GED (Treskon et al., 2020). A serious consideration for high school dropouts who obtain their GED is that the student, while possibly able to complete the work required of them, is one who likely does not conform to societal norms. This consideration may delay an employer from trusting that the student will be able to conform to the societal norms of the workplace (Cohen, 2014). This stigma is lifted when college courses are added to the individual's resume. The more college credits the student obtains, the more the ability to conform to the societal norm is revealed, and the student displays the ability to work in a structured workplace.

In a study conducted in New York State between 2005 and 2013, 12,701 students, who passed the GED, stated that they wanted to attend college, but only 6,131 followed through with enrollment within one year following obtaining their GED (Rossi & Bower, 2018). Liu (2021) discussed the factors that led to dropping out of high school become

barriers to commitment to further education like work, financial stress, and family responsibilities. Treskon et al. (2020) pointed out the number of high school graduates who go to college is substantially higher than that of GED recipients and that programs to assist and encourage the student are pertinent to GED students.

Bridge-to-College programs are available to students interested in furthering their education but unsure of their abilities (Treskon et al., 2020). Some programs focus on high school graduates who may be the first in their families to attend college or display difficulties transitioning from high school to college. Others focus on those who did not graduate high school and need assistance obtaining their GED and preparing for college life with more guidance than the average college student. Several states within the Midwest of the US adopted strategies to encourage adult education, including courses similar to college classes, to prepare the student for what is to come and catch them up on the knowledge required within the college classroom (Hector-Mason et al., 2017). A bridge program in Tennessee focuses on introducing students to the college experience before their freshman year. This program has produced better retention and greater academic success after the first year (Howard & Sharpe, 2019). Green Bay, Wisconsin's bridge-to-college program considers the specific career field the student is focused on within the lessons, offers individualized support to each student regarding career and educational interests, and offers support in enrollment in classes where students advance together to ensure peer groups remain the same. This program increased GED completion attendance by 11.7 percent and college enrollment by 8.5 percent. (Treskon et al., 2020).

During the introduction to college, each student needs to be aware of the available assistance. Tufue et al. (2019) found that students were unaware of and did not use many support systems offered to them by the college they attended. Being more aware of the usefulness of support systems like learning and counseling services can significantly impact the attrition rate within the first year of college (Tufue et al., 2019).

Self Determination, Locus of Control, and Intrinsic Motivation

When an individual is self-determined, the individual's motivation is so internal that the actions created are intentional and controlled (Link, 2018). The goal of setting the student on the path from GED to PhD involves an adjustment of the individual's self-determination and internal locus of control. As sociocultural theory and SCM-MLE point out, the student can achieve the goal but will need mediation to understand that they can be successful (Andriola, 2021; Aslam et al., 2017). The locus of control shifts when the student learns to take responsibility for their actions in any case of success or failure. In the case of failure, the individual can adjust the behavior to create success. Intrinsic motivation happens when the individual decides on their own to accomplish a goal. No one tells them to do so, and no external influence provokes the change. It is genuinely a desire or passion that drives the student. Once the student understands their ability, the transition and motivation become internally intentional (Link, 2018). Goldman et al. (2017) pointed out that intrinsic motivation happens when an individual's psychological needs are met during their educational path. While seeking a GED can be guided by the mentor and sought out by the student extrinsically, intrinsic motivation becomes more critical as the student moves through higher education (Shin et al., 2022). Ultimately, the

desire to become a doctorate recipient and follow through with the doctoral process can only happen by being a self-determined individual with an internal locus of control and intrinsic motivation mindset (De Clercq et al., 2021).

The timeframe surrounding the student obtaining the GED and the bridge-to-college adjustment is crucial to shifting the student's mindset from extrinsic to intrinsic (Corpus et al., 2020). The mentor will consider the student's values, needs, and identity (Link, 2018). Adjustment at this stage sets the student on a college path where they are doing what they desire because they desire it, which will create more success (Corpus et al., 2020). An open pedagogy, where student engagement within the instruction is the focus, instead of a controlled method of instruction with stern lectures, leads to a more intrinsically motivated student (Werth & Williams, 2021). Link (2018) stated a few benefits of student autonomy including staying in school, having increased creativity, appreciating challenges, developing better emotionality, and performing better academically.

Doctorate Completion

The National Center for Science and Engineering Statistics (2020) found that 55,283 individuals received their doctorate in 2020. There is a steady increase in doctorate recipients who, at one time, were enrolled in community college (NCSES, 2020). As discussed in the theoretical framework of this literature review, support and guidance by the mentor or chair is the most critical predictor of completion. Communication, connection, consistency, and intentionality stand out within prior research. There is an emphasis on the importance of support services offered to doctorate

students as a factor toward successful completion (Breitenbach, 2019; McCray & Joseph-Richard, 2020; Studebaker & Curtis, 2021).

Considering all that it takes to lead the high school dropout through the GED process and into college, this support may be enough to set them on a trajectory toward success as long as that support remains consistent (Aslam et al., 2017). Most factors involved in the motivation toward success relate to the GED process and college readiness and create a more self-determined and intrinsically minded student ready for the growth that a college education can offer (De Clercq et al., 2021).

Teaching, Counseling, and Mentorship Considerations

"You must believe that human beings can be changed" (Goldberg, 1991, p 38).

When considering how teachers, academic advisors, counselors, and mentors can lead a student to change their mindset and believe in themselves in a more significant way, that individual's beliefs, philosophy, and pedagogical foundation must include an optimistic view of the ability of the student to change (Andriola, 2021, Goldberg, 1991). Along with the guidance noted within this literature review, teachers are encouraged to include students' interest in the planning of instruction, be available to students inside and outside of the classroom, and have an open communication policy so that the student feels comfortable approaching the teacher when needed or simply just to be motivated (Goldman et al., 2017).

To produce a learner-centered classroom, school administrators should consider professional development and freedom to be creative within the classroom (Link, 2018). Todor and Gomoescu (2019) describe mediated learning as a strong relationship between

the learner and the teacher, who can assist the student in processing the stimuli and monitoring them being received and interpreted. The most important aspect of mediated learning in this study is the knowledge that mediated learning is learner-focused and can be adjusted to the learner's unique needs (Todor & Gomoescu, 2019). Training on mediated learning while focusing on dynamic assessment and Instrumental Enrichment, offered by the Feuerstein Institute, could significantly benefit any educator (The Feuerstein Institute, 2022).

The need for connections between students and mentors increases in the high school years, but this is when there are fewer connections because of the frequency of class changes (Noble et al., 2021). This disconnect affects the student's security in the class, which leads to less engagement (Gebauer, 2019; Yavruturk et al., 2020). Noble et al. (2021) suggested school psychologists offer more support for faculty to support more connectedness in relationships and build trust with their students. Focusing on student success inside and outside the classroom by discussing future educational goals can significantly impact students (White et al., 2021).

Social Change

Walden University's mission and vision are embedded in its learning community, producing positive social change. By empowering their students to make a difference on a grand scale, they have seen exponential success among their alumni in making these positive social changes. According to the A Vision for Social Change Report (Walden, 2020):

> Walden has always focused on fostering social change through the education of scholar-practitioners, increasing access to higher education, and applying research to help solve problems in the world. We intend to continue this focus into the next 50 years – and beyond. (p. 4)

It is my honor to continue Walden University's tradition of positive social change by encouraging completion of the higher education degree, even for those who did not finish high school in the traditional manner.

Within higher education, certain benefits arise within society. McMahon (2009) points out that when more individuals within a community obtain a higher learning degree, it will lead to the socio-economic betterment of society. Differences include lower societal unemployment rates, political stability, decreased crime rates, lower public health care costs, and environmental improvement. These are just a few factors that are affected by an increase in higher education completion (McMahon, 2009). Individuals who have dropped out of school and obtained a GED show increased self-confidence, leading to increased self-esteem, which only increases when they advance within their educational progression (Cohen, 2014; Wienclaw, 2021). Those who have earned their way into a good-paying job, have structure in their home life, and are succeeding all around have more to lose when they commit a crime; therefore, when the cost of doing a crime is higher, the hesitation to commit the crime becomes more substantial. This change leads to less crime in society (Darolia et al., 2021).

Furthering education post-GED offers unlimited possibilities for those who did not complete high school (Wienclaw, 2021). Vygotsky believed that learning develops

from others and that learning affects the world. In his book “Mind in Society,” he stated, “the influence of nature on man asserts that man, and in turn, affects nature and creates through his changes in nature new natural conditions for existence” (Vygotsky, 1978, p. 60). Cohen (2014) discussed human capital theory, where the investment an individual puts into themselves creates a more intrinsic mindset and increases their incentive to achieve more. Within human capital theory, society benefits largely from higher education. Those who possess a doctorate are the individuals who lead the nation's ideas and innovation, resulting in remaining a global economic leader (Wienclaw, 2021).

To produce the effect of an increased population of higher education achievers, it is essential to know where the individuals are coming from, within their belief systems, and how to motivate them and produce resilience. Academic mediation and modification are ways to produce this change.

From GED to PhD – A Life Story

Dr. Azul La Luz

“I thought I was stupid” (La Luz, 2010, p. 26).

Dr. Azul La Luz described his life in a book about his experiences as a high school dropout who “hated school with a passion” and what it took to go from GED to PhD (La Luz, 2010, p. 12). As a gang member and heroin addict who served twelve years in prison, he explained he rarely attended school. He read at a third-grade level, had experienced trauma and post-traumatic stress disorder (PTSD), and eventually was diagnosed with a learning disability (ironically, as he was applying for his PhD).

