

THE INFLUENCE OF HOMESCHOOLING ON THE LIVES OF COLLEGE GRADUATES:
A TRANSCENDENTAL PHENOMENOLOGICAL STUDY

by

Jennifer Rose Elliott

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Gary Smith, Ed.D., Committee Chair

Sarah J. Pannone, Ed.D., Committee Member

Katherine L. Todd, Ed.D., Committee Member

ABSTRACT

The purpose of this transcendental phenomenological study was to describe the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of the adult lives of select four-year college graduates. Vygotsky’s sociocultural theory framed this study, as it purports that learning and development occur in the symbiotic relationship between learner and environment. Central research question: How do select four-year college graduates describe the influence of a K–12 home education on their adult lives? Sub-questions: (a) How do participants describe the impact of a K–12 home education on their experiences in higher education? (b) How do participants describe the impact of a K–12 home education on their relationships with their parents? (c) How do participants describe the impact of a K–12 home education on their spiritual journey? (d) How do participants describe the impact of a K–12 home education on their vocational choice? Fourteen participants were selected via purposeful, snowball sampling, and data collection was triangulated via personal interviews, focus groups, and document analysis. Data were analyzed utilizing Moustakas’s modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. Research question responses indicated that (a) participants felt prepared for college because of critical thinking skills as well as experience in dual enrollment, co-ops, and outside classes, (b) the greatest challenges in college were balancing a heavy course load and navigating new social dynamics/venues, (c) most participants had close relationships with their parents, (d) homeschooling helped lay a strong faith foundation, and participants’ faith was similar to their parents’, and (e) there was a connection between homeschooling experiences and vocational choice.

Keywords: home education, home school, homeschool, homeschoolers, homeschool graduates, homeschooled adults

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Dedication

This work is first dedicated to my parents, Norman R. Minor and Elizabeth K. Minor, who taught me to value family and to value education; perhaps this built a foundation that would one day support homeschooling. Thank you so much for your love, generosity, and encouragement, Mom and Dad. It is also dedicated to my children David, Jeffrey, and Timothy: Being your mom has been such a precious gift, and words cannot express my love for you. You were also my very favorite students, with whom I enjoyed precious days of learning. Dad and I are so thankful for the men you have become. To our daughters-in-law Leticia and Hannah and grandchildren Rebekah, Sarah, and David: You are heaven-sent and gifts to not only our sons, but to us. I love you all dearly. To my husband, Brad: How can I ever thank you for the love and encouragement you have given me? You've sacrificed in so many ways, first so that I could stay home and educate our children, and then so that I could finish this degree. You are my rock and my umbrella, and I am so very thankful for you. Yet ultimately, this work is dedicated to my Lord and Savior, Jesus Christ. Your forgiveness, love, peace, joy, and grace take my breath away. I dedicate this meager offering to You, Lord, and pray that its contents would serve to help others.

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This work could not have been accomplished without the transparency of its participants. Getting to know you was the best part of the whole dissertation process; thank you so much for sharing your stories with me. I pray that many are encouraged because of your generosity of time, introspection, and disclosure.

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List of Abbreviations

Coalition for Responsible Home Education (CRHE)

Home School Legal Defense Association (HSLDA)

Homeschool Alumni Reaching Out (HARO)

Homeschoolers Anonymous (HA)

International Center for Home Education Research (ICHER)

More Knowledgeable Other (MKO)

National Center for Education Statistics (NCES)

National Home Education Research Institute (NHERI)

Scholastic Aptitude Test (SAT)

Stay at Home Mom (SAHM)

Zone of Proximal Development (ZPD)

CHAPTER ONE: INTRODUCTION

Overview

Home education is growing at a rate of 2%–8% per year, the fastest growing form of education in the United States (Mazama, 2016; Ray, 2018; Snyder, 2013). The number of homeschooled students has grown from 10,000 in the 1970s to 2.3 million today (Brewer & Picus, 2014; Murphy, 2013; Ray, 2018); yet despite the fact that so many students receive their education at home, little is known about the influence of a K–12 home education on the adult lives of college graduates (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Murphy, 2013; Snyder, 2013). The purpose of this transcendental phenomenological study was to describe the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of the adult lives of select four-year college graduates.

Chapter One provides the framework for this study, beginning with the background of home education and followed by the researcher's motivation and philosophical assumptions. The problem and purpose of the study are introduced, as well as the study's significance. Finally, the central research question and four sub-questions are presented. The chapter closes with a definition of terms and a brief summary.

Background

There is a growing body of literature on homeschooling, which many consider to be the most extreme form of privatization in education and the most extravagant form of school choice (Murphy, 2013). There is a limited amount of literature on homeschool graduates in college, which indicates that homeschoolers are well-prepared (Bolle-Brummond & Wessel, 2012; McCulloch, Savage, & Schmal, 2013), transition well socially (Bolle-Brummond & Wessel, 2012; Kranzow, 2013; Medlin, 2013; Shields, 2015), communicate as well as their peers (Neil,

Bonner, & Bonner, 2014; Payton & Scott, 2013), and are academically commensurate with their traditionally-schooled peers (Bolle-Brummond & Wessel, 2012; Mazama, 2016; Ray, 2018; Snyder, 2013). Furthermore, existent research reveals that previously homeschooled college students experience the same levels of self-esteem as their peers, have lower levels of depression, and view their college experience more positively than traditionally educated peers (Drenovsky & Cohen, 2012).

Close examination of the literature reveals that the voice of college graduates is not heard describing the influence of a K–12 home education on the adult lives of college graduates (Drenovsky & Cohen, 2012; Snyder, 2013). Snyder (2013) researched the academic achievements of homeschoolers in college and suggested further study on effective homeschool pedagogy; this study sought to fill that gap. Drenovsky and Cohen's (2012) quantitative study revealed that homeschoolers experienced higher academic success in college and suggested further qualitative research on this topic; this study sought to add to the qualitative research in this area. Bolle-Brummond and Wessel (2012) researched how the pre-entry attributes of homeschoolers influenced college experiences, and the researchers suggested further study with participants from wider demographics and other geographical areas; this study attempted to fill that gap. The purpose of this transcendental phenomenological study was to describe the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of the adult lives of select four-year college graduates who were homeschooled in the United States.

Historical Context

The history of homeschooling can be divided into three chapters (Murphy, 2013). From the birth of the United States until the institution of public schools across the country (1850–

1918), homeschooling was very common and may have been the primary form of education (Jolly, Matthews, & Nester, 2012; Murphy, 2013). After compulsory public education shifted the burden of educating children from the family to the government, homeschooling moved to the fringe of academia and became an oddity (Medlin, 2013). It was not until the 1960s–1970s that the third chapter of homeschooling began, which is known as the modern homeschooling movement (Murphy, 2013; Ray, 2015). From the political left came the liberal ideology of homeschool pioneer John Holt (1977) and from the political right came the conservative and mostly-Christian ideology of homeschool pioneer Raymond Moore (Moore & Moore, 1981). Though differing in ideology and worldviews, each forefather of the modern homeschooling movement believed that a child’s education should be controlled by the parents (Holt, 1977; Moore & Moore, 1981). While some believe that homeschooling in the United States began in the 1600s and never stopped, most scholars agree that the modern homeschooling movement began with this third chapter in the mid-1960s to mid-1970s (Murphy, 2013; Ray, 2013). Surprisingly, it was not until the 1990s that homeschool laws were enacted in every state, and homeschool rights were recognized across the country (Bhatt, 2014).

Social Context

Brian Ray founded the National Home Education Research Institute (NHERI) and has conducted and collected homeschool research since 1990. According to NHERI research (Ray, 2018), the most common reasons for homeschooling are as follows:

- Customize or individualize the curriculum and learning environment for each child
- Accomplish more academically than in schools
- Use pedagogical approaches other than those typical in institutional schools

- Enhance family relationships between children and parents and among siblings
- Provide guided and reasoned social interactions with youthful peers and adults
- Provide a safer environment for children and youth because of physical violence, drugs and alcohol, psychological abuse, racism, and improper and unhealthy sexuality associated with institutional schools, and
- Teach and impart a particular set of values, beliefs, and worldview to children and youth. (p. 2)

National homeschool demographics are changing, and a growing number of non-Caucasian families are homeschooling. Ray (2018) reported that currently about 15% of homeschoolers are non-White/non-Hispanic. According to the NHERI, the nation's homeschoolers "are made up of atheists, Christians, and Mormons; conservatives, libertarians, and liberals; low-, middle-, and high-income families; Black, Hispanic, and White; parents with Ph.D.s, GEDs, and no high school diplomas" (Ray, 2018, p. 1). Others estimate that one third of homeschoolers are Black, Asian, Hispanic, and other non-White/non-Hispanic (Noel, Stark, & Redford, 2016). The number of homeschooled students has grown from approximately 10,000 in 1970 to 2.3 million today; the oldest method of schooling has re-entered the mainstream (Brewer & Picus, 2014; Murphy, 2013; Ray, 2018).

Theoretical Context

Because the three most common reasons for homeschooling are (a) individualizing curriculum and learning environment for each child, (b) accomplishing more academically than in schools, and (c) using pedagogical approaches other than those typical in institutional schools (Morrison, 2016; Ray, 2018), it was appropriate that Vygotsky's (1978) sociocultural theory framed this study. Vygotsky (1978) theorized that a child's development cannot be separated

from the environment, and that learning and development occur in the symbiotic relationship between learner and environment. Since home education occurs in the relationship between homeschooled child and homeschool environment (Neuman & Guterman, 2016), the sociocultural theory was appropriate to frame this study.

Situation to Self

It is important to the credibility of this study that I disclose my philosophical assumptions and the paradigm that guided this study (Creswell, 2013). As a former home educator and homeschool group leader, I established, administrated, and taught in a large homeschool group (~130 families) in southern Maine, and continue to advise new and struggling homeschooling families. I hold a biblical worldview and believe in the inspired, infallible Word of God as the ultimate authority over my life and my work. Within the boundaries of Scripture, I am pragmatic in the home and classroom, employing methods from a combination of philosophies in order to individualize instruction (Pearcey, 2008).

Researchers always bring deeply ingrained philosophical assumptions and personal beliefs to their research (Creswell, 2013), and it is important that these beliefs are disclosed so that they can be bracketed during the study (Creswell, 2013; Moustakas, 1994). The paradigm that I bring to this study is constructivism, the belief that learning and development take place within the interaction between learner and environment as children learn to construct their own knowledge (Vygotsky, 1978). Learners are intricately connected to their environment, and the process of learning and development is a cyclic relationship between learner and environment (Vygotsky, 1978). Embedded in each paradigm are various assumptions (Creswell, 2013): ontological (the nature of reality), epistemological (how knowledge is acquired), rhetorical (the structure in which one speaks and writes effectively), and axiological (the role of values). In

transcendental phenomenology, the researcher discloses biases so that they can be bracketed (called the Epoche) for the purpose of approaching the research with an open mind (Moustakas, 1994). The researcher must accept that participants may view the phenomenon differently than does the researcher (Creswell, 2013).

My ontological bias is a biblical worldview, which means that I believe in the infallible Word of God and place myself and my work under its authority. Pertinent to the epistemological assumption is the issue of the subjectivity of knowledge (Creswell, 2013). One of the differences between quantitative and qualitative research is that quantitative researchers detach themselves from the study, while qualitative researchers immerse themselves in it (Firestone, 1987). The more researchers know about the participants, the more knowledge is acquired and data are collected (Creswell, 2013). For this reason, the rhetoric of qualitative research is to include thick, rich description in order to attain understanding of the phenomenon (Creswell, 2013; Firestone, 1987).

My epistemological assumption is that though perception of reality is subjective, there is an absolute truth that can be found in the Word of God (Knight, 2006; Pearcey, 2008). The axiological assumption pertains to values, which are very important in this study. One of the research sub-questions probes the transfer of values from parent to child, which is one of the main reasons given for homeschooling (Ray, 2018). My bias is that axiologically, I value teaching and parenting that align with the Word of God and oppose teaching anything that contradicts the Word of God. The teacher's morals and values, no matter if the classroom is in the home or in a school, are critical in shaping the value system of the student: "The classroom is an axiological theater in which teachers cannot hide their moral selves" (Knight, 2006, p. 29).

Over the last 25 years, I have observed families who homeschool with excellence, and have observed families who do not. Though I am positively biased toward homeschooling, I do not believe that it is the best educational option for every family and have counseled some families against it. I have a strong desire to help new and struggling homeschooling families. My hope is that this research will help to guide and encourage the practices of future home educators, as well as to inform homeschool associations, college and career centers, and school choice advocates.

Problem Statement

No existent research gives a voice to college graduates who were homeschooled throughout K–12 describing the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of their adult lives. This is surprising, given that home education is growing at the rapid rate of 2%–8% per year, and that there are currently 2.3 million homeschooled children in the United States (Mazama, 2016; Ray, 2018; Snyder, 2013). Studies have been conducted on the academic achievement of homeschoolers which reveal that homeschoolers, on average, score 15–30 points above their public schooled peers on standardized tests (Mazama, 2016; Ray, 2018). However, there is a paucity of literature on homeschool graduates in college (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Kranzow, 2013; Murphy, 2012; Parker, 2012; Payton & Scott, 2013; Snyder, 2013).

Though the small number of studies pertaining to homeschoolers in college indicate that homeschoolers are academically prepared for college (Drenovsky & Cohen, 2012; Snyder, 2013; Wilkens, Wade, Sonnert, & Sadler, 2015), less is known about the influence of homeschooling on adults after earning a college diploma. Snyder's (2013) quantitative research explored the academic achievements of homeschoolers in college and suggested further research on effective

homeschool pedagogy; this study sought to fill that gap. Studies indicate that the extent of a homeschool's structure affects academic achievement, and this research explored the structure and pedagogy of the participants. Wilkens et al. (2015) found that college students who were homeschooled were demographically similar to their peers, earned SAT scores commensurate with their traditionally-educated peers and earned higher tertiary calculus grades; this study sought to add qualitative research on the topic of success in higher education. Drenovsky and Cohen's (2012) quantitative study revealed that homeschoolers experience higher academic success in college and suggested further qualitative research on this topic; this study hoped to add to the qualitative research in this area. Bolle-Brummond and Wessel (2012) researched how the pre-entry attributes of homeschoolers influenced college experiences, and the researchers suggested further study with participants from wider demographics and other geographical areas; this study sought to address that gap. The body of current scholarly literature pertaining to homeschoolers in college is scant, and even more scarce is literature pertaining to the effect of homeschooling in the lives of college-educated adults. The problem is that even though home education is growing at an unprecedented rate, little is known about how homeschool experiences affect the academic, familial, spiritual, and vocational aspects of the adult lives of college graduates (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Kranzow, 2013; Murphy, 2012; Payton & Scott, 2013; Snyder, 2013); this study attempts to add to the literature on this topic.