When sent to prison in the eleventh grade, he said he could "barely read a comic book" and scored very low on an IQ test (Lu Luz, 2010, p. 26). Doctors discovered that he suffered double-vision during an eye exam, brought on by self-injury to look tough. Upon receiving corrective lenses, he began to practice reading for the first time. A teacher at the school, Mr. Stone, took notice of Azul because he asked for books consistently and eventually started guiding him toward getting his GED. Dr. La Luz explained how patient Mr. Stone was with him and adjusted the instruction based on Azul's needs. Mr. Stone not only taught Azul that there was a world of education out there that he could grasp, but he also taught him that people could be kind without expecting anything in return, a first experience for Azul. Once Azul got the GED, he said, "I wasn't stupid like everyone said I was" (La Luz, 2010, p. 32). Once Azul received his GED, he went on to ask Mr. Stone for more advanced books, books on philosophy and math. He took classes in prison to learn more about what he did not know, which gave him three years toward a bachelor's degree. After release, he progressed through his education and continued to obtain his PhD in Medical Sociology, where he learned of his learning disability but did not let it stop him. He could not believe that he was finished and had gotten his PhD. He said it took months to sink in (La Luz, 2010).

One of the statements that resonate from his book is why he wrote the book. He uses his own life as an example, stating that even if you dropped out of school, you do not have to lose hope of ever returning to school, and you can go as far as you want to in school. Lu Luz (2010, p. xi) stated, "The trick…is to ask for help from the right places and people AND to know when to accept that help".

Previous Studies on the Topic

Through an exhaustive search in scholarly databases, there was no scholarly research on the sociocultural factors of doctoral alumni during the progression from GED to PhD; however, there was one study focusing on general perspectives of the progression. Chaney et al. (2020) conducted a qualitative study that included one individual who had advanced from GED to PhD.

A review of the literature found prior research similar to what was found in the Chaney et al. (2020) study, including retention and support of GED students (Cohen, 2014; Hector-Mason et al., 2017; Howard & Sharpe, 2019; McLaughlin et al., 2009; Treskon et al., 2020); along with the transition to college and the retention rates of those students (Jepson et al., 2017; Rosso et al., 2018; Tufue et al., 2019). Other factors within the study were the educational trajectories of black males, including the school-to-prison pipeline and from high school to college. Continuing, factors of resilience in education, including risk and protective factors, environmental factors, individual factors, and recommendations for educational resilience, were discussed. Within the discussion of these factors, there were some similarities to this current research. Risk factors (Berry, 2019; Camper et al., 2019; Doll et al., 2013; McDermott et al., 2019), socialization (Cornea & Todor, 2019; Thomas, 2018; Tzuriel, 2021), meaningful participation (Jaramillo, 1996), and peer assistance (Mechitti, 2019) were all discussed. These factors, within the research, led to the recommendation for educators to establish healthy interpersonal relationships creating competence and the ability to work independently

(Andriola, 2021; Aslam et al., 2017; Daneshfar & Moharami, 2018; Kozlin, 2002; Moll, 1990; Studebaker & Curtis, 2021).

The interview with Dr. Eric Thomas took place on the day Dr. Thomas graduated with his PhD in Education from Michigan State University (Chaney et al., 2020). The researchers reviewed this interview using phenomenology to capture Dr. Thomas's emotions as he described his path and the obstacles he overcame to accomplish his goal. Four major themes were discovered, including the habit of avoiding challenges, the value of facing challenges, the importance of receiving encouragement and accepting help, and the fragility of work-life balance.

Though many factors were discussed in Chaney et al. (2020), reoccurring throughout these factors were the mediation from others that Dr. Thomas experienced and the modification of his mindset. Though these perspectives were not explicitly examined, they were noticeable throughout the interview. One example Dr. Thomas discussed is how his wife encourages their children to believe academic attainment is obtainable and necessary. Another example is when he admits to being weak in certain areas and allowed himself to be vulnerable and led by stronger individuals.

The researchers recognize that Dr. Thomas is someone who teaches others the "importance of receiving and embracing encouragement and assistance" as he tells his audience, "Y'all got next," referring to the fact that any individual can reach for and attain any goal no matter how difficult it seems (Chaney et al., 2020. p. 51).

Though Chaney et al. (2020) only interviewed one person, making the research ungeneralizable, and did not use the sociocultural perspective specifically, as it relates to

academic mediation and modification, promise for future research was presented. Highlighted in the research was the significant fact that a person who starts out dropping out of high school and gets their GED can, in fact, make it all the way in academia.

Summary and Conclusions

This literature review discussed all aspects of the GED and considered academic mediation and modification as an intervention method that can lead to a change in the student's belief system. As discussed in this literature review, academic mediation and modifiability have been studied within education; however, it is limited to entrance into college and early college retention regarding GED entry. The prior literature discussed factors that led to dropping out of high school (Liu, 2021; Treskon et al., 2020). Hector-Mason et al. (2017) researched strategies used by educators transitioning students from the GED to college, while Rossi and Bower (2018) focused on the demographics of similar students. Jepson et al. (2017) tracked that, though college enrollment increased, overall credits would usually not be enough to produce a degree. Vygotsky's (1978) and Feuerstein's (1988) views on mediation were brought together to show that students can advance past what they would achieve without the mediator (Khanahmadi & Sarkhosh, 2018; Kozulin, 2002). This was backed up by Andriola (2021), who pointed out that all cognition, regardless of personality or behavior, can be adjusted or mediated by a teacher or mentor with purposeful intent specifically focused on the student or mentee. In addition, when the learner is ready to learn, Eun (2018) stated that the individual will internalize the information on a grander scale than if they are not cognitively prepared to advance. Teaching considerations regarding academic mediation and modifiability guide

the mediator and, as Jaramillo (1996) described, by focusing on specific needs, a bottoms-up teaching method can lead to more success in the student as it uses cognitive, emotional, and external interactions. Daneshfar and Moharami (2018) explained how dynamic assessment allows the mediator to analyze the student's ability, adjust instruction, and continue when the student has reached advanced ZPD and is ready to move to the next step. Finally, Aslam et al. (2017) showed that doctorate students learn best when taught through scaffolding versus traditional lectures.

One study on the subject was found during research associated with the progression from GED to PhD (Chaney et al., 2020). The general idea of the study related to the challenges of the progression from GED to PhD as it reviewed the interview of one individual. Though the study did not explore specific aspects, some themes could relate to academic mediation and modifiability, which are noticeable throughout the interview.

There is ample recent research on the educational theories of academic mediation and modification (Andriola, 2021; Aslam et al., 2017; Daneshfar & Moharami, 2018; Karpov, 2017; Khanahmadi & Sarkhosh, 2018; Todor & Gomoescu, 2019; Tzuriel; 2021); however, research focusing on the progression from GED to PhD is lacking. The goal of this research was to discover the academic mediation and modification received by doctorate alumni who started with a GED. It is expected that knowledge of this research will introduce to the academic world that, though it may be rare, the progression from GED to PhD is a possibility and, therefore, should be further researched and acknowledged.

Chapter 3 will describe how this research was conducted. This description will include the qualitative phenomenological design and rationale; my role as a researcher; the method used, including a description of the population: sampling strategy and criteria; a detailed description of the instruments used; data collection and analysis; trustworthiness; and ethical considerations related to this research.

Chapter 3: Research Method

The purpose of this hermeneutic phenomenological study was to (a) explore the personal experiences of doctoral alumni on their achievement during the progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification, which led to doctoral success. This research will contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD.

In Chapter 3, I will list the research questions and explain the reason and rationale for choosing a qualitative phenomenological research design and rationale. I will then discuss my role as a researcher in this study, ensuring that I considered my relationship with the research and the participants. Next, I will give the methodology details while explaining the population, sample size, how I recruited, and the criteria for the population interviewed. I will discuss the instrumentation that was used, the interview questions asked, as well as the data collection process to include obtaining participants, interview questions, and details on Zoom interviews. Data analysis includes the use of a hermeneutic phenomenological analysis, which contains a rich interpretation of the participants' experiences. Finally, I will discuss trustworthiness and ethics, including credibility, transferability, dependability, confirmability, ethical research, and informed consent. I will also discuss biases and ethical barriers and how I eradicate them.

Research Design and Rationale

The research questions that I used to guide this study were:

RQ1: What are the lived experiences of those who progressed from GED to PhD?

RQ2: What, if any, academic mediation and modification occurred within these lived experiences based on Vygotsky's ZPD and Feuerstein's SCM-MLE?

I conducted this qualitative research using a hermeneutic phenomenological design. The intent of the study was for me to understand the experiences of those who dropped out of high school, obtained a GED, and completed a PhD.

During qualitative research, the researcher is able to make meaning of the participant's lived experiences by understanding their thoughts and feelings (Sutton & Austin, 2015). When considering each type of qualitative research, I concluded that a phenomenological design was most appropriate because it allows the researcher to obtain a rich understanding of personal experiences, just as Chaney et al. (2020) were able to accomplish with the interview of Dr. Eric Thomas. Other qualitative designs were not appropriate. Ethnography revolves around the shared experiences of a cultural group (Kian & Beach, 2019). Case study (Merriam & Tisdell, 2016) does not focus on the participants as they understand the experience. Grounded theory is irrelevant to the study as Vygotsky's sociocultural theory and Feuerstein's SCM-MLE are the specific theories to be studied (Pratt et al., 2022). Narrative research is not appropriate to the study as, according to Bamburg (2021), a narrative is a chronological story, and I was seeking a deeper understanding of the experiences as a whole.

While a phenomenological design is used when a researcher seeks to understand the data obtained, the hermeneutic phenomenological design allows the researcher to possess a heavily meaningful interpretation focusing on the participants' feelings (Peoples, 2021). Dangal and Joshi (2020) described the hermeneutic circle as interpreting

individual experiences, moving to the whole experience, and then moving back again repeatedly until the researcher achieves a deep interpretation. They explained that without each experience, the whole cannot be complete, and understanding each separately and together gives a deeper meaning. Once deep understanding occurs, a phenomenological data analysis process can be produced (Dangal & Josie, 2020).