Purpose Statement

The purpose of this transcendental phenomenological study was to describe the influence of a K-12 home education on the academic, familial, spiritual, and vocational aspects of the adult lives of select four-year college graduates. Homeschooling is defined as parent-led, home-

based education (Ray, 2018). The term college graduate refers to one who graduated from an accredited four-year college with a bachelor's degree. The theory guiding this study is Lev Vygotsky's (1978) sociocultural theory, as it purports that learning and development occur in the symbiotic relationship between learners and their environments.

Significance of the Study

This study seeks to contribute to the practical, empirical, and theoretical fields of knowledge on home education. Home education is a viable school choice, "the most radical form of privatization in education, and the most aggressive form of choice" (Murphy, 2013, p. 336). This research attempts to add to the practical discussion on school choice. It is my hope that this study will add to the empirical data on homeschooling, as there is no empirical research that gives a voice to four-year college graduates who were homeschooled throughout K-12, describing the homeschool experiences that affected academic, familial, spiritual, and vocational aspects of their adult lives (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Kranzow, 2013; Murphy, 2012; Payton & Scott, 2013; Snyder, 2013). There is a lack of scholarly data on homeschoolers in college, and this research sought to address this lack. Drenovsky and Cohen (2012) suggested further qualitative research to complement their quantitative study of academic success in college; this phenomenological study of previously-homeschooled college graduates addresses this gap. Snyder (2013) suggested more research on homeschool pedagogy; this research sought to address this gap. The empirical significance of this study is its attempt to fill these gaps in current literature.

This study explored the application of Vygotsky's (1978) sociocultural theory to the homeschool environment. Vygotsky (1978) theorized that learning and development occur in the cyclic relationship between the learner and environment. In homeschooling, the learning

environment is the home; therefore, learning and development take place as children learn to construct meaning as they interact in the home (Tomlinson, 2001; Vygotsky, 1978). Because home education was less common when Vygotsky (1978) developed his theory, it is my hope that this study stretches the knowledge of sociocultural theory by applying it to the homeschool. It is my hope that stakeholders find this study helpful, including current and future homeschool parents and students, homeschool associations, college and career counseling centers, and advocates of school choice.

Research Questions

This qualitative study explored one central research question and four sub-questions.

Central Research Question: How do select four-year college graduates who were homeschooled throughout K–12 describe the influence of homeschooling on their lives?

The central research question addressed Vygotsky's (1978) sociocultural theory, which emphasizes that learning and development take place in the symbiotic relationship between learner and environment. Although the academic achievements of homeschoolers have been well-documented (Drenovsky & Cohen, 2012; Mazama, 2016; Ray, 2015, 2016; Snyder, 2013), little is known about the impact of home education on the adult lives of its graduates (Jamaludin, Alias, & DeWitt, 2015; Jones, 2013; Wilkens et al., 2015).

SQ1: How do participants describe the impact of homeschooling on their experiences in higher education?

Vygotsky's (1978) sociocultural theory informed this question, as it explored the environment in which the participant was homeschooled and how that affected the participants' higher education experiences. A limited number of studies have been conducted on homeschoolers in college (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012;

Kranzow, 2013; Murphy, 2012; Payton & Scott, 2013; Snyder, 2013), but none have explored the impact of homeschooling on the adult lives of college graduates.

SQ2: How do participants describe the impact of homeschooling on their relationships with their parents?

Vygotsky's (1978) sociocultural theory informed this question as well, as it explored the environment in which the participant was homeschooled. Since the 17th and 18th centuries, parents have chosen to homeschool in part to ensure that the values of the parents were passed to the next generation (Jamaludin et al., 2015).

SQ3: How do participants describe the impact of homeschooling on their spiritual journey from childhood until now?

As stated in the previous sub-question, homeschooling parents choose this academic option in part to ensure that the values of the parents are passed to their children (Jamaludin et al., 2015). This question explored the participant's view of these transferred values.

SQ4: How do participants describe the impact of homeschooling on their vocational choice?

Vygotsky's sociocultural theory informed this question. Homeschooling is a unique form of education in that the parent serves as teacher, principal, and guidance counselor (Anthony, 2013; Anthony & Burroughs, 2012; Drenovsky & Cohen, 2012). Home educators have the opportunity to tailor each child's academics to individual interests (Pannone, 2017).

Definitions

1. *Constructivism* – A theory that suggests that children learn and develop as they are actively engaged in their environment (Vygotsky, 1978).

2. *Differentiated instruction* – An approach to instruction in which educators intentionally modify teaching methods and strategies to address the individual needs of students (Tomlinson, 2001).
3. *Homeschooling* – Ray (2018) defined homeschooling as parent-led and home-based education. In this study, the broad definition given by the National Center for Educational Statistics definition will be utilized: “being schooled at home instead of at a public or private school for at least part of their education and if their part-time enrollment in public or private school did not exceed 25 hours a week” (Redford, Battle, & Bielick, 2017, p. i).
4. *Modern homeschooling movement* – The homeschooling phenomenon that re-emerged in the United States in the 1960s–1970s through the present (Murphy, 2013; Ray, 2015).
5. *More Knowledgeable Other* – One who has a higher level of understanding or an increased ability level than does the child (McLeod, 2014; Vygotsky, 1978).
6. *Scaffolding* – Social and instructional support offered to students as they learn new concepts within their Zone of Proximal Development (Vygotsky, 1978).
7. *Sociocultural theory* – The idea that the individual and environment are intertwined; the child learns and develops within this symbiotic relationship (Vygotsky, 1978).
8. *Zone of Proximal Development* – Constructivist term for the space between the actual developmental age of a child and the potential developmental age (Vygotsky, 1978). Effective instruction takes place within the confines of this space (Tomlinson, 2001).

Summary

Homeschooling is the fastest growing form of education in the United States, and so it is worthy of study (Carpenter & Gann, 2016; Mazama, 2016; Ray, 2018; Snyder, 2013). Though homeschooling was common 240 years ago (Jolly et al., 2012; Murphy, 2013), the modern homeschooling movement did not begin until the 1960s–1970s (Murphy, 2013; Ray, 2015). It is quite remarkable that the number of homeschooled students in the United States has grown from 10,000 in 1970 to approximately 2.3 million today, and continues to grow at 2%–8% per year (Ray, 2018). The problem is that even though home education is growing at an unprecedented rate, no existent research gives a voice to college graduates who were homeschooled throughout K–12 describing homeschooling experiences that influenced their adult lives (Drenovsky & Cohen, 2012; Kranzow, 2013; Murphy, 2012; Payton & Scott, 2013; Snyder, 2013). The purpose of this transcendental phenomenological study was to describe the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of the lives of select four-year college graduates who were homeschooled in the United States.

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter Two builds a foundation for this research by synthesizing relevant peer-reviewed, scholarly literature pertaining to the influence that home education has had on the adult lives of college-educated homeschool graduates. Lev Vygotsky's (1978) sociocultural theory framed this study, and this chapter begins by synthesizing the literature pertaining to Vygotsky's sociocultural theory of cognitive development and three relevant components of constructivist theory: The Zone of Proximal Development, the More Knowledgeable Other, and the concept of scaffolding. Following a review of literature on the theoretical framework, related literature is synthesized on topics pertaining to the impact that homeschooling has had on the lives of college educated homeschool graduates. Sub-topics are the definition of homeschooling, history of homeschooling, politics and legislation of homeschooling, demographics in home education, academic achievement of homeschoolers, structured vs. unstructured homeschool environments, curriculum and methodology, and homeschool graduates' transition to college. A brief summary concludes this chapter.

Theoretical Framework

Lev Vygotsky's sociocultural theory of learning frames this research on the influence of home education in the lives of previously-homeschooled college graduates. Constructivism is an educational theory based on the idea that children construct knowledge by interacting with their environments; learners are active participants instead of passive receptors. Vygotsky, a contemporary of well-known Claude Piaget, was one of the pioneers of constructivism (Piaget, 2000; Vygotsky, 1978). He lived and worked in pre-WWII Russia, but his research was suppressed by the Soviet government until the 1960s and was not translated into English until the

1970s (Estep, 2002). Three significant components of social constructivism that are especially applicable to this research are Vygotsky's (1978) Zone of Proximal Development, Most Knowledgeable Other, and the concept of scaffolding (McLeod, 2014; Vygotsky, 1978, 2011; Wass & Golding, 2014).

Les Vygotsky's Sociocultural Theory of Learning

Lev Semyonovich Vygotsky (1896–1934) was born in Gomel, Byelorussia, to a middle-class Jewish family in a large Jewish community (Estep, 2002). After the ban on Jewish people was lifted, Vygotsky matriculated at Moscow State University and graduated with a law degree in 1917, the same year as the Bolshevik Revolution (Deulen, 2013). Following the Revolution and before the police state was established in 1930, artists, musicians, poets, and even scientists enjoyed more freedom in which to work in Russia (Marginson & Dang, 2017). Vygotsky had a wide variety of interests, especially in language and literature, and he continued his education in philosophy and history at Shanyavsky's Popular University (Estep, 2002). It wasn't until 1924 that he pursued a career in psychology and, after having a notable paper on psychology published (Estep, 2002), he was asked to join the faculty of Moscow University's Psychological Institute. He received a Ph.D. the following year after writing his dissertation on "Values in Art," exploring how art reflects values (Estep, 2002). Vygotsky practiced psychology until his early death from tuberculosis at age 37 in 1934 (Deulen, 2013; Estep, 2002; Marginson & Dang, 2017).

In his relatively short life, Vygotsky authored over 296 articles and essays (Deulen, 2013; Estep, 2002; Marginson & Dang, 2017). Vygotsky's writings indicate that he was likely influenced by Marxism, such as when he wrote, "If one changes the tools of thinking available to a child, his mind will have a radically different structure" (Vygotsky, 1978, p. 126). However,

Vygotsky disagreed with Marxist dogma (Estep, 2002). “He knew that human personality and character were pliable, but he could not agree with Stalin that human nature was wholly plastic and thoroughly capable of being molded in society” (Jacobsen, 1991, p. 410). Regarding his view of knowledge and the nature of being, “Vygotsky’s epistemology was realist, and his ontology, materialistic” (Duncan, 1995, p. 459). Because of this disagreement with Marxist dogma, the Soviet government suppressed his work until the 1960s; although some of his work was translated into English in the 1970s, much of it has yet to be translated (Deulen, 2013; Estep, 2002).

Because Vygotsky’s work was not translated into English until later, his constructivist philosophy was not as well-known as Piaget’s; however, both researchers were pioneers in this field and were concerned with the process of learning (Piaget, 2000; Vygotsky, 1978). These fathers of constructivism theorized that children must become active learners, interacting with their environment in order to learn (Piaget, 2000; Vygotsky, 1978). Both pioneers believed that the role of the teacher should change in order to accommodate this learning theory: teachers should no longer be lecturers, but instead should become facilitators. Classrooms should no longer be teacher-centered, but instead should become student-centered (Piaget, 2000; Vygotsky, 1978). If children were to become effective critical thinkers, then students must learn to interact with their environment so that they could come to their own understanding (Piaget, 2000; Vygotsky, 1978).

A striking difference between Piaget and Vygotsky was that Piaget (2000) theorized that development preceded learning, whereas Vygotsky (1978) postulated that learning preceded development. While Piaget theorized that cognitive learning followed intellectual development, Vygotsky’s theorized that learning was a process during which the student interacted with the

culture and with society in such a way that new knowledge was constructed; therefore, learning preceded development (Deulen, 2013). Vygotsky (1978) theorized that the child's interaction with the environment and the culture led to learning and development: "In essence, Vygotsky believed that learning takes place in the context of a community" (Deulen, 2013, p. 91). This was in sharp contrast to Piaget's (2000) biological view of constructivism.

Vygotsky's theory was groundbreaking because he postulated that people are active participants in their own learning and development, and that "at each stage of development children acquire the means by which they can competently affect their world and themselves" (Vygotsky, 1978, p. 123). Learning and development happened in the symbiotic relationship between self and environment. One of the most common reasons for homeschooling is the ability to individualize the learning environment and curriculum for each child (Ray, 2016). With this in mind, it is appropriate that Vygotsky's (1978) sociocultural theory framed this study, since Vygotsky (1978) taught that the environment plays a key role in learning and development. Three important components of the sociocultural theory of cognitive development that affect home education are the Zone of Proximal Development, the More Knowledgeable Other, and the concept of scaffolding (Vygotsky, 1978).

Zone of Proximal Development. The Zone of Proximal Development (ZPD) is one of Vygotsky's most important contributions to education because it allows educators to understand and facilitate learning (Wass & Golding, 2014; Zaretskii, 2009). "The core idea is that with more capable peer or teacher assistance, students are able to operate at a higher level than they could on their own, and this enables them to learn to operate independently at this level" (Wass & Golding, 2014, p. 672). Vygotsky (1978) defined two developmental levels in children. The first was the actual developmental level, which is a child's mental development based on tasks

that can be completed independently or problems that can be solved without help. The second developmental level is the level of potential development, when children can understand a concept or perform a task with help. Vygotsky supposed that the level of potential development was the most important, for “what children can do with the assistance of others might be to some sense even more indicative of their mental development than what they can do alone” (Vygotsky, 1978, p. 85). Vygotsky defined the ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).

Thomas and Pattison (2013) described the ZPD as “the intellectual space around an individual’s knowledge to provide a zone of possibility for potential learning” (p. 145). A simplistic understanding of its application would be that educators “should pitch what we teach so that it is slightly too hard for students to do on their own, but simple enough for them to do with assistance” (Wass & Golding, 2014, p. 671). Vygotsky (1978) theorized that the best learning occurred “in advance of development” (p. 89), in other words, in that space between actual development and potential development which is called the ZPD. The assistance that is given to help a child attain that potential is given by someone more knowledgeable, more skilled—someone that Vygotsky referred to as a More Knowledgeable Other.

More Knowledgeable Other. The ZPD is closely related to another of Vygotsky’s important educational concepts which is called the More Knowledgeable Other (MKO) (McLeod, 2014; Vygotsky, 1978). Just as its name implies, the MKO is one who has more knowledge, a higher level of understanding, or an increased ability level than does the child, pertaining to a lesson or concept. An MKO facilitates learning in students by planning a lesson

that targets the ZPD in order to help children reach their potential development (Blonsky, 1925; Burt, 1930; Terman, 1916; Vygotsky, 1978). Researchers Terman (1916) in the United States, Burt (1930) in England, and Blonsky (1925) in Russia conducted independent studies exploring the importance of the MKO role. These independent studies held shocking conclusions.

Independent of one another, they found that when instruction targets the average ability in a classroom instead of each child's ZPD, children who come to school with a low IQ tend to raise it, children who come to school with an average IQ maintain it, and children who come to school with a high IQ tend to lower it (Vygotsky, 2011). These studies support Vygotsky's contention that the optimal time to teach a concept to a child is when it falls within the child's ZPD (Vygotsky, 2011). It is ineffective to teach concepts too early or too late (Vygotsky, 2011).

Vygotsky (1978) had no way of knowing that technology might one day serve as an MKO. Educators may now appoint a tool or device on the internet to act as an MKO: "In the pre-twenty-first century classroom the MKOs were most often teachers or advanced classmates. Web 2.0 has dramatically increased the opportunities for learning from a more knowledgeable other" (Cicconi, 2014, p. 58). It could be argued that Web 2.0 tools are merely devices used by MKOs in order to facilitate teaching; in this case, the Web 2.0 would be considered a tool that the educator uses for scaffolding (Cicconi, 2014).

Scaffolding. In the same way that scaffolding supports the construction of a building, Vygotsky (2012) proposed the concept of scaffolding to describe the social and instructional support that MKOs offer students as students learn new concepts within their ZPD. Vygotsky (1978) considered the MKO to be an adult, older student, or tutor; and Vygotsky's scaffolding is the assistance, facilitation, or help that the student needs from the MKO as new material is mastered. Freund (1990) investigated the speed at which children master skills and concepts

when assisted by their mothers, as opposed to solving tasks independently. Children who interacted with MKOs (mothers) through a problem-solving task had improved independent performance (Freund, 1990). In the same way that scaffolding is removed when the building is complete, Vygotsky's scaffolding is removed as soon as the student masters the material. Vygotsky contended that the best teaching occurs when the MKO plans a lesson aimed at the student's ZPD, skillfully utilizing instructional support (scaffolding) to help the student construct understanding and assimilate new knowledge (Vygotsky, 1978). It is a goal of this researcher to extend Vygotsky's theory to encompass the long-term sociocultural impact of homeschooling on adults (Vygotsky, 1978).

Related Literature

Although there is a growing body of information on the topic of homeschooling, most researchers agree that there is a paucity of empirical data on the topic, especially as it relates to this study's topic which explores the influence of a K-12 home education on the academic, familial, spiritual, and vocational aspects of the lives of college graduates (Anthony, 2015; Bolle-Brummond & Wessel, 2012; Clemmitt, 2014; Drenovsky & Cohen, 2012; Gaither, 2012; Gloeckner & Jones, 2013; Hanna, 2012; Kranzow, 2013; Kunzman, 2012; Lubienski, Puckett, & Brewer, 2013). "One of the most stark conclusions one draws when interrogating the scholarly literature on the impact of homeschooling is just how thin the empirical knowledge base is on this social phenomenon and educational movement" (Murphy, 2014, p. 245). In order to adequately explore the lived experiences of previously-homeschooled college graduates, this study must be built upon a foundation of scholarly literature regarding home education. This section contains a review of current literature as it pertains to the definition of homeschooling, the history of homeschooling, politics and legislation of homeschooling, demographics in home

education, academic achievement of homeschoolers, structured vs. unstructured homeschool environments, curriculum and methodology, and homeschool graduates' transition to college.

Definition of Homeschooling

Homeschooling is difficult to define, as there is some discrepancy in definitions found in literature (Murphy, 2012). Ray (2018, p. 1) defines it as “parent-led home-based education.” Homeschooling is certainly parent-led, but it is not always home-based, for many homeschooling families choose to homeschool at the library or participate in weekly co-op classes (Murphy, 2012). The terms “home education” and “homeschool” are used interchangeably, as are “homeschooled” and “home educated” (Anthony, 2013; Haugh, 2014; Ray, 2016). The National Center for Education Statistics at the U.S. Department of Education stated that homeschoolers were homeschoolers if they identified as such and were not enrolled in a traditional school more than 25 hours a week. Payton and Scott (2013) utilized Cogan’s definition of homeschooling: “a type of education which typically occurs in the home with the children’s parent or guardian serving as the primary educator” (p. 1). Neil et al. (2014) defined homeschooling as “the education of students, parent-directed, at home” (p. 107). Forrester (2016) defined homeschooling, home education, or home-based learning as “parent- or caretaker-led, personally funded education of a child outside of a traditional on-campus school” (p. 13). Within this parent-led, home-based form of education, the model of homeschooling has evolved (Murphy, 2014).

Murphy (2013) called homeschooling “the most popular form of choice” (p. 336), and expanded the definition of homeschooling to include two types: pure homeschooling and mixed model. Under pure homeschooling were single homes where parents teach, and “mom schools and collaboratives” (p. 347) where families gather weekly to provide weekly classes and

activities for their children. Next on Murphy's continuum of homeschooling models under mixed model types is public school support, where families use services without taking classes. Finally under the mixed model types is dual enrollment, also called shared services, shared schooling, and part-time enrollment, meaning that a student is enrolled at a public or private school part-time, usually less than 10 hours per week (Murphy, 2013). Murphy (2013) contended that 85% of homeschoolers in the United States fall under the two types of "pure homeschooling" (p. 347) which means that they receive their instruction at home or under the supervision of their parents in a homeschool co-op. For the purpose of this research, the National Center for Educational Statistics' definition will be utilized, which states the following:

Students are considered to be homeschooled if their parents reported them as being schooled at home instead of at a public or private school for at least part of their education and if their part-time enrollment in public or private school did not exceed 25 hours a week. (Redford et al., 2017, p. i)

This definition is broad enough to encompass the four-pronged model that Murphy (2013) described.

History of Homeschooling

Though homeschooling has been practiced in the United States since colonial days, modern homeschooling is still relatively new (Bhatt, 2014; Murphy, 2013; Ray, 2013). In the United States, homeschooling began in the 17th and 18th centuries to ensure that the values of the parents were passed on to the next generation, as well as to provide the means by which parents could offer their children an excellent academic education (Jamaludin et al., 2015). The history of homeschooling can be divided into three chapters (Murphy, 2013). From the birth of our nation until the institution of public schools across the country (1850–1918), homeschooling

was very common and may have been the primary form of education (Jolly et al., 2012; Murphy, 2013). After compulsory public education shifted the burden of educating children from the family to the government, homeschooling moved to the fringe of academia and became an oddity (Medlin, 2013). It wasn't until the 1960s–1970s that the third chapter of homeschooling began, the modern homeschooling movement (Murphy, 2013; Ray, 2015). The modern homeschooling movement was built upon two pillars, pioneers John Holt (1977) and Raymond Moore (Moore & Moore, 1981). Holt and Moore held important common ground: Each pioneer started as a school reformer and then sought to legitimize their shared belief that parents should control the education of their children (Murphy, 2013). Holt and Moore considered themselves trailblazers, yet they also recognized that they approached the phenomenon of homeschooling from different worldviews. Holt saw homeschooling as a “commitment to a new world order” (Murphy, 2013, p. 339), whereas Moore saw homeschooling as an extension of deeply held religious beliefs.

John Holt and the politically liberal left. From the political left came the liberal ideology of homeschool pioneer John Holt (1977), “evolving from a reformer of public schooling to the defacto head and chief tactician of the branch of homeschoolers known as the ‘unschoolers’” (Murphy, 2013, p. 339). Unschoolers are known for their humanistic beliefs, for being countercultural and politically left or progressive (Murphy, 2013). Holt believed that children’s interests should guide their education and that education should be child-centered because children are basically good and can ascertain and pursue their own interests (Holt, 1977). Holt also believed that the learning environment should be flexible and tailored to the learner, which he declared was the opposite way schools operated (Murphy, 2013). Home educators adhering to this philosophy would later be called Pedagogues (Van Galen, 1998). While Holt’s ideology was to the progressive left, Moore’s ideology was to the Christian right.

Raymond Moore and the conservative right. From the conservative and mostly-Christian political right came the ideology of the other modern homeschooling pioneer, Raymond Moore (Moore & Moore, 1981). Like Holt (1977), Moore wanted to reform the school system because he believed that education should be controlled by parents, and frustration with school reform led him to consider home education (Murphy, 2013). Moore was highly concerned about the pressure parents were under to send their children to school at younger and younger ages because he found no empirical data to support this practice (Murphy, 2013). Furthermore, this homeschool pioneer found evidence indicating that it was harmful to begin a formal education too early, and co-authored *Better Late Than Early: A New Approach to Your Child's Education* (Moore, Moore, & Moore, 1975) as a response. Murphy (2013) reported that the “right arm” of the modern homeschooling movement grew in popularity because “the public schools had birthed a belief system that was at odds with the one expressed by conservative Christian parents” (p. 341), and “the academic program and social climate that flourished in these schools were inimical to children and undermined the values of the home” (p. 341). By the 1980s the vast majority of homeschoolers operated under this Christian ideology because they wanted to avoid the secularism and ungodly influences in the public schools, and because they desired a more robust academic program and wholesome environment for their children (Murphy, 2013; Ray, 2013). Home educators who adhered to Moore et al.’s (1975) philosophy would later be called Ideologues (Van Galen, 1988).

Holt and Moore differed greatly in ideology and worldviews: Holt supported a child-centered education, while Moore supported parental authority and family-centered education (Murphy, 2013). Holt believed that children were basically good, while Moore’s followers believed in the biblical view of children as both good and sinful (Holt, 1977; Moore & Moore,

1981; Murphy, 2014). Though differing in ideology and worldviews, they shared a common mission, which is described by Gaither (2017):

Though they represented polar opposite political and often religious convictions, the two traditions in the early years of the movement worked hand-in-hand to facilitate homeschooler networking and to fight to make homeschooling easier to do by securing friendly court decisions and changing state laws. (p. 15)

Today, approximately 24.6% of homeschoolers follow the ideology of Holt, 46.8% follow the ideology of Moore, 26.4% claim to be motivated by a combination of ideologue and pedagogue philosophies, and 2.2% claim motivation that stems from another philosophy (Hanna, 2012).

While this third chapter of the history of homeschooling began with Holt and Moore in the 1960s and 1970s (Murphy, 2013; Ray, 2013), it was not until the 1990s that homeschool laws were enacted in every state, and homeschool rights were recognized across the country (Bhatt, 2014).

Politics and Legislation of Homeschooling

Throughout the history of homeschooling, there has been tension between freedom and regulation. On the far right are those like John Locke, who believed that the education of the child is the right and responsibility of the parent, and those on the far left like Karl Marx, who believed that the education of a child is the responsibility of the state (Anthony, 2013; Marx & Engels, 1964/1848). The U.S. Constitution protects the rights of individuals, and yet the state has an apparent conflict of interest: “In addition to its obligation to protect the rights of parents and children, the state has educational interests of its own, in particular the development of citizens who are willing and able to participate in a democracy” (Kunzman, 2012, p. 85).

Until the 1980s, there was no clear idea on whether homeschooling was legal or not; it was decided on a case-by-case basis (Bhatt, 2014). Between 1982 and 1991, 32 states legalized

homeschooling, though laws differed between states (Bhatt, 2014). It was not until the mid-1990s that homeschool rights were recognized in every state (Bhatt, 2014), and laws still differ widely throughout the country (Anthony, 2013; Bhatt, 2014; Kunzman, 2012; Ray, 2016). Many states require the parents to notify local school districts, but some do not require any notification. Some states require academic assessments to prove the student's progress, but many do not (Home School Legal Defense Association, n.d.). There are now approximately 2.3 million homeschoolers in the United States (Ray, 2018), and regulations vary from state to state.

Demographics in Home Education

Researchers call home education the fastest growing form of education in the United States (Mazama, 2016; Murphy, 2013) where approximately 2.3 million children are being educated at home, and this number is growing by 2% to 8% annually (Ray, 2018). It is difficult to ascertain a comprehensive understanding of homeschool demographics, in large part because many states do not require registration, which results in incomplete datasets from which to gather information (Kunzman & Gaither, 2013). Though some of the literature indicated that home educators were becoming more diverse, "most homeschooled students were White and non-poor and lived in cities, suburban, or rural areas" (Redford et al., 2017, p. 8). However, the National Home Education Research Institute (NHERI) reported that homeschooling is growing in popularity among minorities, and that 15% of homeschoolers are non-White or non-Hispanic (Ray, 2018). The number of Black homeschooled children tripled in the United States between 1999 and 2007 (Mazama, 2016; Ray, 2015). Researchers agree that more research is needed regarding the changing demographics that now include more minorities. "Some racial, linguistic, and ethnic minorities are drawn to homeschooling as a way to preserve their cultural

and linguistic distinctive, but little research has been conducted on this phenomenon” (Kunzman & Gaither, 2013, p. 11).

Ray (2018), president of the NHERI, found that homeschoolers were becoming more ideologically diverse as well. The NHERI reported that the nation’s homeschool population now includes “atheists, Christians, and Mormons; conservatives, libertarians, and liberals; low-, middle-, and high-income families; black, Hispanic, and white; parents with Ph.D.s, GEDs, and no high school diplomas” (Ray, 2018, p. 1) and that homeschooling is spreading around the world to nations including Australia, Canada, France, Hungary, Japan, Kenya, Russia, Mexico, South Korea, Thailand, and the United Kingdom. Furthermore, Ray (2018) discovered that homeschools spend an average of \$600 per student as opposed to the national public school average of \$11,732 (Ray, 2018). This is significant, given the academic achievement of homeschoolers.

Academic Achievement of Homeschoolers

Much of the literature on home education pertains to the academic achievement of its students. Homeschoolers usually score 15-30 percentile points above their public-schooled peers on standardized tests, with African American homeschooled students scoring 23-42 percentile points above their African American public-schooled peers (Mazama, 2016; Mazama & Lundy, 2013; Ray, 2015, 2018; Wilkens et al., 2015). McCulloch et al. (2013) reported that the median test scores of homeschooled students were in the 70th to 80th percentile, and that homeschooled students in first through fourth grades tested at least one grade level above their traditionally-schooled peers on standardized tests. Snyder (2013) stated that “homeschooled students scored significantly higher than traditionally schooled students on standardized achievement tests (the

ACT and SAT) and in overall college GPA” and claimed that “the homeschooling movement is preparing students for academic success in college” (p. 304).