I chose the qualitative approach as the most appropriate to answer the research questions. Seidman (2019) described the research interview as the ability to inquire on a specific subject by understanding the subjective point of view of the participant. During each interview, I discovered the lived experience of each participant. Though the interviews were set up as semistructured, the interview guide (Appendix B) was a way to start the conversation while allowing participants to discuss their experiences and allow for deep reflection. Using the guide cautiously, as Seidman (2019) recommended, I allowed the participants to reveal their true feelings about their experiences. Relevant information relating to the research questions will then be obtained from the descriptions given.

Role of the Researcher

The role of the researcher in a qualitative study involves having excellent listening skills and the ability to empathize with participants to make them comfortable enough to talk about the subject in-depth (Fink, 2000). Fink (2000) described that when relationships naturally form during the qualitative interview and empathy is present, the respondent will be more at ease and willing to share. Gutierrez (2019) described empathy as the ability to understand another person's thoughts and feelings while being able to

experience that individual's point of view. Ratcliffe (2012) explained how phenomenology is a form of empathy because when a person can think of another individual's experience as one of reality and not fiction, they become more empathetic.

As a researcher, I experienced the empathy needed for a well-conducted phenomenological study. At the same time, I needed to be cautious about how my personal experiences and bias affected the interviews and data analysis. I mitigated the potential for personal bias by ensuring that I had no personal or professional relationships with my study participants. Seidman (2019) shared that one individual can never completely understand another person's perceptions but can be open to the participants' experiences in a way that will produce valid interpretations. Roberts (2019) suggested that valid responses and interpretations, along with epoché/bracketing of preconceptions, are vital while translating participants' perspectives in a neutral manner. To ensure that I cleared any preconceived expectations before interviews and data analysis, I used journaling while understanding that none of my assumptions should be allowed to guide my interpretation of each experience.

Methodology

I recruited and interviewed a purposeful sampling of six alumni who had progressed from GED to PhD. I achieved data saturation when no new data would have been gained by interviewing new participants. Peoples (2021) explained that the number of participants is not as crucial as it is to ensuring saturation is met. Moser and Korstjens (2018) described the richness needed within the research to reach saturation as qualitative researchers work more with sample size estimations than with a set number with the

primary desire to reach saturation. I continued interviewing participants until I met saturation.

I recruited from the Walden University Participant Pool using the invitations as noted in Appendix A. To ensure confidentiality, I had each participant contact me via my Walden University email address. I emailed each participant to ensure they met the criteria. I included the informed consent form and asked for a convenient meeting time. I asked them to either sign and return the form or email me back with their consent attached to that email. After completing these steps, I set up a Zoom meeting and emailed each participant the link to that meeting. I maintained confidentiality by creating documents with all communication for each participant within a Word document and stored in password-protected files in duplicate on two secure hard drives within my home. I hid participants' names and identifying characteristics by using a code for each participant (P1, P2, etc.). Once this occurred, I permanently deleted emails.

When I did not obtain an appropriate number of participants from the Walden Pool, I posted my invitation on social media platforms like Facebook and LinkedIn (Appendix A). Further, I sent an invitation to potential participants from a list constructed from online data, including news articles and internet posts on those who had obtained a PhD after receiving a GED. I contacted potential participants through emails found online. I used my Walden University email for all communications regarding this research.

To ensure I recruited participants who could help answer my research questions, I developed the following criteria for participant eligibility:

1. Must speak English
2. Must have obtained a PhD prior to participating.
3. Must have dropped out of high school and received the GED certificate.
4. Must be a U.S. citizen and have been a citizen since birth to ensure a cultural balance.

Instrumentation

Data collection consisted of semistructured interviews that I conducted using Zoom conferencing. Fink (2000) suggested that video interviews contain a "richer representation" (para 21), while Dangal and Joshi (2020) described how face-to-face interviews let the researcher become an observer, which allows them to catch non-verbal cues that would not be possible via a telephone interview. Using the Zoom platform enabled me to capture the essence of the interviews.

Interview questions centered around the research questions regarding the participant's experience and support from others before and during their doctoral program into completion. According to Welman and Kruger (1999), questions should focus on participants' lived experiences, including how participants feel and what they believe about the research theme. Similarly, Bentz and Shapiro (1998) stated that data should focus on the participants' lived experiences in a direct manner. Interview questions can be found in Appendix B.

Data Collection

Upon receiving institutional review board (IRB) approval, I attempted to recruit participants from the Walden University Participant Pool (Appendix A). I did not obtain

any legitimate participants from that pool; therefore, I posted my invitation on social media platforms like Facebook and LinkedIn (Appendix A). Further, I sent an invitation to potential participants from a list constructed from online data, including news articles and internet posts on those who have obtained a PhD after receiving a GED. I contacted potential participants through emails found online. I used my Walden University email for all communications regarding this research.

The data collection tool consisted of individually recorded Zoom interviews. Once I confirmed that the participant met the research criteria and informed consent had been signed and returned, an interview was scheduled at a time convenient to the participant. Each participant was interviewed and recorded separately so that I could focus on each person's experience individually. The Zoom platform, which makes discussions at a distance possible, also includes recording and secure storage and is the preferred platform for qualitative interviews by participants and researchers (Archibald et al., 2019). According to Zaveri (2020), there has been a recent increase in video conferencing, including platforms like MS Teams or Zoom, which means that most participants have become comfortable using these platforms. Seidman (2019) discussed video conferencing challenges and recommended that the interviewer be genuinely interested in the interview topic and convey that to the participant while creating a balanced rapport.

To ensure the authenticity of the interpretation from each interview, I emailed each participant the interview summary. I asked them to confirm that what I had transcribed was true. Peoples (2021) recommends this type of confirmation, so by

completing this task, I was able to clarify any information and fill gaps within the original interview.

Data Analysis

While using the hermeneutic phenomenology process to interpret the interview material, I used Hycner's (1985) phenomenological analysis guidelines. These guidelines include bracketing and phenomenological reduction, delineating units of meaning, clustering of units of meaning to form themes, summarizing each interview, validating it, and modifying it where necessary. Peoples (2021) described the hermeneutic phenomenology data analysis process as an emergent process and what the researcher finds dictates the data.

Roberts (2019) recommends translating participants' perspectives in a neutral manner, highlighting that to produce epoché/bracketing of preconceptions, it is vital to obtain valid responses and interpretations. Dangal and Joshi (2020) explained that within hermeneutic phenomenological data analysis, the researcher should immerse themselves, as an individual, into the participant's experience. They continued to add that when the researcher steps outside of themselves by eliminating any preconceived notion or bias, they have a greater understanding of the participants as individuals with varied personalities and perceptions of life experiences, which can differ from the researcher.

Peoples (2021) described the essence needed to fully understand the participants' experiences, suggesting that software to organize verbal communication may not produce enough depth, which is essential within a hermeneutic phenomenological study. Therefore, as recommended by Seidman (2019), I conducted data analysis manually to

reduce any loss of meaning, keeping in mind how each word of the participant was essential, and those words are what grew connections into emerging themes. Peoples (2021) recommended that steps taken during data analysis consist of initial transcription, creation of units of meaning, and discovery/construction of themes.

During the data analysis process, I transcribed the interviews to make sense of the significant information obtained from each participant in a way that ensured no relevant data was lost. I then created units of connections based on similarities and differences of the emerging data. I allowed time to go back to the original transcripts and the recordings along the way to ensure my interpretation of the data remained the same. As Seidman (2019) recommended, I used these chunks of data to find emerging themes and determine what I have learned from the themes.

Trustworthiness and Ethics

Trustworthiness

In this qualitative study, I documented each participant's detailed descriptions of their lived experiences. Then, to prove credibility, I confirmed that the transcription of the interview was clear in representation and context for each participant by emailing them a summary of the transcription of each interview. This email verification allowed each participant the opportunity to clarify any misunderstandings. Peoples (2021) recommended that participants ensure the accuracy of the transcript of their interview. To ensure transferability, I constructed the research questions in a way that elicited rich responses to produce strong interpretations. Amankwaa (2016) explained that transferability is like telling a story, where an author describes the setting so profoundly

that the reader gains a vivid picture of the experiences within the interview. This is produced by having deep detail in the conversation and a detailed description of the environment and feelings of the participant and researcher within journals and records produced during the process.

I established dependability with the verification emails previously mentioned. Peoples (2021) described the need to keep detailed notes so that duplication of the research would produce similar results; therefore, I organized an audit trail to include all correspondence, transcripts, forms, journals, analysis, and any research-related documents. Seidman (2019) highlights accountability in recorded interviews in that the interviewer can go back to the recording to ensure what has been interpreted is correct.

I established confirmability by using reflexivity. Florczak (2021) described reflexivity as self-reflection during the research project in that the researcher interviews and analyzes the obtained information. Journaling, included in the audit trail, consisted of any feelings related to the entire research process and took place before each interview in my home office, where I typed my thoughts and how I would be empathetic to each participant in a way that allowed their experiences to be different from my own or any prior participants experiences. The journal entries will be stored with all other research materials.

Ethical Issues

Ethical issues within research are of the topmost priority in any scientific research. Within the field of psychology, the American Psychological Association (APA) ensures that all research has institutional review board (IRB) approval (APA § 8.01). I

obtained IRB approval before any communication with potential participants. Along with ethics in research, the primary concern of the APA is the safety of participants. "Do no harm" is a standard that all psychologists and researchers should abide by at all times (APA § 3.04). It was essential within this research to ensure that no memories discussed during the interviews affected the participants negatively. Though the participants have worked very hard to overcome the initial reasons for dropping out of school and have accomplished such success, I remained aware that tender conversations could have arisen and would have needed to be dealt with gently. Had I found that a participant was too sensitive, it would have been crucial to ensure that the participant felt safe and could communicate their needs to someone who could assist them in working through those memories. I would not have abandoned any participant who displayed extreme emotions during the interview. Had this experience presented itself, I would have ensured that assistance was available. In case mental assistance was needed, I provided a list of resources in the informed consent. Any participant could withdraw at any time before or during the interview, as stated in the informed consent form.

Before any interview, informed consent for research and audio recording is required (APA, 2017, 3.10/8.03). This consent included details of the nature of the study, a statement of audio recording, and confidentiality details. Password-protected files stored in duplicate on two secure hard drives within my home include folders and subfolders for the various documents. The documents will be disposed of after a five-year period when I will delete all data and empty the recycling bin of each computer. Participants' names and identifying characteristics were hidden by using a code for each

participant. Once this occurred, emails were permanently deleted. The only access to the data was directly related to the completion of the research, including the Walden University supervising committee. If this data is shared in the future, only the files with no identifying information will be shared.

Chapter Summary

Chapter 3 discussed the use of qualitative research using a hermeneutic phenomenological design for this study and the rationale behind the research design. The role of the researcher was explored as, within a phenomenological study, this role is extremely important as it requires a deep understanding of the participant's experiences. Participants and their inclusion criteria were described as well as the method that was used to interview them. Finally, the data analysis process was discussed and described with an important focus on trustworthiness and ethics related to this research.

Chapter 4 will detail the research findings and the personal experiences of each participant's lived experiences throughout the academic mediation and modification which occurred during their progression from GED to PhD. Within the chapter, I will describe the interview setting and participants' demographics. Data collection will be explained along with any variations that occur from the expected collection process. Data analysis will include coding procedures and themes gathered from the data. Credibility, transferability, dependability, and confirmability will be discussed, as noted in Chapter 3. Finally, the results of the study will be presented with answers to each question and data to support each theme and finding.

Chapter 4: Results

The purpose of this hermeneutic phenomenological study was to (a) explore the personal experiences of doctoral alumni on their progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification, which led to doctoral success; and (c) to contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD. I used two research questions to guide the study:

RQ1: What are the lived experiences of those who progressed from GED to PhD?

RQ2: What, if any, academic mediation and modification occurred within these lived experiences based on Vygotsky's ZPD and Feuerstein's SCM-MLE?

I discuss research findings in this chapter, including a description of the research setting, demographics, and recorded data. Then I describe the data analysis coded units, categories, and themes that emerged from the data. I describe evidence of trustworthiness within the research. Finally, I will detail the results, address each research question, and present data to support each finding. In the end, I summarize the answers to the research question.

Setting

I asked study participants to provide a convenient time and date for them to be interviewed. The freedom to choose a time when the interviews would not be rushed ensured that communication could flow naturally. This relaxed method allowed participants to backtrack and create more meaning from the experience as they told their

stories. I conducted interviews using Zoom videoconferencing in my home office, and there were no interruptions during the interviews.

Demographics

Participants consisted of six individuals who progressed from their GED to PhD. All the participants were at least 18 years old and met the following criteria:

1. Dropped out of high school and received the GED certificate
2. Currently have a PhD
3. Currently a U.S. citizen and have been a citizen since birth
4. Spoke English

All six participants met the above criteria as defined. The demographics of the interviewed participants are shown in Table 1.

Table 1

Demographics

Participant	Gender	Race	Age	Age at PhD completion
P1	F	W	58	41
P2	F	W	40	34
P3	F	W	45	43
P4	M	B	46	43
P5	M	W	46	46
P6	F	B	69	64

Data Collection

I conducted this phenomenological research with six participants. Upon receiving informed consent from each participant, I conducted one-time, face-to-face, semistructured interviews on Zoom. Each interview was recorded using the Zoom

platform with consent for audio-recorded interviews. The average interview lasted 38 minutes.

Each interview began with a short introduction, followed by participants being asked to tell their story as they would tell any other interested individual. They were informed that we would return to the subject to fill in the blanks if anything was missed. Each participant seemed pleased with the method, so they proceeded with their story. Many of the semistructured interview questions (Appendix B) were answered throughout each participant's story. As the interviews progressed, each participant would reapproach a time in their lives to add something that was missed that impacted them within their academic progression. At the end of each interview, I scanned the questions and ensured the answer to each question was discussed. At that point, clarification of anything that was not clear was asked and answered.

As expected, my primary participant recruitment plan did not produce enough participants. After receiving IRB approval, I submitted my study to the Walden Participant Pool. This attempt did not produce any legitimate prospects. When this was apparent, I emailed a few potential participants I found through a Google search. One person responded and subsequently ended up as a participant. I also posted the IRB-approved social media advertisement (Appendix A) within doctoral-focused Facebook groups. This process consisted of gaining approval from group administrators. Upon approval, I received emails from each participant. Once I verified their legitimacy through a Google or LinkedIn search, I emailed each participant an attachment of the informed consent. During this time, I also asked that, if they approved of the consent,

please respond with a date and time which would suit them best for the interview. All interviews were scheduled using the Zoom platform. I interviewed six participants and determined that I had reached saturation when no new information pertinent to the study would have been achieved with additional participants.

Data Analysis

Following Hycner's (1985) phenomenological analysis guidelines, I analyzed each interview to ensure rich meaning using bracketing and phenomenological reduction. I accomplished this by journaling and clearing my mind of preconceived notions about the subject or the theories associated with this research. The best representation of eliminating expectations was the process of questioning, where each participant was simply asked to tell their story. As they worked through the story of their journey from GED to PhD, each participant filled in any blanks as they came to mind and produced quality data that was only driven by their stories and not the interview questions. At the end of each interview, I scanned the research questions to ensure each was answered and filled in any blanks. I found that most answers came along naturally within the stories.

Hycner (1985) described the process of interpretation as getting a sense of the whole interview by repeatedly listening to the interviews and reading the transcripts in a way that will allow for new data to emerge each time. Dibley et al. (2020) explained the beginning of the hermeneutic circle as a pre-understanding of the phenomenon as soon as the research for a study begins. Through the research process, the researcher adds to that understanding, and through the information received from the interviews, the researcher moves back and forth between each part and the whole while dwelling on the data. I

returned to the data numerous times, which allowed me to understand the information better for my interpretation to take on more meaning. I stepped away from the data and reapproached it with a fresh mindset which increased the clarity of the interviews. As Vaismoradi et al. (2016) suggested I used immersion and distancing, which allowed me to view the data from a different angle, sometimes referred to as self-correcting.

Hycner's (1985) steps of delineating units of general meaning and then reapproaching those general interpretations to find meaning relevant to the research questions help determine if there is relevancy within the interview to the research question. General understanding was produced by highlighting meaningful statements and noting the manner in which they were shared. A general understanding of each interview allowed for a more meaningful process when it came to delineating units of meaning directly to the research questions. Hycner's (1985) steps of clustering units of relevant meaning and determining themes were accomplished by viewing the interview as a whole and identifying common themes. Once I interpreted the interviews and meaning was attained, I emailed each interview summary to the participant for validation. Upon approval by participants that their interviews included no discrepancies and they were consistent with their story, I adjusted any details which needed to be modified.

Completing Hycner's (1985) steps of identifying general and unique themes for all interviews, I compared the themes which emerged within each interview. I identified codes from participants' stories regarding RQ1, which included overcoming obstacles, wanting a better life, having a passion for encouraging others, being determined, etc. Questions asked regarding RQ2 found more of a social aspect, including codes like

seeing others as role models, family support, and social network encouragement. Within the codes, three themes were discovered. Theme 1, the desire to make a change, was associated with the codes of overcoming obstacles and wanting a better life. Theme 2, passion and determination, was associated with the codes of having a passion for encouraging others and being determined. Theme 3, success depended on social connectedness, was associated with the codes of seeing others as role models, family support, and social network encouragement.

Identifying these similarities and differences in the interviews created a clear view of the stories confirming themes and content leading to the study's results, where Hycner's (1985) final stage of contextualization of the themes takes place. Though participants had very different backgrounds, the current research had no discrepant cases.

Evidence of Trustworthiness

Credibility was threatened by the Walden Participant Pool when one potential participant emailed me and assured me that she met the criteria of the study. Once I sent her the informed consent, I never heard back. Shortly after, I received an email from the Walden Participant Pool stating that this person was creating fake accounts and volunteering to participate in studies listed in the pool to obtain monetary incentives. She appeared to be no longer interested when she saw that I offered no monetary incentives. This scam prompted me to approach all my participants cautiously. Each participant was verified with a Google or LinkedIn search to confirm their identity and PhD status. After each interview, an interview summary was emailed to each participant to verify that I transcribed all data appropriately without losing any meaning of the interview. Journaling

was important as I went from one interview to the next to clear my head of any preconceived notions of earlier interviews or my thoughts on how the next story should develop.

I achieved transferability with my interview questions as they produced rich stories. The participants and I gained comfortability as the ease of storytelling occurred following the initial greeting. Seidman (2019) discussed open-ended questions to avoid probing and leading while ensuring the researcher is not presumptive. In the present study, I asked participants to simply tell their stories as they would tell someone in their life. This method produced the most comfortable flow for the participants as they could speak freely without structure. As the stories were revealed, participants felt more comfortable and began to fill in blanks initially skipped over. In the end, I reapproached any missed interview questions, which were easily answered. By doing this, I was able to approach each transcript with the knowledge that I had experienced a conversation with deep meaning and expression. Asking participants to talk to the researcher as if they were telling someone else the story and having them reconstruct the story instead of remembering it are suggested as favorite approaches by Seidman (2019). Using these recommendations, the initial question to start each interview was, “Tell me about your journey from GED to PhD like you would tell a friend or mentee.”