Ray (2016) reported that 13,549 homeschooled seniors took the SAT in 2014 and that mean scores were 567 in critical reading, 521 in mathematics, and 535 in writing. These are impressive statistics when juxtaposed with the nation’s college-bound seniors’ mean scores of 497 in critical writing, 513 in mathematics, and 487 in writing. However, this comparison has been questioned by researchers at the Coalition for Responsible Home Education (CRHE), an organization that advocates for homeschool reform (Coleman, 2016). The CRHE claims that not only were these statistics based on a self-selected sample, but that the number of homeschoolers who took the SAT was alarmingly low. The CRHE found that while 53% of the nation’s high school seniors took the SAT in 2014, only 10% of homeschooled seniors did so; the CRHE considers this alarming, because taking the SAT indicates an intention to attend college (Coleman, 2016). The CRHE is not alone in challenging the statistics for academic achievement in home education.

Other researchers have challenged the academic achievements of homeschoolers as well (Kunzman & Gaither, 2013; Lubienski et al., 2013; Martin-Chang & Levesque, 2017; Murphy, 2014; Snyder, 2017), maintaining that since most homeschoolers are White, politically conservative evangelical Christians (Clemmitt, 2014), comparing the average homeschooled student to the average public school student is disingenuous. Furthermore, Martin-Chang and Levesque (2017) purported that “first and foremost, scientific research is best conducted by non-stakeholders” (p. 122). Lubienski et al. (2013) and Snyder (2017) claimed that although the body of information on homeschooling is growing, few empirical data support these claims. Snyder went one step further and claimed that “still other studies—notably those by Brian Ray—

seem biased towards advancing the political agenda in favor of homeschooling” (p. 157).

Martin-Chang and Levesque (2017) illuminated the need for more empirical studies on home education: “Unfortunately, the scarcity of empirical research on this topic—in contrast to the abundance of anecdotal reports—makes it especially difficult for parents to discern the educational validity of homeschooling” (p. 122). These researchers observed that the vast majority of data collected on homeschooling were from studies that had been commissioned by homeschooling groups or other stakeholders, which “leaves their findings open to question” (Martin-Chang & Levesque, 2017, p. 122). Lubienski et al. (2013) analyzed the literature as well and concluded:

Rather than a critique of homeschooling per se, we have demonstrated that there is essentially no scientific evidence on the effectiveness of homeschooling. This is not to say that the practice is not effective . . . but only that multiple research attempts have not yet proven its effectiveness. (p. 390)

Martin-Chang and colleagues (Martin-Chang, Gould, & Meuse, 2011; Martin-Chang and Levesque, 2017) and Lubienski et al. (2013) strongly criticized the bias in homeschool research. In a direct attempt to address this bias, a group of Canadian researchers designed a study to compensate for the problems observed in the literature (Martin-Chang et al., 2011).

In a review of the literature on home education, Martin-Chang et al. (2011) observed that there was significant bias in every study that explored the academic achievement of homeschoolers. The researchers analyzed Rudner’s 1999 study which included over 20,000 homeschooled children and concluded that homeschooled children functioned at a higher academic level than traditionally-schooled children in every grade and in every subject including language arts, mathematics, social studies, science, and information services; however, Martin-

Chang et al. alleged bias in Rudner's study. First, data had been collected from a testing company, and so only families that could afford to use a privatized educational testing company participated in the study. Second, the sample was self-selected, "thus, the parents who were most confident in their children's abilities may have made up the majority of the sample" (Martin-Chang et al., 2011, p. 195). Finally, Martin-Chang et al. stated that the method of administration may have shown bias: homeschoolers are usually tested by parents, offering a level of comfort and support that the traditionally-schooled students did not receive. Martin-Chang et al. (2011) alleged the same kind of bias in another significant study conducted by Ray (2010) of the NHERI.

Ray (2010) collected data from 11,729 participants across America, Guam, and Puerto Rico. Findings mirrored those of Rudner and also revealed a strong correlation between academic achievement and homeschool environment. Martin-Chang et al. (2011) reviewed Ray's study and summarized:

Homeschoolers who obtained the highest scores came from high-income families with university-educated parents who invested at least \$600 each year (per child) on educational materials. Student success was also associated with higher amounts of overall "structure" in the homeschooling program and greater amounts of time engaged in formal instruction (e.g. lessons). (p. 196)

Martin-Chang et al. alleged the same level of bias in Ray's (2010) study as in Rudner's (1999). The sample was made up only of homeschooling families that could afford the services of a privatized testing company, the sample was self-selected, and parents proctored the tests. Martin-Chang et al. wondered if the correlation between high academic performance and homeschooling actually had more to do with the high level of parental involvement intrinsic to

home education, and examined the research of Barwegen, Falciani, Putnam, Reamer, and Stair (2004) regarding academic achievement in homeschools and public schools.

Barwegen et al. (2004) proposed the notion that the elevated standardized test scores of homeschooled students “may have reflected greater parental involvement rather than general educational superiority” (Martin-Chang et al., 2011, p. 196). Using questionnaires to gather data from 127 public high school seniors pertaining to perceived parental involvement, the researchers found a direct correlation between high perceived parental involvement and higher standardized test scores. “In addition, the scores of traditionally schooled teenagers with highly involved parents did not differ significantly from those reported from homeschooled students” (Martin-Chang et al., 2011, p. 196). However, Martin-Chang et al. found one great flaw in the design of Barwegen et al.’s study: the homeschooled students were not administered the questionnaire, which prevented a direct comparison. Martin-Chang et al. (2011) alleged the same type of bias in Barwegen et al.’s (2004) study as in Rudner’s (1999) and Ray’s (2010): data were gathered from a privatized testing service, the sample was self-selected, and there was a lack of uniformity in gathering data. As a response to the bias discovered in homeschool research, Martin-Chang et al. designed a study that would explore the academic achievement of homeschooled students while compensating for the bias found in previous studies.

First, Martin-Chang et al. (2011) chose not to rely on self-reporting or on a third party for data collection, but instead determined that each participant would be tested by a trained researcher under controlled conditions. Additionally, the tests were offered at no cost which controlled for the bias of having participants who could afford such services. Next, the study was conducted by independent researchers, none of whom were stakeholders in home education. Finally, a paired-sampling approach was taken; a control group was carefully selected to allow

for direct comparison between the two groups. Interestingly, as the researchers attempted to form the control group, it was observed that there were two types of homeschooling subgroups: structured homeschoolers and unstructured homeschoolers. Structured homeschoolers utilized purchased or homemade curriculum and lesson plans, and unstructured homeschoolers did not. This differentiation between structured and unstructured homeschoolers led to insightful findings.

After controlling for bias that the researchers observed in previous empirical studies, Martin-Chang et al.'s (2011) exploratory analyses suggested that children who were homeschooled in an unstructured environment scored substantially lower than public schooled students on standardized tests, while children who were homeschooled in a structured homeschool environment scored significantly higher than public schooled students. Additionally, family income and mothers' level of education played no role in the academic achievement of children. The researchers concluded the study by stating that "the evidence presented here is in line with the assumption that homeschooling offers benefits over and above those experienced in public school" (Martin-Chang et al., 2011, p. 200), noting that structured homeschools have the clear advantage over unstructured homeschools. The researchers also stressed the need for more empirical research on the topic of homeschooling.

In summary, Martin-Chang et al. (2011) intentionally designed a study to control for the methodological limitations found in their review of the empirical literature and achieved similar (yet slightly altered) findings: Children educated in structured homeschools scored significantly higher than public schooled students. Although Martin-Chang et al.'s research only included 12 homeschooled students aged 5 to 10 years old, researchers agree that it advanced the body of empirical data on home education significantly because it controlled for bias and added a control

group of public schooled students. Additionally, Martin-Chang et al.'s study illuminated the importance of the homeschool environment: structured homeschool environments resulted in higher academic achievement than did unstructured homeschool environments.

Structured vs. Unstructured Homeschool Environments

Many researchers have noted a dichotomy within the phenomenon of homeschooling. Jane Van Galen (1988, 1991) first coined the terms “ideologue” and “pedagogue” to differentiate between those in Moore’s camp of structured homeschoolers who were homeschooling for religious reasons, and those in Holt’s unstructured homeschooling camp who were homeschooling to avoid the formalism of institutional education (Holt, 1977; Kunzman & Gaither, 2013; Moore & Moore, 1981). Hanna (2012) described the structured environments of ideologues:

In the execution of their homeschooling programs, Van Galen (1991) noted that ideologues modeled the formalized classroom environment without the harmful curriculum. Children progressed through workbooks/textbooks, worked in time-defined schedules, experienced extrinsic motivations, and learned values espoused by their parents. Although the ideologues desired to be more controlling of the children’s education, they oddly enough relied on publishers to provide materials/instruction for their children’s education. (p. 612)

Kunzman and Gaither (2013) described ideologues as “the conservative Christians who typically prosecuted their homeschools much like the traditional schools they had left behind, complete with formal curriculum, tight schedules, authority-figure teacher, and so on, but suffused with religious content” (p. 13). Cai, Reeve, and Robinson (2002), in one of the few empirical studies conducted on this topic, concurred with Ray’s 2004 findings and found that “religiously

motivated home educators ($n = 71$) endorsed a more controlling motivational style than did public school educators ($n = 76$)” (p. 331).

Alternatively, the unstructured learning environments of pedagogues can be described as those who have “reacted not to the secularism of public education but to its formalism, choosing to use the home as a haven from the regimentation and drill of institutional schooling” (Kunzman & Gaither, 2013, p. 13). Hanna (2012) reported that pedagogues homeschooled because parents “objected strongly to what they perceived as poor teaching in schools” (p. 612). Hanna described the unstructured learning environments of pedagogues: “The learner took a central role as the pedagogues created a holistic, experiential, and unstructured learning laboratory that bore little resemblance in form and function to the public schools” (p. 612). In summary, existent literature delineated two philosophical approaches to home education, and each one affected the learning environment: Ideologues created a more structured learning environment that usually included curriculum, and pedagogues created a more unstructured environment that usually excluded formal curriculum (Hanna, 2012; Kunzman & Gaither, 2013; Martin-Chang et al., 2011).

Curriculum and Methodology

There is a plethora of curriculum options available to homeschoolers and a number of approaches from which to choose. Pedagogues do not use formal curriculum, and ideologues most commonly choose from a traditional textbook approach, classical approach, Charlotte Mason approach, unit studies, independent, and/or eclectic approach.

Unschoolers/pedagogues/unstructured homeschoolers. Unschoolers resist the formalized structure of education as seen in traditional schools (Holt, 1977) and use resources

other than textbooks (Bell, Kaplan, & Thurman, 2016). Gray and Riley (2013) studied 232 unschoolers and described the methodology as follows:

Unschooling is often considered to be a branch of homeschooling. While other homeschoolers may do “school at home” and follow a set curriculum, unschoolers learn primarily through everyday life experiences—experiences that they choose and that therefore automatically match their abilities, interests, and learning styles. (p. 2)

Thomas and Pattison (2013) described this child-centered method of schooling as education that is marked by the absence of that which is generally considered necessary for a traditional education, “including curriculum, learning plans, assessments, age related targets or planned and deliberate teaching” (p. 141), and the researchers examined how learning occurs “away from such imposed structures and to explore how children go about learning for themselves within the context of their own socio-cultural setting” (p. 141). Morrison (2016) described unschooling as follows:

Briefly, unschooling is a form of homeschooling pedagogy in which the student is primarily self-directed. The child is able to decide what is studied, when, and how (of course, parents suggest and facilitate, but if a child shows no interest in a particular area of study, there is no compulsion of the child to engage in that topic). (p. 51)

Therefore, the mark of unschooling is the absence of a structured curriculum and includes a child-centered, interest-led method of learning (Bell et al., 2016; Morrison, 2016; Thomas & Pattison, 2013).

Ideologues/structured homeschoolers. Pannone (2014) discovered that homeschoolers base curriculum choices on the recommendations of others, religious or moral considerations, the individual interests of students, and seeking outside help when needed. Common methods of

structured homeschool instruction include a traditional textbook approach, classical approach, Charlotte Mason approach, unit studies, independent, and eclectic approach (Duffy, 2015; Price, 2014).

Traditional textbook approach. This approach is teacher-centered and straightforward, with separate books for each subject. Some refer to the traditional textbook approach as school at home, or the method that most closely resembles a teacher-centered classroom (Duffy, 2015; Price, 2014). This method is less labor-intensive for the teacher and is usually accompanied by teachers' books which make grading more efficient and record-keeping more straightforward. However, this is one of the most rigid forms of homeschooling (Duffy, 2015; Price, 2014). Common textbooks publishers are Abeka, BJU Press, Calvert, Modern Curriculum Press, Scott Foresman, Macmillan/McGraw Hill, Houghton Mifflin, Alpha Omega, Saxon, and Rod and Staff (Duffy, 2015; Price, 2014; Schneider & Schneider, n.d.).

Classical approach. Kunzman and Gaither (2013) reviewed more than 1400 academic texts and found that classical methodology was growing in popularity among homeschoolers. This academically-rigorous approach is organized around the trivium, which emphasizes three sequential stages of learning: the grammar stage with its emphasis on memorization, the dialectic stage which incorporates logic, and the rhetoric stage which emphasizes the synthesis of information, writing, and speaking. During the grammar stage, students master the basic structure and skills of each subject; during the dialectic or logic state, students analyze knowledge and begin to make connections in this knowledge; and during the final stage of rhetoric, students assimilate knowledge and think creatively, and express thoughts through speech and writing (Duffy, 2015; Price, 2014). This approach may include learning the classic language of Latin, as well as reading classical literature's great books (Duffy, 2015). Curricula

that take this approach include Peace Hill Press, Memoria Press, Canon Press, Logos School, Classical Writing, and Classical Academic Press (Price, 2014).

The Charlotte Mason approach. Kunzman and Gaither (2013) found that the Charlotte Mason approach was growing in popularity among homeschoolers as well. Also called the living books approach, this method integrates different subjects into the reading of real or living books. Hallmarks of this approach include choosing real books over textbooks, the use of narration, nature study, fine arts, hands-on projects, and “a focus upon both development of good habits and a love of learning in children” (Duffy, 2015, p. 14). Price (2014) described this approach as follows:

Narration and notebooking (and notebooking’s newest cousin, lapbooking) are specific methodologies that are employed for feedback on the student’s progress. This approach allows exploration of subjects in a low-key learning environment (by simply reading a book), but it’s difficult to track the work or follow a traditional scope and sequence or to align to standards. (p. 4)

Publishers who carry Charlotte Mason curriculum include Ambleside Online, Apologia Elementary Science, Beautiful Feet, Five in a Row, Learning Language Arts Through Literature, and Queen Homeschool.

Unit studies. Also called integrated studies, this approach organizes some or all subjects around a unifying theme, such as a topic (e.g., horses) or literature (e.g., *The Little House on the Prairie* books). “Rather than approaching each subject and topic as isolated things to be learned, information is integrated across subject areas, thereby helping children better understand what they are studying” (Duffy, 2015, p. 17). Unit studies may focus on a narrow topic or one that encompasses many subjects over the whole year. This methodology typically uses real books, is

multisensory, and is more labor-intensive for the teacher. Duffy (2015) describes the unit studies method as follows:

Unit study, sometimes called delight-directed study, appears under different names and formats but can be recognized by the presence of a unifying theme. Rather than approaching each subject and topic as isolated things to be learned, information is integrated across subject areas, helping children better understand what they are studying. According to the theory behind the unit study approach, when children really understand what they are learning because of the integration of subjects, they remember it better.

(p. 17)

The main drawbacks of this method is that it is labor-intensive for the parent since much time is spent reading aloud, in discussion, and leading hands-on activities. Curricula that take this approach include Tapestry of Grace, KONOS, Five in a Row, Prairie Primer, Learning Adventures, and Moving Beyond the Page (Duffy, 2015; Price, 2014).

Independent study. Although materials used in this approach may be similar to other approaches, Duffy (2015) included an independent study method to differentiate the lack of direct teaching or parental interaction needed in this approach, with the exception of checking a student's answers. Some traditional textbook material or online options may appeal to homeschooling families who have independent learners or parents with limited time (Duffy, 2015). Companies that offer self-instructional curricula include Alpha Omega (LIFEPAC curriculum and its computer version *Switched-On Schoolhouse*), and School of Tomorrow (Duffy, 2015).

Eclectic approach. Kunzman and Gaither (2013) reported that many homeschooling families begin with one approach, and then become more eclectic in their methodology. Price

described this approach as mix and match, allowing parents to choose specific curriculum for each student in each subject (Price, 2014). This approach is more common with experienced home educators, as it requires more parental responsibility (Duffy, 2015). Some publishers, such as Sonlight Curriculum, package an eclectic program (Duffy, 2015).

Kunzman and Gaither (2013) summarized the plethora of homeschool curriculum options as follows:

Whether homeschoolers identify as Ideologue, Pedagogue, or both, they have available a wide range of curricular options; these exist along a continuum from complete “school in box” curricula available for purchase to “unschooling” which aims to have learning be entirely child-directed, free of any external imposition. (p. 14)

Homeschool Graduates’ Transition to College

It has been close to 50 years since the modern homeschooling movement gained momentum in the United States, and homeschool graduates have now been attending colleges and universities for close to 30 years. “The growing number of homeschoolers attending institutions of higher learning has led many researchers to ask how successful the social phenomenon of homeschooling is at preparing students for college and adulthood when compared to traditional schooling” (Snyder, 2017, p. 158). Of the limited amount of research that has been conducted on this topic, four themes emerge: (a) academic preparedness of homeschoolers for college, (b) socialization and the transition to college, (c) perceptions of homeschoolers by admission officers and professors, and (d) homeschoolers as adults (Snyder, 2017).

Academic preparedness for college. Academic preparedness can be measured using SAT and ACT scores as well as high school GPA, although GPA is not as valuable since it can

be skewed according to the difficulty of chosen high school courses (Kim, Newton, Downey, & Benton, 2010). Yu, Sackett, and Kuncel (2016) examined whether high school GPA and standardized test scores are dependable predictors of college performance. Yu et al. found that while the SAT was an accurate predictor of college performance, the GPA was not. Therefore, scores from the SAT and ACT are the best predictors of academic preparedness for homeschooled students (Kim et al., 2010; Yu et al., 2016).

In 2014, the College Board administered the SAT to approximately 1.7 million students and according to the NHERI, 13,549 of them were homeschooled seniors. The national average scores for all seniors were 497 in critical reading, 513 in mathematics, and 487 in writing, which is a composite score of 1497. Average homeschool scores were 567 in critical reading, 521 in mathematics, and 535 in writing, which is a composite score of 1623. In 2014, the ACT reported that the average composite score for homeschooled students was 22.8, compared to the national average of 21. Therefore in 2014, homeschooled seniors scored 126 points higher on the SAT than the national average, and 1.8 points higher on the ACT than the national average. Some researchers have challenged these comparisons, which will be discussed later in this section.

Other research on the topic of the academic preparedness of homeschoolers included the study of communication apprehension in college freshmen (Payton & Scott, 2013), a small case study regarding decision-making in choosing majors (Parker, 2012), and a quantitative study specifically measuring homeschoolers' readiness for college calculus (Wilkens et al., 2015). Payton and Scott (2013) studied communication apprehension in homeschooled college freshmen and found that there was no significant difference between homeschool students, private schooled students, and public school students. While this study was narrow in content and only studied communication preparation, it did add to the literature and revealed that in this

category of preparation, homeschoolers were commensurate with traditionally-schooled students (Payton & Scott, 2013). Parker (2012) performed an intrinsic case study to explore the decision-making process of two homeschooled undergraduates as they chose music education college majors. While this study was also very limited in scope with only two cases, it did explore the concept of influential role models in homeschooling which connected with this study's research questions. Parker (2012) found that influential role models included participants' music teachers, especially their private instructors and later the university music teachers. Wilkens et al. (2015) studied 190 homeschooling students and found that they were demographically similar to their peers, earned similar SAT math scores, and earned higher tertiary calculus grades. Bolle-Brummond and Wessel (2012) studied college students who were homeschooled in high school and found that "homeschooled students were equipped to succeed academically and socially" (p. 223). Researchers agreed that homeschooled students were adequately prepared for college and were commensurate with traditionally educated students in performance (Cogan, 2010; Drenovsky & Cohen, 2012; Murphy, 2014; Payton & Scott, 2013; Ray, 2016; Snyder, 2013; Yu et al., 2016).

Perceptions of admissions officers and college professors. Paul Jones was an admissions officer at a Colorado college who believed that homeschoolers were outperforming their traditionally-schooled peers, and Gene Gloeckner was a former public school teacher and professor in teacher education at the same college who believed that homeschooled students performed lower than public-schooled students (Gloeckner & Jones, 2013). Gloeckner and Jones (2013) observed that admission officers and college professors had strong opinions on the academic preparedness of homeschoolers for college, and yet had little empirical data upon which to base their opinions. Together, they determined to explore this topic and add to the

empirical data not only on the academic comparison between previously-homeschooled and non-homeschooled students, but to compare the attitudes and perceptions of college admission officers regarding homeschooled college students, as well (Gloeckner & Jones, 2013). Their study revealed a shift in the attitudes of admission officers over the last decade and found that the more exposure that college admissions officers had to previously-homeschooled students, the more they expected these students to perform as well as students educated in a public or private school; 78% of college admissions officers anticipated that homeschoolers would be as successful or more successful than traditionally-schooled students (Gloeckner & Jones, 2013). The researchers reported that over 75% of colleges had official homeschool policies, up from 10% in 1986 (Gloeckner & Jones, 2013). The researchers also reported that since there are both excellent and poor examples of homeschooling represented in college applicants, students should be evaluated individually and not based on their background in home education (Gloeckner & Jones, 2013).

McCulloch et al. (2013) also studied college admission officers' attitudes and impressions of college students and reached similar findings: admission officers initially viewed homeschooled applicants as below average socially and above average academically, but the more exposure they had to previously-homeschooled students, the less they adhered to this homeschool stereotype. Interestingly, McCulloch et al. found that initial impressions of college admission officers were affected by their political views. The more politically conservative admission officers claimed to be, the greater their belief in the academic preparedness of the homeschooled participant and the more likely they would be to homeschool their own children (McCulloch et al., 2013). Conversely, the more politically liberal college admission officers

claimed to be, the less likely they were to choose to homeschool their own children (McCulloch et al., 2013).

Socialization and the transition to college. There is a dearth of data on the social adjustments of homeschoolers to college (Medlin, 2013). Medlin (2013) found that homeschooled students successfully transitioned into college life, according to (subjective) self-reporting and the (objective) number of extracurricular activities in which students participated. While some professors observed that homeschooled students were less confident, the students disagreed. In fact, homeschooled students reported a lesser degree of anxiety, had healthy self-esteem, and scored higher on a test of openness to experience new friendships (White, Moore, & Squires, 2009). Kranzow (2013) found that homeschooled students felt more comfortable approaching their professors than did conventionally-schooled students and kept in frequent contact with their families during the transition to college. Furthermore, Kranzow (2013) recognized that some homeschooled students intentionally chose not to assimilate peer-group values and viewed their sheltered homeschool experience as positive. Drenovsky and Cohen (2012) surveyed 185 college students to determine social adjustment in the areas of depression and self-esteem. Results of their study revealed that there was no statistical difference in self-esteem between homeschooled students and their traditionally-schooled peers. However, they did see a difference in the areas of depression: “Homeschooled students had significantly lower levels of depression than those who had been homeschooled, reported higher levels of academic achievement, and claimed an excellent college experience overall” (Snyder, 2017, p. 166). Most homeschoolers transitioned well to college, and many learned to synthesize their own values with those of their new peers and professors (Bolle-Brummond & Wessel, 2012; Hoelzle, 2013; Kranzow, 2013; Payton & Scott, 2013). One study explored the emerging values of college

graduates who were homeschooled for K–12 and asked participants to describe the similarities and differences between their parents' value system and their own. One of the chief reasons that parents choose to homeschool is to transmit treasured morals and values to their children (Jamaludin et al., 2015). This study explored that concept in the lives of the participants.

Homeschoolers as adults. Of the little research that has been conducted on homeschoolers as adults, three studies are noteworthy and two call into question the empirical data previously mentioned regarding homeschoolers' SAT scores. In 2003, the Homeschool Legal Defense Association (HSLDA) commissioned Ray (2004) of the NHERI to conduct a large survey of 18–24-year-old homeschool graduates in order to assess the outcomes of home education. This quantitative study of over 7300 home-educated adults found that approximately 75% of them had taken college courses (compared to the national average of 50%) and were unhindered in finding employment. Regarding service in the community, 71% participated in service activities (compared to the national average of 37%), 88% belonged to an organization (compared to the national average of 50%), and only 4.2% said that government and politics were too complicated to comprehend (compared to the national average of 35%). Additionally, Ray (2004) found that 76% of homeschooled adults aged 18–24 years old had voted within the previous five years (compared to 29% in the nation). Finally, Ray (2004) discovered that 59% of the participants were very happy with life and were happy that they had been educated at home.

However, some researchers claimed that there were problems with Ray's (2004) research. First, it was biased because the participants were drawn from the HSLDA network, "thus ensuring that respondents would already have positive views on homeschooling and likely be involved in the community" (Snyder, 2017, p. 170). Second, the sample was non-representative of national demographics; "most of the respondents were White, Protestant college students

between the ages of 18 and 24; moreover, the sample size of homeschooled students (approximately 5000) was much smaller than the general U.S. sample size and therefore cannot be considered representative of the homeschooling population” (Snyder, 2017, p. 170). Finally, Snyder (2017) purported that it was an unfair comparison because Ray’s sample was compared to a national survey that had been conducted six years earlier. While this study utilized a self-selected sample, a Canadian study which was conducted in 2010 utilized a random sampling.

Cardus (Pennings & Wiens, 2011), a Canadian research and educational institution, sought to compare the motivations in Christian education with its outcomes in the lives of graduates 23–49 years of age, specifically in the areas of attitudes toward spiritual, social, and academic achievement. This study is significant because it utilized a random sampling, as opposed to Ray’s (2004) self-selected sampling. Cardus employed data from two web-based surveys and of the combined 1471 respondents, 82 were homeschooled. Of the 82 homeschoolers, 61 had been homeschooled for religious reasons, and 21 for nonreligious reasons. Findings in the Cardus Education Survey were based on the 61 religious homeschoolers. Cardus found that in the area of spirituality, homeschoolers resembled those who attended Protestant schools: “They go to church a lot, respect religious authority, have a private devotional life, believe in traditional theology and morality, and share a religious life with their spouse” (Gaither, 2011, para. 7). Cardus also found that religious homeschoolers did not give as much to churches or charities when compared with Catholic school graduates. Regarding socialization, Cardus found that religious homeschoolers had feelings of helplessness about dealing with conflict and life goals, got married younger than the rest of society and had fewer children, got divorced more than other private school graduates, and were apolitical. Regarding academic achievement, Cardus reported that homeschoolers felt less prepared for

college, attended less selective universities, and had lower SAT scores than other private school graduates. The CRHE summarized the Cardus report as follows:

The study indicates fairly negative outcomes for religious homeschoolers in the United States. Though they were positive about their academic abilities, religious homeschool graduates were less likely than public school graduates to obtain quality higher education. They had a strict and legalistic moral outlook, a lack of interest in politics, and did not show a tendency for volunteerism or charitable giving. They reported a sense of helplessness and a lack of clarity about their lives. They married younger, divorced more, and had fewer children than public school graduates. (McCracken, n.d., para. 18)

This negative report has been challenged by the HSLDA and the NHERI, who compared it to similar studies conducted by Ray (2004). Though Ray's samples were much larger, the samples were self-selected while Cardus used a random sampling. Furthermore, Gaither (2011) purported that participants in the Cardus Educational Survey were 24–39 years old in 2010, which meant that they were home educated 10 to 20 years earlier; Gaither mentioned that homeschooling was very different then, particularly in the area of educational options via the fluidity between homeschools and institutional schools. Additionally, Gaither illuminated the inconsistency between participants, as most homeschoolers do not choose this option for the student's entire K–12 education.

A third study worthy of mention was conducted by the Homeschool Alumni Reaching Out (HARO) group which is the parent organization of Homeschoolers Anonymous (HA), in cooperation with the CRHE. In 2014, HARO surveyed 3,702 adult homeschool graduates and found that most participants were White females born in the late 1980s and early 1990s. HARO (2014) summarized the findings as follows:

Many respondents were raised in fundamentalist homes; most respondents are still Christian, married, and have or intend to have children. Most are positive towards homeschooling and would homeschool their kids. The results of the survey do indicate that there are suffering children in the homeschool community whose needs should be addressed. There are unusually high rates of LGBTQ children and mental health issues, and emotional abuse, physical abuse and educational neglect are much bigger problems than sexual abuse. In particular, science and math education and sexual education seem to be at a lower level than desirable. (p. 29)

It is worth noting that in the same way that Ray's non-random 2003 survey was favorably biased toward homeschooling, the HARO survey included a non-random sample drawn from unfavorably biased communities including homeschool abuse survivors.

When comparing the unfavorable results of the Cardus (Pennings & Wiens, 2011) and HARO (2014) surveys to the more favorable findings of Ray's (2004) study, it is clear that even in the paucity of existent literature on homeschoolers as adults, there is disparity in the research. There is a lack of empirical data on homeschoolers as adults, and it is the hope of this researcher to add to the literature on this topic.