Based on Hycner’s (1985) guidelines for phenomenological analysis, I interpreted each interview by delineating units of meaning. I developed themes based on clustering the answers relevant to the research questions. After this was complete, I confirmed dependability when interview summaries were emailed to each participant to confirm

consistency with their story. I found that minimal adjustments were requested and needed to be fulfilled. I produced an audit trail consisting of all correspondence, transcripts, forms, a journal of the progression, analysis, and research-related documents.

I ensured confirmability with self-reflection throughout the process. The fact that I am currently progressing from GED to PhD added to the need for understanding, processing, and moving past my personal bias in my path. Writing in my journal, I kept my mind on track with each participant as an individual. Each participant was so different from one another and myself that it made the compartmentation of each story comfortable.

Results

Within this study, I explored two research questions by asking two groups of interview questions (Appendix B). The first group of questions concentrated on RQ1, focusing on participants' paths, goals, and accomplishments throughout their academic progression. Interview questions associated with RQ1 connected to key variables and concepts discussed in Chapter 2, such as drop-out reasonings, GED preparation, self-determination and motivation, and doctoral completion. Within the second group of questions, I concentrated on RQ2, focusing on the individuals involved in their progression and their influence on the participants. Interview questions associated with RQ2 connected to the theoretical framework of Vygotsky's ZPD development and Feuerstein's SCM-MLE.

Desire, Passion, and Determination

RQ1 was: What are the lived experiences of those who progressed from GED to PhD?

I encouraged participants to openly discuss their progression from GED to PhD by asking one question, “tell me about your path from GED to PhD.” During each story, participants shared why they dropped out of high school and how they were encouraged to return to school by earning their GED and enrolling in college, eventually completing their PhD. Each participant discussed that at the time of making the initial decision to return to school, there was something transformative going on in their lives, and they knew that something had to change. Participants suggested that they were very determined to make that change and that their passion was driven by the desire to change their own lives or the lives of others.

Theme 1: Desire to Make a Change

The desire to make a change comes when an individual sees that something needs to be adjusted. This desire to create change can occur within themselves, their families, or their social community. Throughout the interviews, the six participants displayed their desire to make a change, prompting the desire to seek higher education. Though the reasoning for this change may have varied, it was repeatedly expressed.

One factor was that only having a GED was frowned upon within the workplace regarding career advancement. P5 described how hurt he was when someone said to him, “you’ve only got a GED.” He was told he needed a high school diploma to get a promotion. He expressed the feeling by saying, “Talk about taking the wind out of your

lungs." However, once he obtained a higher degree, even an associate degree, the GED stigma was erased as he was now recognized for that degree. The desire to be recognized as someone who could make an impact gave him the drive needed throughout each step of the process.

Similarly, P4 shared that being a "young black male in Chicago with no high school diploma, your options are limited." He shared that after returning from Germany with the National Guard, "it's back to one weekend a month…so, it's like, you still gotta get a job." He found out about tuition assistance through the National Guard and began college.

All participants discussed having children early in their education, which led to a desire for a better life. P2 shared she had her son when she was 19 and created a home that was "so peaceful and safe, and we had everything we needed…polar opposite from everything that I [had] experienced." P6 said that she "kind of got sidetracked," she had her son shortly after obtaining her GED, but she got back on track shortly after. Remembering difficult times, P5 stated, "I couldn't even hardly afford diapers or formula for my small son, and something had to give. Something had to change, and to be honest with you, that was the time that I really came to know God."

The desire to make a change in others was illustrated in P2. Describing her traumatic start in life and her ability to overcome the obstacles passed on to her, she said she "wanted to understand, why I was able to make it out and so many others did not." Using that as a platform, she returned to school "to find a way to use that understanding to help other people who are struggling in similar ways."

The desire to make a change involves a deep thought process leading to action. Each participant processed their desires and determined the solution to be higher education which would be prominent to accomplishing the change.

Theme 2: Passion and Determination

Each participant displayed and even discussed passion and determination. Helping others comes from an internal drive. Four participants talked about breaking generational habits driven by being low-income, suffering from emotional abuse, and even having trauma from childhood. P2 discussed the trauma that she overcame and her desire to help others in similar situations. She stated her passion for education was driven by "the work that I wanted to do in the world." She also shared, "I had a very strong commitment to being as qualified as possible and as knowledgeable as possible to be able to do the work that I wanted to do."

Highlighting the statement "the light in the furnace never went out in me," P4 shared that he "never had a dream or goal to get a PhD." It was a personal goal for him. Thinking about his parents, he said, "my mom and dad not being able to actually go to high school, that was that push for me." Determination not only involved the past but the future. "It was something that I wanted to get for myself so that I can show my kids," he shared, "if I can accomplish the highest degree in education, coming from where I came from on the resources during my time, I know you guys can also do that as well."

When asked what got her through, P3 said, "I think my motivation and drive…that kind of righteous stubbornness…[I] just really dug my heels in." She refused to give up, saying, "[you're] not scaring me out of this. This was always going to happen.

I'm going to finish it." What advice would she give? "You have to be self-disciplined, manage your time wisely, and sacrifice the fun stuff you want to do." She gave God credit for her success. She said, "I'm not the smart one here. Like God is the smart one. He will figure out what I need to do." Allowing herself to listen to the path she should follow, she shared, "OK, God. You put me here, so there must be something that…you need for me to deliver". Regarding her academic path, she follows up with, "God was my greatest encourager."

Discussing where his family from back home is today, P5 said they are still in the same rut. "Job hopping and retirement is just a figment of their imagination." He, however, sees a bright future and said, "I know my purpose in life." He stated he was determined to "break that generational stigma that you were born with...the only way you're gonna change it is you're gonna do it." Today, he said he is a provider. Not only does he provide for his family, but he also provides safety and security for his community as chief of police. He added that he also provides the community with knowledge as a teacher in the criminal justice program. He said he relates with his students and coworkers who grew up in poverty and tells them, "Lean on me. I'll be your support.

Like P5, teaching was a factor that drove the advancement of four out of the six participants. Those who teach have the desire to help others succeed. For two of the participants, succeeding led to their desire to teach. P4 ended up teaching classes and stated how it helped him in the dissertation process. P1 said, "I knew I needed a doctorate to be able to teach at a university." As P6 was preparing for retirement, she shared that she still had a lot to do and told herself, "I will…prepare myself so that I can teach."

The PhD dissertation requires independent original research. This process requires motivation, determination, and grit, and the student needs to be aware of what they can accomplish without a doubt (Todor & Gomoescu, 2019, Walsh, 2020). Each participant displayed steadfast determination they had for accomplishing their goal. This determination was motivated by the passion each had for their field of interest and internal drive for success.

Success and Social Connectedness

RQ2 was: What, if any, academic mediation and modification occurred within these lived experiences, based on Vygotsky's ZPD and Feuerstein's SCM-MLE?

Throughout each story, participants mentioned individuals who initially encouraged their return to school, those who were present for a short time, and those who had been there the whole time. As each story advanced and participants became more comfortable, they were found returning to earlier times in their stories to add information they had missed or skipped over. This process brought out memories of individuals who helped them reach their goals and how important the relationship was to their education. When asked at the end of each interview, "do you think you would have accomplished your PhD without the individuals involved?" all six participants stated they did not believe they would have accomplished the goal without that support. Three sections for social connectedness were recognized, including family, social environment, and academic environment.

Theme 3: Success Depended on Social Connectedness

The social connectedness that each participant experienced was essential to their belief in themselves. As explained in Vygotsky's sociocultural perspective, where one learns from a more knowledgeable other (Aslam et al., 2017; Vygotsky, 1978), each participant described their relationship with more knowledgeable others as integral to their path to success. Within the interviews, connectedness to family, a connectedness within a positive social environment, and connectedness to academic figures throughout their path all stand out as key elements in their successes.

Family. Three participants associated their academic progress directly with their mothers. P1 described the day she officially withdrew from high school to pursue her ballet career at a more intense level. Her mother told her, "We want you to be creative and follow your passions." P1 also explained, "My promise to her was that I would continue [my education] and pick back up at some point when it was right." "I think having my mom's voice there definitely knowing that my career as a valid dancer was gonna dwindle down." She said throughout her academic career, "I always had the voice in the back of my head…with my mom talking to me."

Similarly, P6 shared that she watched her mother advance in her nursing career from being a CNA to an LPN, then an RN, eventually achieving her master's in Public Health Administration. P6 remembered her mother having study groups come to their house and how much of an impact that had on her. She described her mother as diligent in her studying and her habits as she advanced through her degrees. She said, "So, it was

no question in my mind, even from a youngster, that I knew I was going to finish school, but I just hadn't at that point figured out what I was going to do."

Given that P4 came from a family where both parents quit school very early, he discussed how he felt this was something he could do for them. Even though his mom has passed away, he shares, "I think she was my motivational factor [she] kept pushing me…I would just think about what she would be saying in certain situations that I was going through."

The promise to a mother held high standings among the participant's encouragement to succeed in their education. Each participant who described the connection to their mother and education lost their mothers during their path. Just as P1 and P4 stated, they kept that voice in their heads even after she was no longer with them.

Another family member key to the participant's academic success was the relationship with a spouse. Participants described daily encouragement and celebration when goals were met as equally important as the initial validation when pursuing each new degree was approached. P1 explained that her husband was also pursuing his degrees as she advanced on her degrees. Both being non-traditional students, they would express frustrations and turn unimportant issues into more stability in their goals. She shared, "I think pulling back and reminding each other that we're doing this for a reason" was important when those frustrations occurred "we have to make sure that we're not getting too bogged down by other irrelevant things that we won't even remember, in five to ten years." When asked if she thinks she would have attempted the next steps in her

education had he not been there, she stated, “probably not, because I think it was that feeling of, we're doing this together.”