Summary

Chapter Two synthesized peer-reviewed scholarly literature on the study's theoretical framework of Lev Vygotsky's (1978) sociocultural theory. Subsequently, peer-reviewed scholarly literature was synthesized on subtopics pertaining to homeschooling experiences of previously-homeschooled college graduates. Subtopics included the definition of homeschooling, history of homeschooling, politics and legislation of homeschooling, demographics in home education, academic achievement of homeschoolers, structured vs.

unstructured homeschool environments, curriculum and methodology, and homeschool graduates' transition to college. This chapter sought to reveal the gap in this literature. A review of existent literature reveals that there has been no qualitative research which gives a voice to college graduates who were homeschooled throughout K–12 describing homeschooling experiences that influenced academic, familial, spiritual, and vocational aspects of their lives (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Snyder, 2013). Chapter Two laid the foundation upon which this transcendental phenomenological study was built and attempted to address this gap in the literature.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to describe the influence of homeschooling on the academic, familial, spiritual, and vocational aspects of the lives of select four-year college graduates who were homeschooled throughout K–12 in the United States. In order to accomplish this, a transcendental phenomenological study was designed to explore how select participants described the influence of a home education on their experiences in higher education, relationships with parents, spiritual journey, and career choices. This chapter will describe the planned methodology and research design as well as the setting, selection and description of participants, role of the researcher, data collection and analysis procedures, and the steps that were taken to ensure trustworthiness and ethical treatment of participants and data.

Design

Creswell (2013) likens research methods to a continuum displaying quantitative at one end and qualitative on the other, with mixed methods in the middle. Quantitative research, also known as positivist research, takes an objective view of reality and subjects numerical data to statistical analysis (Gall, Gall, & Borg, 2007). At the opposite end of the spectrum is qualitative research, also known as constructivist research, which is based on the theory that “individuals construct social reality in the form of meanings and interpretations, and that these constructions tend to be transitory and situational” (Gall et al., 2007, p. 650). Qualitative research is employed when a problem needs to be explored and when complex, detailed understanding of the issue is needed (Creswell, 2013). In qualitative research, the voice of the participants is heard (Creswell, 2013). Since this research explored the homeschooling experiences of college graduates and

how those experiences impacted the academic, familial, spiritual, and vocational aspects of their lives, a qualitative method was appropriate.

Within qualitative research, phenomenology is an approach that focuses on discovering and describing the shared, lived experiences of individuals (Creswell, 2013). “The type of problem best suited for this form of research is one in which it is important to understand several individuals’ common or shared experiences of a phenomenon” (Creswell, 2013, p. 81). This study describes the shared experiences of select college graduates who were homeschooled throughout K–12. Since “a phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or phenomenon” (Gall et al., 2007, p. 245), phenomenology was the appropriate design for this study.

Transcendental phenomenology, also known as psychological phenomenology, is a type of qualitative research that seeks to describe the experiences of the participants in a systematic way without interpretation (Creswell, 2013; Moustakas, 1994). Transcendental phenomenology seeks to set aside prejudgments, presuppositions, and biases in order to come to the research with an open mind; the process through which one achieves this is called the *Epoche* or bracketing (Moustakas, 1994). The goal of this research was to describe the shared experiences of 14 college graduates regarding the influence that homeschooling had in their lives pertaining to higher education, relationships with parents, spiritual journey, and vocational choices. Because of the researcher’s experience in home education, it was necessary to bracket prejudgments and bias. Therefore, it was appropriate to utilize a transcendental phenomenological approach.

Research Questions

The central research question was as follows: How do select four-year college graduates who were homeschooled throughout K–12 describe the influence of homeschooling on their lives?

Sub-question 1 (SQ1) was as follows: How do participants describe the impact of homeschooling on their experiences in higher education?

SQ2 was as follows: How do participants describe the impact of homeschooling on their relationships with their parents?

SQ3 was as follows: How do participants describe the impact of homeschooling on their spiritual journey from childhood until now?

SQ4 was as follows: How do participants describe the impact of homeschooling on their vocational choice?

Setting

Adults from across the United States were invited to participate in this study utilizing purposive snowball sampling which “identifies cases of interest from people who know people who know what cases are information-rich” (Creswell, 2013, p. 158). Social media allows for national recruitment, and recruitment information was posted in various Facebook homeschool groups. Snowball sampling was also executed via contacts in Maine: the researcher contacted Ed and Cathy Green, leaders of the state homeschool group Homeschoolers of Maine (HOME), as well as State Representative Heidi Sampson, who also serves on the Maine State Board of Education and was previously the researcher’s assistant in the TEACH Homeschool Group. Interviews and focus groups were conducted via video conference. Participants chose their

homes or offices for video conferencing where they were free to speak aloud as they reflected upon and shared their homeschool experiences.

Participants

This study sought to explore the homeschooling experiences that influenced the academic, familial, spiritual, and vocational aspects of the lives of select four-year college graduates who were homeschooled throughout K–12 in the United States; therefore, an appropriate recruitment technique was a purposeful, snowball sampling (Creswell, 2013). In snowball sampling, the researcher requests help from well-situated people in order to find participants (Gall et al., 2007). Selection criteria were college graduates who (a) had earned a bachelor's degree from an accredited college, and (b) were homeschooled throughout K–12 in the United States. Delimiting participants to those who were homeschooled throughout K–12 increased the credibility of this study, because all participants were homeschooled for the same amount of time (Creswell, 2013). Because the researcher homeschooled for 19 years in Maine, those state and local contacts were utilized in recruitment. Recruitment also took place via Facebook homeschool groups, some of which were joined for this purpose. After employing the snowball sampling technique using social media as well as state and local homeschool groups in Maine, letters of invitation were emailed to adults who were known to meet the study's criteria. Attached to the emailed invitation was a recruitment letter (Appendix B) and a screening survey (Appendix C). The following is a list of the screening questions that accompanied the recruitment letter:

1. For what grades were you homeschooled?
2. From which college did you receive a four-year degree?

3. Do you feel that homeschooling has had a significant influence on your life (pertaining to experiences in higher education, relationship with parents, spiritual journey, and/or vocational choice)?
4. Are you willing to talk openly about your homeschool and homeschooling experiences knowing that all data collected, audio recordings and transcriptions, will be kept in strict confidence?
5. What is your preferred means of contact (phone, email, Facebook Instant Messaging, Facetime, Skype, etc.)?

Fourteen adults returned the screening survey, letter of consent, and a copy of their college transcripts or diploma. Fourteen is an appropriate number of participants for a phenomenology, because the goal in qualitative research is data saturation, not generalizability (Moustakas, 1994). “The intent in qualitative research is not to generalize the information (except in some forms of case study research), but to elucidate the particular, the specific” (Creswell, 2013, p. 157). Creswell (2013) suggested a sample size of three to 15 participants who have each experienced the phenomenon: “A heterogeneous group is identified that may vary in size from 3 to 4 individuals to 10 to 15” (p. 78). Moustakas (1994) suggested 12 to 15 “co-researchers” (p. 109). Therefore, the 14 participants who volunteered aligned with optimum group size suggestions for a transcendental phenomenology (Creswell, 2013; Moustakas, 1994) while allowing for possible attrition. Question 3 was worded broadly as “spiritual journey” in order to include participants of any religion or no organized religion, but those who responded were predominantly Christian. Table 1 displays the demographics of the 14 participants.

Table 1

Participant Demographics

Participant	Age	Gender	Ethnicity	Location
Abigail	34	Female	Caucasian	Mid-Atlantic
Belle	28	Female	Caucasian	Midwest
Charles	27	Male	Caucasian	Midwest
Deborah	28	Female	Caucasian	Midwest
Elizabeth	32	Female	Caucasian	Northeast
Fiona	25	Female	Caucasian	West
George	25	Male	Caucasian	Mid-Atlantic
Hope	24	Female	Caucasian	Mid-Atlantic
Isabelle	24	Female	African American/ Caucasian	Mid-Atlantic
Julia	29	Female	Caucasian	Mid-Atlantic
Kara	31	Female	Hispanic	Mid-Atlantic
Levi	28	Male	Caucasian	Mid-Atlantic
Mary	31	Female	Caucasian	Mid-Atlantic
Naomi	28	Female	Caucasian	Mid-Atlantic

Procedures

After the dissertation proposal was successfully defended, approval from the Liberty University Institutional Review Board (IRB) was obtained for this study. No data were collected before receiving IRB approval. Upon receiving IRB approval, participants were recruited utilizing a purposeful, snowball strategy (Gall et al., 2007) via Facebook homeschool groups as well as state and local groups in Maine. Once names and email addresses of potential participants were received, recruitment letters (Appendix B) and screening surveys (Appendix C) were emailed. Surveys attempted to screen for eligibility and confirm interest in participation. Once potential participants expressed interest and confirmed eligibility by returning the

screening survey (Appendix C), informed consent forms (Appendix D) and a demographics questionnaire (Appendix E) were emailed.

Upon completion and return of the informed consent forms (Appendix D), interviews were scheduled. After individual 30–90 minute interviews (Appendix F) were conducted and transcribed (by researcher), transcripts were returned to participants for a member-check (Creswell, 2013). Once data were amended according to participants' feedback, the transcripts were analyzed according to the modified Stevick–Colaizzi–Keen version of Moustakas's (1994) rules for transcendental phenomenology. Moustakas (1994) developed two methods of analysis: the first was a modification of van Kaam's (1959, 1966) method of analyzing the transcribed interview, and the second was a modification of the method of analysis developed by Stevick (1971), Colaizzi (1973), and Keen (1975). Moustakas's modified Stevick–Colaizzi–Keen version of data analysis offers a systematic, orderly set of rules with which to understand and organize the data. At this point, focus group questions (Appendix H) were amended and focus groups were scheduled. Focus groups took place via Google Hangouts video conferencing and were transcribed by Rev Voice Recorder transcription service. Participants were given pseudonyms, and all data were kept in locked locations (laptop and secured file cabinets). All of the thick, rich data were analyzed using the modified Stevick–Colaizzi–Keen version of Moustakas's (1994) rules for transcendental phenomenology utilizing NVivo Plus 12. Additionally, an audit trail (Creswell, 2013) was maintained throughout the entire data collection and analysis process.

The Researcher's Role

As a human instrument (Lincoln & Guba, 1985), it is important that I bracket myself by disclosing my personal experiences (Moustakas, 1994), especially in the realm of

homeschooling. I am a former home educator, homeschool group leader, and private school teacher; therefore I bring a positive bias to this research. I homeschooled my sons throughout K–12, from 1991–2010. All three sons hold graduate degrees. My oldest son is a United States Marine Corps officer with three master’s degrees, an MAR (Master of Arts in Religion), an MBA (Master of Business Administration), and an MDiv (Master of Divinity); he is currently enrolled in a Master of Military Studies program. My second-born son holds an MAR and is now a Navy officer and fourth-year medical student. My youngest son holds a JD (Doctor of Jurisprudence) with a special interest in medical law and is now a medical underwriter. While homeschooling, I established, administrated, and taught in a large homeschool group in southern Maine (~130 families). I have presented many workshops on homeschooling in the community and once at the Maine state convention.

I received an MAT (Master of Arts in Teaching) from Liberty University in 2011, and after my youngest son graduated (home) high school, taught first and second grades for three years in a small Christian school in Maine. During that time I also taught history as well as Greek and Latin roots to third and fourth graders and designed school-wide workshops. I resigned from teaching in 2014 in order to travel with my husband (an electrical engineer who oversees high transmission voltage projects in the United States and Canada) and to pursue this doctoral degree. I continue to interact with new and struggling homeschooling families.

Though I am positively biased toward homeschooling, I do not think that all families should homeschool and have advised some against it. However, it was necessary to bracket my thoughts and experience in order to approach this study with an open mind (Moustakas, 1994). I was careful to be as objective as possible when collecting data and not to interpret the data as would be appropriate in hermeneutic phenomenology (Creswell, 2013; Gall et al., 2007;

Moustakas, 1994). Because a close prior relationship may have tainted the data, I had no close relationship with participants. My experience as a home educator, homeschool leader, and private school teacher taught me the importance of a quality education and of a structured learning environment (Vygotsky, 1978).

Data Collection

Triangulation is a research technique by which data are collected using multiple methods in order to corroborate evidence, adding validity to a study (Gall et al., 2007). In this study, data collection was triangulated via the long personal interview (Appendix F), focus groups (Appendix G), and document analysis (see a sample letter to a new homeschooler in Appendix J). Thick, rich, and detailed data contributed to this study's credibility (Creswell, 2013; Gall et al, 2007). Once purposeful snowball sampling was employed and names of potential participants were received through well-situated people (Creswell, 2013), recruitment letters (Appendix B) were emailed with an attached screening survey (Appendix C) to potential participants. Return of the survey established eligibility for participation. Fourteen participants were chosen based on stated criteria, and consent forms (Appendix D) and a demographics questionnaire (Appendix E) were emailed. Upon receipt of the signed consent form with a copy of their college diploma, face-to-face interviews (Appendix F) were scheduled. Once the interviews were conducted and transcribed, transcriptions were sent to participants for member-checks (Creswell, 2013). After data from interviews were analyzed, directions for writing a two-page letter to a new homeschooler were emailed to participants, and finally focus groups were scheduled and conducted via Google Hangouts video conferencing. Participants returned demographics surveys via email, the researcher confirmed accreditation of four-year colleges via college websites, and parents were contacted by researcher to verify a K–12 home education

using contact information provided by the participants. Data were collected from August to November of 2018.

Interviews

The first step in data collection was the interview. In qualitative research, interviews are the means by which thick, rich data are collected (Creswell, 2013). “Typically in the phenomenological investigation the long interview is the method through which data is collected on the topic and question . . . and involves an informal, interactive process and utilizes open-ended comments and questions” (Moustakas, 1994, p. 114). Interviews were scheduled upon receipt of consent forms. Interviews were face-to-face with each participant via video conference, and lasted 21–90 minutes each; the average length of the interviews was 44 minutes. Interview questions were prepared in advance and sent to participants so that they could gather their thoughts ahead of time but were altered during the interview process (Moustakas, 1994). Moustakas (1994) recommended using an ice breaker as the first question. The following is a list of the open-ended personal interview questions used in this study:

1. Would you tell me about yourself?
2. How was your homeschool environment structured?
3. What curriculums do you remember using?
4. How were your homeschooling days structured?
5. How would you describe your parents’ style of homeschooling?
6. How would you describe your parents’ style of parenting?
7. How were you prepared for college?
8. How could you have been better prepared for college?
9. What were the most challenging aspects of college?

10. If you ever chose to homeschool your own children, how would your homeschool resemble the one you experienced?
11. Would you please describe one of your fondest homeschooling experiences?
12. If you could go back and advise 12-year-old you regarding college preparation, vocation, relationships with parents, and/or faith journey, what would you say?
13. How do you think homeschooling influenced the relationship you have with your parents today?
14. What role do you think that homeschooling played in your faith journey?
15. How similar is your faith now to that of your parents while you were homeschooling?
16. What experiences in your homeschooling contributed to your career choice?
17. How did you prepare for your career?
18. If you had to boil down homeschooling to its very essence, how would you describe it?
19. Is there something else that you would like to tell me?

Interviews were recorded on two devices and were transcribed verbatim by the researcher.

Question 1 was an ice-breaker. Questions 2–6 were designed to better understand the homeschool environment regarding motivation (ideologue vs. pedagogue), pedagogy, and structure. Ideologues are more structured in approach, favoring formal curriculum, schedules, and an authority-figure teacher; pedagogues are less controlling of the homeschool environment, with the learner taking center stage and the curriculum excluded (Cai et al., 2002; Hanna, 2012; Kunzman & Gaither, 2013; Van Galen, 1988, 1991). Snyder (2013) suggested further study on effective homeschool pedagogy; the exploration of structure and curriculum sought to fill that gap. Martin-Chang et al. (2011) found that more structured homeschools resulted in higher

academic achievement; data collected from Questions 2–6 illuminated whether this study supported that finding.

Questions 7–10 were designed to gather information to inform SQ1, “How do four-year college graduates who were homeschooled throughout K–12 describe the impact of homeschooling on their experiences in higher education?” Studies have revealed that homeschoolers are well-prepared for college (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Parker, 2012; Payton & Scott, 2013; Yu, et al., 2016). However, Cardus (Pennings & Wiens, 2011) reported that homeschoolers felt less prepared for college. Questions 7–10 sought to collect data on the topic of college preparation.

The purpose of Questions 11–14 was to shed light on the topic on familial relationships. SQ2 sought to describe the influence of homeschooling on relationships with parents, and Questions 11–14 sought to delve into family relationships. Researchers have found that one of the most common reasons for homeschooling is to “enhance family relationships between children and parents and among siblings” (Ray, 2018, p. 2); Questions 11–14 sought to explore this phenomenon. Questions 11–14 sought data to illumine the impact of homeschooling on the evolution of familial relationships from childhood to adulthood.

The purpose of Questions 15 and 16 was to further explore the influence of homeschooling on the spiritual journey of the participants (SQ3). One of the fathers of the modern homeschooling movement, Raymond Moore (Moore & Moore, 1981) maintained that homeschooling transferred conservative Christian values onto the next generation. However, studies have shown that college students who were previously homeschooled tend to synthesize their own values with those of their new peers and professors (Bolle-Brummond & Wessel,

2012; Hoelzle, 2013; Kranzow, 2013; Payton & Scott, 2013); therefore Questions 15 and 16 sought data to gather information on this topic.

Questions 17 and 18 sought to gain understanding regarding career choices (SQ4). Research has explored the influence of role models on choice of college majors (Parker, 2012), but there is very little literature on the topic of the influence of homeschooling on career choice. These questions sought to collect data on this issue.

Questions 19 and 20 sought to give participants the opportunity to summarize their thoughts on the essence of homeschooling, which was the goal of this study. The central research question was “How do select four-year college graduates who were homeschooled throughout K–12 describe the influence of homeschooling on their lives?” After participants responded to Questions 2–18 on the topics of the influence of homeschooling on higher education, familial relationships, spiritual journey, and vocational choice, Questions 19 and 20 offered a last chance to disclose their thoughts.

Focus Groups

The second step in data collection was focus groups. The optimum size for focus groups is seven to 10 participants, large enough for a relaxed discussion, but small enough so that members have opportunity to speak (Gall et al., 2007). This study held two focus groups in November 2018, with seven and four participants respectively, for the purpose of collecting thick, rich data (Creswell, 2013); three participants were unable to attend either group. Researchers have found focus groups valuable for data collection because “interactions among the participants stimulate them to state feelings, perceptions, and beliefs that they would not express if interviewed individually” (Gall et al., 2007, p. 245). Additionally, focus groups prevent the researcher from taking a directive role; instead, the researcher initiates discussion and

then allows participants to state views and draw out the views of the others (Gall et al., 2007). Focus groups were scheduled to take place on November 8 and 10, 2018, after interviews were transcribed, analyzed, and member-checked. Focus group questions were amended to assimilate data collected during the interviews; this is an acceptable and integral part of qualitative research.

Creswell (2013) speaks of the “emergent design” of qualitative research: “This means that the initial plan for research cannot be tightly prescribed, and that all phases of the process may change or shift after the researchers enter the field and begin to collect data” (p. 47). In this study, a shift occurred during the interviews when two participants used the term “authoritarian” to describe the parenting style they perceived as experiencing. I chose to probe this concept further and edited the focus group questions accordingly. The amended question asked:

How did your parents’ style of parenting* affect 1) your satisfaction (or dissatisfaction) with home education, and 2) your relationship with your parents (then and now)?

*styles of parenting: *authoritarian* (unresponsive, strict rules, high expectations, expect blind obedience); *authoritative* (warm and responsive, clear rules, high expectations, supportive) *permissive* (warm and responsive, few or no rules, indulgent, lenient); *neglectful* (cold and unresponsive, no rules, uninvolved, indifferent).

Descriptions of parenting styles were chosen because of terminology used by the two participants which was based on the work of Diana Baumrind (1971), who described specific parenting styles based on the demandingness and responsiveness of parents (Darling, 1999). Researchers have found that an authoritarian style of parenting creates a “parent-child relationship gap” (Afsheen Amir, 2017, p. 3). Afsheen Amir described this parent-child relationship gap as follows:

Children do not feel loved and accepted by their parents because of conditional love.

They usually think that they are loved for their efforts and their achievements rather than who they are (Ang & Goh, 2006). This creates a gap between parents and children. As a result of this relationship gap, instead of receiving guidance from their parents, they prefer counseling from someone else or avoid counseling at all. Thus, they lose the opportunity of parental guidance.

The amended questions were emailed to participants on November 6, 2018, two days before the first focus group. Moustakas recommends beginning with an ice breaker (Moustakas, 1994).

The following is a list of the focus group questions used in this study:

1. Would you please introduce yourself, and share your degree(s) and vocation?
2. How important were hand-on experiences in your home education? Please describe a favorite.
3. What experiences in high school had the greatest impact on your success in college (e.g., specific curriculum, dual enrollment, online classes, co-ops, tutors, CLEP/AP classes, apprenticeships, jobs, etc.)?
4. Now that you are established in a career (or from your current vantage point), what homeschool experiences were especially helpful in preparing you for a career? Do you wish anything had been handled differently?
5. How did your parents' style of parenting* affect 1) your satisfaction (or dissatisfaction) with home education, and 2) your relationship with your parents (then and now)?

*styles of parenting: *authoritarian* (unresponsive, strict rules, high expectations, expect blind obedience); *authoritative* (warm and responsive, clear rules, high expectations,

supportive) *permissive* (warm and responsive, few or no rules, indulgent, lenient);
neglectful (cold and unresponsive, no rules, uninvolved, indifferent)

6. What experiences in your home education affected your faith today?

Focus groups took place via Google Hangouts. The first group, with seven participants, lasted 66 minutes; the second group, with four participants, lasted 50 minutes. They were recorded on two devices and were transcribed verbatim by a trusted transcription service, Rev Voice Recorder transcription service. Transcripts were submitted to participants via Google Docs to be member-checked and amended for accuracy.

Document Analysis

The third step in data collection was document analysis. After the interview, participants were asked to write a two-page letter to a new home educator. Participants were asked to share the influence that homeschooling had on their lives pertaining to their experiences in higher education, their spiritual journey, their relationship with parents, and/or their career choice.

Directions for this document were as follows:

Thank you so much for participating in this research study. It is my hope that our findings will be an encouragement to new home educators. As a means of collecting more data, I am asking you to write a two-page letter to a new homeschooler. You are a new homeschooling parent's dream; you have successfully graduated college. Would you please share details of your life pertaining to the influence that homeschooling had on your experiences in higher education, your relationship with your parents, your career choice, and/or your spiritual journey? You do not have to mail this letter. Thank you so much for encouraging a new home educator, and for continuing to allow me to collect data for this research study.

Thirteen participants submitted letters.

Data Analysis

Researchers utilizing transcendental phenomenology must master Clark Moustakas's (1994) *Phenomenological Research Methods*. Moustakas built upon the work of Edmund Husserl, who was heavily influenced by the philosophy of Descartes. Husserl's transcendental phenomenology, founded in the early 1900s, was deeply rooted in "intentionality" (Moustakas, 1994, p. 28), which is consciousness that is composed of *noema* and *noesis*, two interconnected concepts. Moustakas described noema as "that which is experienced, the what of experience, the object-correlate" (p. 69). Connected to the noema is the noesis, which "is the way in which the what is experienced, the experiencing or act of experiencing the subject-correlate" (p. 69). Building upon this philosophical foundation, Moustakas described the steps of his methodology: the Epoche, the Phenomenological Reduction, the Imaginative Variation, and Synthesis.

The first step in transcendental phenomenology is the Epoche, which Husserl developed in accordance with the philosophy of Descartes (Moustakas, 1994). In the Epoche, "the everyday understandings, judgments, and knowings are set aside, and phenomena are revisited, freshly, naively, in a wide open sense, from the vantage point of a pure or transcendental ego" (Moustakas, 1994, p. 33). Moustakas (1994) recommended finding a quiet place to think about the phenomenon, to "set aside biases and prejudgments and return with a readiness to look again into my life" (p. 89) and emphasized that this practice may need to be repeated several times accompanied by "reflective-meditation" (p. 89). In employing this step, I attempted to bracket my own opinions and approach the data without bias.

The Phenomenological Reduction process follows Epoche. Moustakas (1994) described this reflective and experiential process as "that of describing in textural language just what one

sees, not only in terms of the external object but also the internal act of consciousness, the experience as such the rhythm and relationship between phenomenon and self” (p. 90). An essential part of the Phenomenological Reduction process is horizontalization, which occurs when something enters one’s consciousness and is given the same value as the previous horizon and the next horizon (Moustakas, 1994). Phenomenological Reduction included the bracketing of my own biases so that they did not affect my research without disclosure, horizontalizing each statement, clustering horizons into themes, and organizing those themes into a coherent textural description of the phenomenon (Moustakas, 1994). I utilized the QSR International data analysis software, NVivo 12 Plus, to code and categorize the data.

The next step is the Imaginative Variation from which “a structural description of the essences of the experience is derived” (Moustakas, 1994, p. 35). This step is not only reflective, but requires using imagination to understand the “how” connected to the “what” of the phenomenon being studied. “The task of imaginative variation is to seek possible meanings through the utilization of imagination, varying the frames of reference, employing polarities and reversals, and approaching the phenomenon from divergent perspectives, different positions, roles or functions” (Moustakas, 1994, pp. 97–98).

Finally, Moustakas synthesized the last two steps: “The structural essences of the Imaginative Variation are then integrated with the textural essences of the Transcendental-Phenomenological Reduction in order to arrive at a textural-structural synthesis of meanings and essences of the phenomenon or experience being investigated” (Moustakas, 1994, p. 36). The researcher sought to blend the textural and structural descriptions of each participant into one universal statement of the essence of the phenomenon. After analyzing all of the data in this way, I constructed “a composite textural-structural description of the essences of the experience,

integrating all individual textural-structural descriptions into a universal description of the experience representing the group as a whole” (p. 123). These were the themes, the shared voice of the participants, organized by sub-questions.

Transcendental phenomenology was an appropriate method with which to study the phenomenon of having been homeschooled K–12 and then earning a bachelor’s degree; it allowed the researcher to explore how that experience impacted higher education, relationships with parents, participants’ spiritual journey, and choice of vocation because it focused on synthesizing the experiences of the participants (Creswell, 2013) in order to answer to research questions. This method allowed the researcher to set aside prejudgments, which was important as I have a background in home education. Through the process of Epoche, I was able to approach the research with an unbiased, open mind (Moustakas, 1994). In order to collect thick, rich data, the long interview which “involves an informal, interactive process and utilizes open-ended comments and questions” (Moustakas, 1994, p. 114) was utilized with 14 participants, a number within the recommended 12–15 that Moustakas suggests. The orderly and systematic approach outlined in Moustakas’s modification of the Stevick–Colaizzi–Keen method was followed in order to collect and analyze the thick, rich data.

The transcribed interviews, transcribed focus groups, and documents (letters) were analyzed utilizing Moustakas’ (1994) systematic steps in the modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. The following outline presents Moustakas’s (1994) modification of the Stevick–Colaizzi–Keen Method:

1. Using a phenomenological approach, obtain a full description of your own experience of the phenomenon.
2. From the verbatim transcript of your experience complete the following steps:

- a. Consider each statement with respect to significance for description of the experience.
 - b. Record all relevant statements.
 - c. List each nonrepetitive, nonoverlapping statement. These are the invariant horizons or meaning units of the experience.
 - d. Relate and cluster the invariant meaning units into themes.
 - e. Synthesize the invariant meaning units and themes into *a description of the textures of the experience*. Include verbatim examples.
 - f. Reflect on your own textural description. Through imaginative variation, construct *a description of the structures of your experience*.
 - g. Construct a textural-structural description of the meanings and essences of your experience.
3. From the verbatim transcript of the experience of *each* of the other *co-researchers*, complete the above steps, a through g.
 4. From the individual textural-structural descriptions of all co-researchers' experiences, construct *a composite textural-structural description of the meanings and essences of the experience*, integrating all individual textural-structural descriptions in to a universal description of the experience representing the group as a whole.
- (Moustakas, 1994, p. 122)

Trustworthiness

Qualitative terminology differs from quantitative. When seeking truth value, quantitative researchers seek validity, while qualitative researchers seek credibility; when seeking applicability, quantitative researchers seek external validity or generalizability while qualitative

researchers seek transferability (Guba, 1981; Schwandt, Lincoln, & Guba, 2007). For consistency, quantitative researchers seek reliability, while qualitative researchers seek dependability; and in seeking neutrality, quantitative researchers seek objectivity, while qualitative researchers seek confirmability (Guba, 1981; Schwandt et al., 2007). Therefore, the elements of trustworthiness that qualitative researchers pursue are credibility, transferability, dependability, and confirmability (Guba, 1981; Lincoln & Guba, 1985; Schwandt et al., 2007). Though Creswell (2013) does not adhere to a strict list of validation strategies, he suggests using at least three validation strategies for each qualitative approach to research. Multiple validation strategies (Creswell, 2013) were employed in order to guard the trustworthiness of this study, including (a) triangulation, (b) clarifying researcher bias, (c) member checks, (d) rich, thick description, and (e) an audit trail (Guba, 1981).