Having a supportive wife was discussed with P5 when he shared his experience as he approached new goals. He described her response as saying, “why don’t you?” He knew she would be there to support him. He even described a time when he lost a document when his computer crashed, and he told her, “I’m finished…I can’t do it”, but his wife encouragingly supported him. He said his academic success could not have been accomplished without that support.

Coming from a neglectful and emotionally abusive home, P3 said, “they weren't supportive of me doing anything, and they had no hopes for me.” She shared that if she had stayed around her hometown, she could have seen herself going down the wrong path. Though her husband doesn’t have a high school diploma, he is successful in his trade and remains supportive in all she does. She discussed the ability to have philosophical conversations with him and stated, “If I hadn’t met [him] and got like out of my home situation…I probably wouldn’t have [made it to this point]”.

Social Environment. Social environment was another source of success within academia. P2 shared, with the exception of her own determination not to be a product of her early environment, those she came into contact with made her aware of what could be. She said, “I saw…the professionals who I was working with. The people in leadership had degrees.” This exposure made her aware of the possibilities a degree would bring. “My supervisor was in school working on her degree…Her masters at the time. That was

my first example of someone working on their degree online while still working a full-time job." She asked her supervisor about the classes and school and said, "I just did it."

There were multiple people in P3's social circle who influenced and encouraged her. She mentioned a friend prompting her to take the GED test with her. She also described her connection with a friend she worked with at a church organization. As a stay-at-home mom, she was going to college. She stated, "she's doing homework…she's got kids…it was great." Enrolling in school, she said, "we worked at the same school together…for half the day, and then we'd go home and do our work and still hang out." This friend was defined as a good model of what she could do as a fellow stay-at-home mom. She described two individuals who worked at the woman's prison where she worked during her bachelor's degree. She said they were "super supportive." They encouraged her to continue her education with a master's degree, helped her with licensure, and one was even involved with assisting her throughout her dissertation journey.

Had the Army recruiter not taken his time to work with him while getting his GED and passing the Armed Services Vocational Aptitude Battery exam (ASVAB), P5 believes that he may have never gotten to this point. He also referred to the day college recruiters came to the police station to talk to his chief. The recruiters wanted to discuss further education with the officers. Although the chief essentially turned them away, P5 followed the recruiters into the parking lot and asked for more information.

It is not necessary for social connectedness to be associated with one or a few specific people. P4 did not have one specific person in his social circle who stood out. He

said he had many different people contribute to his determination. He said, “I’ve had so many people in my life give me bits of pieces of positivity.” Throughout the military, people come and go, but a little piece of them remains within you. He was motivated by these individuals “actually seeing how they progressed.” He considers himself a product of his environment as he traveled with the military and experienced different cultures, personalities, and motivation styles. He saw what people did, who they were, and how they developed. He said, seeing that, “was like boom. If they can do this, this is something I can focus on.”

Academic Environment. Lastly, each participant mentioned individuals involved in their education within their academic environment. Academic intensives throughout P3’s doctorate, when she was required to go out of state for a week, stood out to her. She mentioned her cohorts and a specific professor who challenged her and opened her eyes to many things involving her research. Then she mentions how challenged she was in the dissertation process.

Faculty members throughout P1’s educational progression were important to her success. After her high school principal encouraged her to follow her dreams, she discussed being a non-traditional student and the support she received in college. She described her path as “not cookie cutter.” She said she felt pushed at certain times because of her lack of knowledge from not taking core classes in high school. Looking back on her difficulties, she remembered that she had the ability to do certain tasks but did not have the confidence. Once she allowed herself the confidence to succeed, she loved most of the subjects.

The teacher who prepared P6 for her GED test stood out when he took her class to a historically black college/university (HBCU) college to encourage them to pursue further education. She also recalls a professor who was very knowledgeable in the program she was in, as she stated that he was "very helpful to me."

Social connectedness was prominent in each participant's success. Though their determination drove them through, the influence of family, friends, and their academic environment assisted in producing and encouraging that drive. Within each interview, it was asked, "Do you think you would have accomplished your PhD without the individuals involved?" The answer was a resounding "no" from each of the six participants.

Summary

Chapter 4 discussed how the research transformed once research began. The setting and demographics did not deviate from the expectations described in Chapter 3. Data collection included an explanation of each step of the process which was involved in the interviews. Data analysis methods were detailed, including moving through the hermeneutic circle and coding procedures using Hycner's steps of phenomenological analysis. Trustworthiness was discussed to include the only deviation from the expected plan regarding the Walden Participant Pool scam. Finally, the study's results were organized and presented based on the research questions.

Chapter 5 will include a comprehensive interpretation of the findings as they relate to the theories presented in Chapter 2. I will discuss the study's limitations,

recommendations for future research, and implications for social change, theory, and practice.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this hermeneutic phenomenological study was (a) to explore the personal experiences of doctoral alumni on their achievement during the progression from GED to PhD; (b) to understand what experiences, if any, related to receiving academic mediation and modification, which led to doctoral success; and (c) to contribute to the literature focusing on academic mediation and modification in the progression from GED to PhD. The Department of Education reported a 15% high school dropout rate among students in 2019 while counting for the adjusted cohort graduation rate (Digest of Education Statistics, 2019). Risk factors associated with dropping out of high school are numerous, but, as Camper et al. (2019) pointed out, lack of support and a loss of interest in education is at the forefront of the problem. Many negative social implications occur because of the lack of education in high school dropouts, but these implications can be reversed with academic guidance (McMahon, 2009; Vygotsky, 1978). McMahon (2009) shared that the betterment of society when education is improved includes lower unemployment rates, political stability, decreased crime rates, lower public health costs, and environmental improvement. Academic progression increases self-confidence and self-esteem (Cohen, 2014; Wienclaw, 2021). Given the lack of importance typically given to higher education in high school dropouts (Goggin et al., 2016), within this research, I focused on the stories of individuals who progressed from GED to PhD. After initial analysis, I looked closely at each story to determine what it took to succeed in that goal and those who supported them.

Previous scholarly research that I found on the subject was limited to one study in which one individual was interviewed after accomplishing the task of progressing from GED to PhD (Chaney et al., 2020). Researchers analyzed this interview using phenomenology and took a general look at Dr. Erik Thomas' progression. Factors discussed within the interview included avoiding challenges, the value of facing challenges, the importance of receiving encouragement and accepting help, and the fragility of work-life balance (Chaney et al., 2020). Though sociocultural theory was not the focus of this research, there were noticeable academic mediation and modification trends. In addition, within the literature search, several news articles and a few books were found that were written by those who accomplished the goal. Generally, information on how the academic community could assist high school dropouts and GED recipients in pushing forward in higher education, specifically to the point of earning a PhD, was lacking.

I conducted this study using a hermeneutic phenomenological approach, and analysis was performed by following Hycner's (1985) steps for phenomenological analysis. I used a semistructured interview format with six participants using one general question at the beginning of each interview to tell me the story of their progression from GED to PhD. I found that most questions in the interview question guide (Appendix B) were answered along the way, and at the end, I asked them to fill in any blanks. The following research questions were answered during each interview:

RQ1: What are the lived experiences of those who progressed from GED to PhD?"

RQ2: What, if any, academic mediation and modification occurred within these lived experiences based on Vygotsky's ZPD and Feuerstein's SCM-MLE?

Within this chapter, I presented a discussion of major findings from the research as they relate to prior theories and interview findings of the participant's lived experiences. The chapter also includes limitations, recommendations for future research, implications for social change, and a conclusion summarizing the study.

Interpretation of the Findings

Theories discovered during the initial inquiry for this research suggested that sociocultural theories, specifically mediation by a more knowledgeable member of society and modifying cognition within the belief system (SCM-MLE), are especially important for individuals who require academic encouragement (Andriola, 2021; Aslam et al., 2017; Khanahmadi et al., 2018). McDermott et al. (2019) pointed out that students who drop out of high school may not find academic development important. Therefore, encouraging the high school dropout to pursue further education involves more personalized considerations than it might for high school graduates.

Although these theories were presented in prior research regarding encouraging high school dropouts to enter college and tested for retention, there was no related research on individuals who dropped out of high school, obtained their GED, and went on to earn their PhD (Berry, 2019; Camper et al., 2019; Cornea & Todor, 2019; Doll et al., 2013; Jaramillo, 1996; Jepson et al., 2017; McDermott et al., 2019; Mechitti, 2019; Rosso et al., 2018; Thomas, 2018; Tufue et al., 2019; Tzuriel, 2021). This research contributes to that gap in knowledge. I formulated interview questions (Appendix B) to obtain open-

ended conversations regarding each participant's lived experience in their journey from dropping out of high school to earning their PhD. When focusing on RQ1, I concentrated on each participant's story in general, while, within RQ2, I concentrated more on the sociocultural significance of their path and its involvement in their achievement. The research findings showed that each participant desired to make a change in their lives, had passion and determination throughout, and their success depended on social connectedness. These findings add to the prior knowledge presented in Chapter 2 regarding early college entry among GED recipients and support those in a position to encourage this population to view higher education as more attainable.

Lived Experiences

I designed the main research question, "What are the lived experiences of those who progressed from GED to PhD?" so each participant could have an open-ended dialogue for them to tell their stories in their own words. When asked to "tell me the story of how you progressed from GED to PhD," each participant started the conversation with the reason for dropping out of high school, what was going on when they decided to get their GED, and why they decided to start and continue through college. This question focused on participants' paths, goals, and accomplishments throughout their academic progression. As the interviews progressed, the participants reapproached the past to fill in some missing information giving the interview more depth. I allowed this free talk until the end of each interview when I asked any interview questions (Appendix B) which may have been missed. The interpretation of RQ1 is brief as it only includes the experience of

dropping out since once the participants received academic mediation and modification (RQ2), the theoretical framework becomes involved.

Dropping Out

McDermott et al. (2019) said the top reasons for dropping out of high school were the need to make money to support a family, the effect of being bored, not seeing school as relevant to their life, and the student failing classes. Included in these reasons is the lack of support for the student's education. Four out of six participants demonstrated a lack of support when I initially inquired about the path from GED to PhD. Reasons for dropping out included social influences and a lack of seeing the importance of education. P2 stated, “I didn't have a lot of social support…the social support that I did have didn't value education.” P3 shared that she experienced a lack of emotional availability within her family and that as the “black sheep of the family,” there were few expectations regarding her education.

This lack of support intensified when an individual’s parents had also not graduated (McDermott et al., 2019). P4 explained that his mother and father dropped out of school in the sixth and seventh grades, but they were hard workers. He shared, “My dad … wasn't the type where it's like, ‘hey, get up, you're late, get up for school,’ you know, he was ‘oh hey you better not be late for work.” P5 grew up very poor in a family of eight. His mother had graduated from high school, but she was the only one in the family who had accomplished the goal. He stated, "it was just a matter of time when I dropped out.” When he found out he was going to be a father, dropping out was the obvious next step for him.

Though the reason for dropping out centered around the lack of support for four out of six participants, two participants did not experience that lack. P1 was a ballerina advancing toward her dream of dancing in New York, and P6 was distracted with advocating for racial justice. Both participants had positive educational influences in the home but explored paths that temporarily led them away from their education. These participants knew they would eventually return to education when the right time came. P1 stated her promise to her mom "was always that I would continue and pick back up at some point when it was right." P6 shared that she "was planning to do college right away," and though her "son was born in July of 1970" and she "kind of got sidetracked," "it was no question in my mind, even from a youngster, that I knew I was going to finish school."

Academic Mediation and Modification

Though RQ1 was an open-ended question asking about each participant's experience, the second research question, "What, if any, academic mediation and modification occurred within these lived experiences, based on Vygotsky's ZPD and Feuerstein's SCM-MLE?" focused on the individuals involved in participants' progression from GED to PhD and their influence on the participants. Interview questions associated with RQ2 connected to the theoretical framework of Vygotsky's ZPD and Feuerstein's SCM-MLE. It is impossible to separate RQ1 and RQ2 since RQ2 is a large part of RQ1. Once the participant received academic mediation and modification, the next part of their story began.

Academic Mediation

Mediation and modification within people's belief systems come from their connectedness to others. Vygotsky's sociocultural theory states that individuals learn through the encouragement of a more knowledgeable other (Aslam et al., 2017; Vygotsky, 1978). Trust is necessary to accept this encouragement from the more knowledgeable other (Leighton et al., 2018). Each participant described the individuals involved in their decision to start their academic path and those who were there throughout the process.

Family support was highlighted within the interviews. P1 and P6 promised their mothers they would return to school when the time was right. P4, though his parents had quit school early, said his mother was his motivation, and even when she was no longer alive, he knew he had to keep pushing. P1, P3, and P5 each agreed that without their spouse's support, they would not have accomplished the goal. P1 shared that without her "key person," being her husband, she didn't "know if I would have been able to do it alone."

Social environment was a factor in dropping out of school, returning to school, and progressing until they completed their PhD. P2 described the professionals she worked with as setting an example of what could be, whereas P3 described numerous individuals who were there for her along her path, each with individualized support, which provided the consistency so needed, according to Andriola (2021). P4 and P5 described individuals who came into their lives and added value to their educational paths.

The importance of academic connection for GED students was more significant than it would be for students with a high school diploma and the skills to advance in college (Cohen, 2014; Liu, 2021; Treskon et al., 2020). Todor and Gomoescu (2019) described this relationship as critical because it allowed the student to process the information the teachers offered in mediated learning. The trust the student has in the educator allowed for more successful learning (Leighton et al., 2018). Creating mediation within the GED environment was crucial (Hector-Mason et al., 2017; Jepson et al., 2017; Rossi & Bower, 2018). Academic environment was discussed when participants remembered educators who offered patience and encouragement along their path. P6 discussed her GED teacher, who took her class to an HBCU campus to expose them to possibilities. P1 remembered educational support as a nontraditional student contributing to her confidence that she could achieve her goals. Doctoral intensives stood out in P3's mind as being a big eye-opener to what her research would mean. She stated, "She had challenged me to the point where it was like personal, you know…which was awesome."

Vygotsky's ZPD, present throughout each participant's education, was highlighted in the doctoral program. While obtaining a doctorate demands a fully intrinsic mindset, as success depends on motivation, determination, and grit (De Clercq et al., 2021; Walsh, 2020), social support is necessary throughout the process. The guidance provided to each student by a committee and peer support are critical (Meschitti, 2019; Studebaker & Curtis, 2021). Within the only prior research discovered on the progression from GED to PhD, Chaney et al. (2020) described encouragement and accepting help from others as critical in the success of the interviewee when he acknowledged he was weak in certain

areas. P4 refused to be a statistic of his environment and shared, “the light in the furnace never went out in me,” and P3 said, “this was always going to happen. I’m going to finish it.”

SCM-MLE

Feuerstein believed that all things are possible, even when someone thinks they are not (Falik, 2019; Feuerstein et al., 1988). SCM-MLE can change how people view themselves intellectually by gently encouraging internal thought adjustment. Todor and Gomoescu (2019) pointed out how this adjustment leads to a different view of ourselves and our place in the world. Understanding that a different reality is possible is the first step each participant took in their desire to make a change. Once an individual has “purposeful direction,” as described by Goldberg (1991), the individual experiences modification and is encouraged to exceed what was originally thought possible. Intrinsic learning is one of the first and most important steps of SCM-MLE and occurs when the individuals’ psychological needs are met along their educational path (Goldman et al., 2017).

With each participant, specifically the four who dropped out of high school because of a lack of social support, a certain occurrence had to take place to realize a change needed to happen. For two participants, a moment in time led to the realization that a change needed to occur. P2 described herself as experiencing “all ten adverse childhood experiences currently assessed.” She had a son at 19 and was working full-time when she described a “moment of reflection.” She stated she wanted to do something different with her life than she had been exposed to growing up. Through hard work, she

experienced an emotionally healthy lifestyle for the first time while providing a “safe place for myself and my son to live.” P5 described a day long ago when he realized he was not breaking the cycle of his past. Struggling and unable to buy diapers, he fell to his knees and cried like a baby, saying, "there has to be more to life than what I'm going through.” Later, after starting a career in law enforcement, he experienced being passed over for promotions because he “only has a GED.” Hewitt et al. (2019) stated that a GED is not seen as equivalent to a high school diploma based on neuropsychological performance levels. Therefore, along his path to create a better life for himself and his family, P5 knew he had to advance in his educational career.

The self-determined individual produces intentional and controlled actions (Link, 2018). Each interview revealed the participant's passion and determination to complete their goal. P2’s story highlighted her desire to help others like her overcome the obstacles of trauma in childhood. Her commitment to making a change in the world is what drove her. She shared, “it was the work I wanted to do in the world," and she "had a very strong commitment to being as qualified as possible.”

A common theme throughout the end of each interview was the encouragement that each participant gave to those around them in accomplishing their goals. P4 said that when encouraging his children to reach their goals, he tells them, “I can accomplish the highest degree in education, and if I can do that coming from where I came from on the resources during my time, I know you guys can do that as well.”

Similarly, P5 has continued his passion by sharing his experiences with others, telling them to lean on him. From buying a GED book for an employee to taking the extra

time for a student in need, he also wants to see others fulfill their dreams. He tells them to "dream it, chase it, live it." After obtaining her PhD, P6 was invited back to one of her prior colleges, where she was the keynote speaker for a criminal justice dinner and conducted workshops on perseverance and resilience. P1 even hinted at the research when she asked, regarding moving from GED to PhD, “what is it that someone needs?" and "is it going to be different for everyone else?”

Limitations of the Study

Limitations of the study were a focus throughout the research, specifically on my own bias since I am also progressing from GED to PhD. Journaling helped me clear my head prior to each interview, which opened my mind to understand each participant's individual stories as separate narratives. Observing a range of participants, from P1, a ballerina who quit high school to pursue her dreams, to P4, a child from the rough streets of Chicago, it was clear that no story was the same. According to Roberts (2019), this understanding of differences allowed me to communicate and interpret in a way that produced a neutral perspective.

A lack of previous research on the subject encouraged a general look at academic mediation and modification in a way that introduced the subject of sociocultural theory and SCM-MLE to the progression from GED to PhD. Only having one prior study on the topic, specifically GED to PhD, gave little guidance. It was necessary to research the GED with college entry and academic mediation and modification in education, in general. Within this research, I attempted to connect the progression from GED to PhD with academic mediation and modification.

I conducted each interview in a way that encouraged free talk. Amankwaa (2016) suggested using this strategy would allow each participant's experiences and feelings to elicit rich responses, ensuring transferability. This process proved true as it allowed each participant to tell their story in a way that allowed them to go back and forth and fill in the blanks as they progressed and saw the need. Limitations for interview questions involve the need to dig deeper into academic mediation and modifiability within the classroom instead of a view of social environments in general.

There were no time constraints for these interviews besides any rush on the part of the participants. However, participants chose a time when they had set aside time for the discussion. I had initially intended for each interview to take around 30 minutes, and while the average time was 38 minutes, some took longer, while some were quick and to the point.

Hycner (1985) suggested additional communication with the participant after summarizing the interview. This additional communication ensures that what was written captured the essence of the interview and allows the participant to follow up with anything they would like to add. With this in mind, I followed up with each participant with an interview summary to ensure what I transcribed and delineated was true to the meaning of the interview. Each participant followed up with a confirmation that established dependability.

Trustworthiness of the study was limited to one issue prior to the start of the interviews when one individual found the research invitation within the Walden Participant Pool. When she reached out, stating she met the criteria and wanted to

participate in the study, I emailed her to confirm the criteria and then sent the informed consent. At that point, I did not hear back from her; however, I received an email from the Walden Participant Pool stating that this individual was creating fake accounts to participate in research for financial gain since some researchers offer incentives in the way of gift cards, for example. When I did not hear back from the potential participant, I assumed she saw no compensation for the interviews and was no longer interested. This threat to credibility prompted me to ensure the identity of all potential future participants. A brief Google search proved their legitimacy when I found their LinkedIn profile and websites for their businesses, allowing me to continue my contact and subsequent interview with them.

Six participants were interviewed for this research. Because the subject being researched had no prior data, it was found that saturation was achieved with six participants since no new data would have been found by adding more participants. I attempted to be inclusive with my choice of participants but found that White women were most likely to respond and, therefore, made-up half of my participant selection.

Recommendations

This hermeneutic phenomenological study included a general view of the lived experiences of those who progressed from GED to PhD. Though one prior study had been conducted on one participant, it did not specifically focus on sociocultural aspects (Chaney et al., 2020). Obtaining a general picture of each participant's experiences and sociocultural influences allowed me to understand their progression from GED to PhD. However, it is recommended that any future qualitative research obtain a more focused

understanding by narrowing the scope of research by including more specific interview questioning. Six participants offered an appropriate amount of data to produce a general introduction to the sociocultural factors of the progression from GED to PhD. I met saturation when I found no new relevant information being introduced as the interviews progressed.

Throughout the literature review, research was discovered on GED to college enrollment and retention for the first year or two, but nothing expanded further than that (Jepson et al., 2017; Rosso et al., 2018; Tufue et al., 2019). Included in the research are risk factors (Berry, 2019; Camper et al., 2019; Doll et al., 2013, McDermott et al., 2019), socialization (Cornea & Todor, 2019; Thomas, 2018; Tzuriel, 2021), meaningful participation (Jaramillo, 1996), and peer assistance (Mechitti, 2019). These factors all display the need for appropriate interpersonal relationships between student and mentor to create the confidence and ability to work independently (Andriola, 2021; Aslam et al., 2017; Daneshfar & Moharami, 2018; Kozlin, 2002; Moll, 1990; Studebaker & Curtis, 2021). Though prior research focused on getting GED recipients into college, with an initial focus on retention, it is important to include individuals who progress further in their education than the initial research. Within this research, I focused on individuals progressing from GED to PhD, but this left out GED recipients who obtain their bachelor's or master’s degrees; therefore, it is recommended that these levels of education be understood as well. Researching a wider variety of individuals will offer an inclusive understanding of what the academic community can do to connect more with these students. One quantitative recommendation is to determine the number or percentage of

individuals who have accomplished the goal of GED to PhD as, according to the Survey of Earned Doctorates (Kang, 2021), this data is not currently available.

The findings of social connectedness, family, social environment, and academic environment critically influenced the study participants. Social connectedness should be researched further, possibly including the social environment which led to initially dropping out of high school, deciding to go back to school, and finally seeing the education out until the end. It is expected that each of these dynamics will change throughout each of these three stages. Personality styles of individuals who accomplished the goal of progressing from GED to PhD would also be an important addition to the research, along with theories associated with resilience, determination, and grit.

There is a large gap regarding the successful completion of a PhD for those who obtained a GED, as only one study was previously written (Chaney et al., 2020). This untouched area in academic research leaves many questions to be answered by future scholars. The more the academic community knows about how this progression occurs, the better prepared it will be to assist at-risk youth and those who have the desire to change but may not know how to begin.

Implications

The progression from GED to PhD requires that the individual realizes a need for change and is determined to make that change based on a passion that drives the change and the social connectedness which assists the individual in achieving a goal that they may not have thought possible before the desire for change. Within this research, I highlighted six stories of the experience from dropping out of school through the

completion of their PhD. As described by each participant, had these things not occurred and had they not had the positive social influences present in their lives, the participants would not have seen their path ending in the same way.

Obtaining higher education leads to the betterment of society based on a socio-economic standpoint. When more individuals in a community have higher degrees, the effects can include lower societal unemployment rates, political stability, decreased crime rates, lower public health costs, and environmental improvements (McMahon, 2009). A high school dropout who obtains a GED shows increased self-confidence and self-esteem, which increases further as they advance in their education (Cohen, 2014; Wienclaw, 2021). Darolia et al. (2021) discussed that the cost of doing crime becomes higher when the individual has more success since the structure in their lives would be jeopardized. Human capital theory suggests that society benefits when more of the community is educated as the investment each individual puts into themselves creates an intrinsic mindset and encourages them to achieve more (Cohen, 2014).

The knowledge this research brings on how an individual progresses from GED to PhD introduces a new perspective to the scholarly community. It offers a guideline on what needs to occur to encourage more high school dropouts to return to school and understand that they can take their education further than originally considered. As discussed in Chapter 2, the more the academic community knows about the abilities of those who start their academic career as non-high school graduates, the more mediation and modification can be offered to adjust the student's belief system. This research will be important for GED facilitators, college admissions, student advisors and support,

administrators, and professors as they guide students through their college careers. The research is also important for those within the high school and earlier school system, including school districts, administrators, teachers, school counselors, and school psychologists. The ability to offer support for students while supporting connectedness in relationships, building trust, and focusing on student successes and motivation inside and outside of the classroom is invaluable (Noble et al., 2021; White et al., 2021).

Professional development for those involved in academic connectedness is recommended to understand the various needs of individuals who did not complete high school. Effective adjustments within the classroom include allowing freedom for the teacher to be creative, implementing an open communication policy, and encouraging a learner-focused classroom where each learner's unique needs can be met (Goldman et al., 2017; Link, 2018; Todor & Gomoescu, 2019). Not to be overlooked, knowledge of this research could help parents and guardians understand the path their children may be on and how adjustments to the mindset can be made by offering the family support that was so important to each participant in this study.

Social connectedness stood out within this study. As described in Chapter 2, individuals learn through the encouragement of a more knowledgeable member of society (Aslam et al., 2017; Vygotsky, 1978), and the interaction between individuals and their social and cultural environment has a large effect on intellectual development and cognition (Tzuriel, 2021). Connectedness was proven with each participant when the three areas of family, social environment, and academic environment were discussed.

Conclusion

The lived experiences of individuals who progressed from GED to PhD were examined in this study. Although the start of their academic career left them not knowing where they would end up, there came the point in each of their lives where they were determined to make a change and let their passion drive them through to completion. Social connectedness and the support associated with that connectedness were highlighted throughout each part of the journey, from dropping out of high school, deciding to return to school, and seeing it through to the end.

Vygotsky's (1978) sociocultural theory of mediation and Feuerstein et al.'s (1988) academic modifiability, as described by Aslam et al. (2017) and Falik (2019), were displayed in more than just an academic arena. The influence of family and social environment also offered this type of adjustment in the individual's belief system. As discussed in Chapter 2, the thought process depends on an individual's experience in the social world, where these interactions lead to interpretations and perceptions (Jaramillo, 1996; Vygotsky, 1978). In addition, the level of trust within an individual determines their connectedness, leading to their ability to open their mind to new possibilities (Leighton et al., 2018; Lemkin et al., 2018). This connectedness is important throughout the entire educational process, including doctoral work. Meschitti (2019) discussed the importance of social networks and encouragement within small groups during the doctoral process since it involves such an independent research project.

Each participant was excited to share their experience for this research and hoped their narrative could add to the stories of determination and success a person can have

when they start on a different track than the typical high school graduate. Though each path was long and, at times, difficult, it taught them that anything is possible. Feuerstein told Falik many times, “When people say to me that it cannot be done, that it is impossible, that is when I start to work. I fight to show that it can be done and find a way to do it” (Falik, 2019, p. 10). Each participant in this study fought to show that it could be done, and they found a way to do it. In the end, those who desired to make a change for their families, themselves, or their communities succeeded in their path because of social connectedness. Though their formal educational path may be complete, each participant works daily to spark that desire in others. This creates a beautiful circle as they work to strengthen their social community, just as they were strengthened along their own path to success.

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Appendix A: Social Media Invitation to Participate

Did you get a GED and later go on to obtain a doctorate?

Heather Hoyt, a Ph.D. student at Walden University, is conducting an interview study examining the experience of progressing from a GED to a Ph.D.

The study involves a 30-45 min interview via audio-recorded face-to-face MS Teams or Zoom conference. Participation is voluntary, confidential, and you may withdraw from the study at any time.

Volunteers must meet the following requirements:

- Dropped out of high school and received the GED (General Education Development) certificate
- Currently have a doctorate
- Are a US citizen and have been a citizen since birth
- Must speak English

Appendix B: Interview Guide

Date: _____ Identification Code: _____

Gender: _____ Age:_____

Time started:_____ Time ended: _____

Interview Time Total:_____Race Identity: _____

"What is your age, gender, and the race you identify with?"

Tell me about your path from high school through to your Ph.D.

- What/who encouraged you to pursue your GED?
- When and how did you decide to go to college?

- What was going on in your life when you decided to get your doctorate?
- Did your path consist of small goals, or was it always one big goal to get your Ph.D. once you started?
- 50% of doctoral students make it through the process. What drove you through to completion?
- What did obtaining a Ph.D. mean to you as you worked through your capstone project? What does it mean to you now?
- Was there someone who stands out in your mind who offered you the encouragement you needed throughout each step of your academic career?
    - What was your relationship with this person in the beginning? Throughout the process?

- How did this person encourage you or guide you? Was it purely academic encouragement, or was there an emotional aspect to it?
- Do you think your academic skills improved because of this relationship?
- Do you think you would have attempted the next step in your education had that/those individual(s) not been involved in your life?