Credibility

Taking steps to establish credibility guards against non-interpretability (Guba, 1981). In order to strive for credibility in this study, triangulation and member checks were employed (Creswell, 2013; Guba, 1981). Triangulation is the use of multiple data collection methods in order to corroborate data (Gall et al., 2007). In this study, data were collected via interviews, focus groups, and document analysis. Member checks involved having participants review their statements for accuracy (Gall et al., 2007); participants were asked to review the transcribed notes from both the interview and the focus group.

Dependability and Confirmability

Pursuit of dependability guards against instability (Guba, 1981). The use of overlapping methods (Guba, 1981), as well as establishing an audit trail, helps to establish dependability (Creswell, 2013; Guba, 1981). Methods employed in this study overlapped, as similar questions

were asked in each separate data collection method. An audit trail not only documented the research process (Gall et al., 2007), but also allowed the researcher to practice reflexivity (Guba, 1981), which helped to prevent bias.

Pursuit of confirmability guards against researcher bias (Guba, 1981): triangulation, acknowledgement of researcher bias, and an audit trail helped establish confirmability (Creswell, 2013; Guba, 1981). Triangulation was employed by using multiple data collection methods (interviews, focus groups, and artifact collection). Researcher bias was disclosed in “The Researcher’s Role” and in the “Significance to Self” sections, as well as in the practice of reflexivity in the audit trail (Gall et al., 2007).

Transferability

Taking steps to pursue transferability prevented noncomparability (Guba, 1981). In order to strive for transferability, rich and thick detailed description was sought (Creswell, 2013; Guba, 1981). The 14 interviews lasted an average of 44 minutes each, and the two focus groups averaged 58 minutes each. Transcription of these notes resulted in thick, rich data. “With such detailed description, the researcher enables readers to transfer information to other settings” (Creswell, 2013, p. 252).

Ethical Considerations

It was imperative that the participants of this study were treated with honor and dignity. Certain ethical considerations were taken to protect the privacy and integrity of the participants (Creswell, 2013). The purpose and description of this study were accurately described on the consent form. Pseudonyms were used and identifying information was changed. Hard copies of data were kept in a file cabinet to which only I had the key. Digital data were stored in a

password-protected laptop to which only I had access. I was very careful to maintain in strict confidence all names and identifying information.

Summary

This chapter described the methodology utilized for this research. I explained why a transcendental phenomenological approach was most appropriate for this study and the plan that I designed to triangulate data collection via interviews, focus groups, and document analysis. I described the participants and the procedures that were followed in this study and the steps that were taken in analysis, which followed Moustakas's (1994) modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. I disclosed my positive bias toward homeschooling and the steps that I took to bracket myself per the Epoche process (Moustakas, 1994). I disclosed the questions that were asked on the screening survey, in the interviews, and in the focus groups, as well as directions for the artifact. Finally, I explained the steps that were taken to ensure the trustworthiness of the research and the fair treatment of participants and their private information. The following chapter will disclose this study's findings.

CHAPTER FOUR: FINDINGS

Overview

Chapter Four presents the results of this transcendental phenomenological study which explored the influence of a K–12 home education on the adult lives of college graduates. This chapter details findings from the interviews, focus groups, and document analysis. It begins with a description of the 14 participants and then outlines the steps taken for development of the themes which emerged from data analysis. Finally, responses are given to the central research question as well as to each research sub-question.

Participants

Fourteen participants who were homeschooled throughout K–12 in the United States and who graduated from an accredited four-year college were selected via a purposive, snowball sampling. After participants submitted informed consent forms (Appendix D) and copies of college diplomas, personal interviews were scheduled and conducted utilizing their choice of video conferencing (e.g., Skype, FaceTime, Google Hangouts, etc.). After all interviews were transcribed by the researcher and member-checked by each participant, focus group questions were amended and two focus groups were conducted via Google Hangouts; seven participated in the first focus group and four participated in the second. Three participants were unable to attend the focus groups; two because of work obligations, and one because she was unable to connect to the video conference. Thirteen participants wrote two-page letters to a new homeschooler and submitted them via email.

The following section describes each participant.

Abigail

Abigail (age 34) holds a bachelor's degree in music performance, is married, homeschools her three young children, and is director/teacher in a school of music. Abigail described homeschooling as “freeing”:

I was allowed to go at my own pace . . . I had time that other people didn't, to invest in other people. I was free to pursue teaching . . . [Homeschooling was] freeing in the way I saw the world. It was more beautiful—I like to explore things, I like to touch it, feel it, embrace it, if it's going to be mine. It freed me to explore the way I learn. My parents tried to give us the freedom to realize what our gifts were, and to try to figure out how we could use them; that was freeing, too.

Belle

Belle (age 28) is married, holds a Ph.D. in electrical and computer engineering, and works as a university professor. In her letter to a new homeschooler, Belle shared the following:

I have always loved learning. My parents certainly helped me develop my desire to learn and the confidence to try things. My mom made it possible for me to always be reading new books, often of the “how-to” variety, and she often gave me the materials I wanted to be able to try the craft projects or experiments I found described in books. Later in my education, my dad encouraged me in my technical interests by watching science documentaries with me, taking me to lectures on science, religion, and philosophy, and discussing articles about potential career choices. It is hard for me to imagine what my attitude toward learning would be like now if my parents had not been so encouraging and in-tune with my interests. Although doing the research for my Ph.D. dissertation was considerably more difficult than, say, figuring out how to do calligraphy, the fact that I

have been able to understand, try, and succeed at varied things throughout my life is a real confidence booster when the next thing seems a bit too daunting.

Charles

Charles (age 27) is married to Belle. He earned a National Merit Scholarship, a bachelor's degree in mechanical engineering (summa cum laude), holds a Ph.D., and has an academic career in engineering research and teaching. Charles purports that homeschooling “facilitated the growth of independent thought and self-motivated, self-controlled-type of lifestyle.” Charles's letter to new homeschoolers is in Appendix J.

Deborah

Deborah (age 28) holds a bachelor's degree in history, is married, and is homeschooling their three children. Deborah shared that homeschooling “was very formative and supportive.”

She continued:

It was supportive in the sense that my parents were not necessarily trying to craft a certain thing; they were trying to teach me how to think. They had a lot of direction in that, but it was primarily a learning-to-think without a lot of rigid requirements, or that I had to turn out a certain way.

Elizabeth

Elizabeth (age 32) holds a Ph.D. in mathematics, has taught at the college level, and is married with a baby. Elizabeth shared her experience with new homeschoolers:

Coming out of homeschool, I felt well prepared for college. One of the most important college-preparation skills I learned was how to manage my time. In our format of homeschooling, I was responsible for managing my own time and getting assignments done. My mother, who was my teacher, did not micro-manage or closely supervise my

use of time. I was expected to be diligent, and that expectation helped me when I hit college. Homeschooling for me was not a situation in which I passively received instruction and was herded through my assignments with much prodding, but in which I actively synthesized knowledge on my own and kept myself on schedule. As a result, college was not a culture shock to my academic habits: I already knew how to keep myself accountable and organized, and was ready to succeed.

Fiona

Fiona (age 32) holds a bachelor's degree in theater education and is a resident teacher artist; she works with a theater company and teaches drama and public speaking in public schools. Fiona shared this advice with new homeschoolers:

One of the things that was extremely helpful in my experience is that my parents were both teachers and both dedicated to making sure we got a good education. This sounds like an obvious point, but I have known homeschooled children who grew up with very little structure and whose education wasn't up to any kind of standard, and this made it more difficult for them to get into college later or, sometimes, to even function in the workplace because they were missing the skills and knowledge that their peers had. This meant that for topics that weren't my parents' strengths, they sought out other experts who could help us learn the lessons—local tutors or online courses, for example.

George

George (age 25) holds a bachelor's degree in physics and is pursuing a doctorate in optical science and engineering. George shared the following thoughts with new homeschoolers:

In reality, homeschooling becomes more than just a method of learning outside the public or private education system; it becomes a way of integrating what you learn and the life

that you live. . . . It is my hope that you'll realize that homeschooling can allow you to learn so much more than what a book or test can teach you, and that can become fun. Or at least, you can learn how to excel at what you are gifted in, allowing you to fall back on your skills to accomplish a task even when you don't want to do it. You can experience how to think, how to interact with varieties of people, and how to pursue those pieces of information or experiences that will best allow you to learn skills and abilities that match the gifts God has given you, preparing you to glorify Him as you proceed into a career or role in life, equipped with not just knowledge, but understanding.

Hope

Hope (age 24) holds a bachelor's degree in nursing and works full-time in a hospital.

Hope shared the following with new homeschoolers:

I couldn't imagine how my life would be now if schooling hadn't allowed me to learn to play musical instruments or work with animals. Many of the skills learned aren't strictly practical, but they are no less important than the aspects of education considered to be traditionally taught. And that is why homeschooling is worth the work . . .

homeschooling allows the freedom to choose how and what your children learn.

Isabelle

Isabelle (age 24) holds a bachelor's degree in fine arts and is pursuing a master's degree in art therapy and counseling. Isabelle shared a memory illustrating the relationship she has with her father:

A very early memory of mine from that time is my dad teaching me to read through *100 Easy Lessons* by Siegfried Engelmann. This 20–30 minutes a night was “quality time with Daddy” that showed me that he cared to invest time for me even when I didn't get to

see him all day. I think that these moments were significant in helping me establish a strong relationship with him early on, and helped set the groundwork for the relationship I have with him now.

Julia

Julia (age 29) holds a bachelor's degree in psychology, worked in human resources in a large mortgage company, and is now a stay-at-home mom (SAHM). She is expecting her second child and works at home with her self-employed husband. A shy child, part of Julia's home education included working on a family farm close to their home. She described her experience as follows:

I learned so much working on that farm. There is so much science that goes into farming and yet, even more than that, I learned how to talk with people. I learned how to stand in front of crowds of all ages and teach with boldness. I learned how to talk with adults and have educated conversations. I learned that I had a passion for people and teaching and sharing. I knew then that I would never be able to just sit at a desk and work all day, but I would need a job that allowed me to be out and about with people while teaching in some regard. I got my bachelor's degree in psychology. I love people, and how they think and operate fascinates me. I knew that I wanted to learn more about the human psyche and what motivates people to be who they are. I believe that being homeschooled allowed my parents to see our individual strengths and interests, and they allowed us to chase after those interests from a young age.

Kara

Kara (age 31) holds a bachelor's degree in psychology and works as a behavioral health specialist in a psychiatric hospital. She is married with two children and has also hosted

exchange students and mothered children in foster care, birth through teenagers. Kara completed high school requirements by the end of her junior year, which gave her the freedom to follow her interests during her senior year. Her final year of homeschooling consisted almost exclusively of working in a Catholic Charities children's home, which led to a career in social work.

Levi

Levi (age 28) holds a bachelor's degree and is an accompanist at a large university. He is married with no children. Levi was unschooled for most of his K–12 education, learning through real-life experiences. He worked with his father and brother in his father's construction business and helped with their family baking business and café. These real-life experiences were supplemented by independent study using Alpha-Omega LIFEPAACS, which Levi completed in the evenings.

Mary

Mary (age 31) holds a bachelor's degree in nursing and works part-time in a hospital emergency room as a nurse and as a sexual assault forensic examiner. She is married with a young child whom she plans to homeschool. Mary described how homeschooling impacted her faith:

My faith was strongly impacted by homeschooling. Diligent parents can probably find a charter school that will provide all the educational opportunities to get their child into the college and career desired, but they won't find a school that guides their faith quite that easily. Often we think of the unique role parents have in homeschooling, but equally so is the role siblings play in each others' lives. The growth of my faith as a teenager is where this became most evident. There were eight of us, and we spent a lot of time

together during and out of school hours. As we got older, we would often have long conversations speaking into each others' lives and challenging each other in our faith.

Naomi

Naomi (age 28) holds a bachelor's degree in journalism and a master's degree in Human Services Counseling: Marriage & Family Therapy. She is a growth strategist for a real estate company in a large city. She is married and expecting their first child. Naomi described one of the most significant benefits of homeschooling as the creation of a self-starter/self-teacher, "someone who is not afraid to try new things." She shared,

Things that I do now in my career were not directly taught to me. But the spirit of homeschooling was, "If you're interested in something, then learn it. If you want to do something, then do it." Right? "If you find this fascinating, lean into it." And there's time for that.

Results

The purpose of this study was to explore how a K–12 home education influenced the adult lives of college graduates. Data collected from 14 long personal interviews, two focus groups, and 13 documents were analyzed utilizing Moustakas's (1994) modified Stevick–Colaizzi–Keen's approach to transcendental phenomenology. The remainder of this chapter outlines steps taken for data analysis and the development of themes as well as responses to the research questions.

Theme Development

In order to answer the research questions, data were analyzed and themes were developed which described the influence of a K–12 home education on the adult lives of college graduates. Themes emerged as the following steps were taken.

Epoche. Moustakas (1994) describes this step as “a process of setting aside predilections, prejudices, predispositions, and allowing things, events, and people to enter anew into consciousness, and to look and see them again, as if for the first time” (p. 85). Because of my background in home education, it was important that I set aside my own opinions and biases in order to explore the data without prejudice. Therefore, before I interviewed the first participant, I responded to the research questions as transparently as possible in order to acknowledge my opinions and set them aside in an attempt to approach the data without bias. Throughout the data collection process, I kept an audit trail (Appendix K) which also served as a means by which to practice reflexivity (Creswell, 2013; Guba, 1981).

Long personal interviews. Participants were interviewed from August to November 2018 via video conference using semi-structured, open-ended questions (Appendix F). Participants chose either their homes or private offices from which to be interviewed, and I used my own living room or family beach house living room as a video backdrop in order to create a more comfortable environment. I tried to make each participant comfortable and at ease as we briefly chatted before the interview began. Homeschooling is a unique lifestyle, and there is camaraderie among those who understand the subculture; there was a friendly tone to the video conferences. Interviews varied in length from 26 to 89 minutes each, with the average length 44 minutes; the sum of the interviews was 10 hours, 19 minutes. Interviews were recorded on two devices. I transcribed the interviews verbatim and emailed each transcript to the participant for member-checking. Edited transcripts were returned via email or Google Docs. The edited, member-checked transcripts were used for data analysis.

Focus groups. After interview transcripts were member-checked, focus group questions (Appendix G) were amended and emailed to participants, and two focus groups were scheduled

in November 2018. Seven participated in one focus group and four participated in the other. Both focus groups were conducted on Google Hangouts, which had been successfully utilized for most of the long personal interviews; Skype and FaceTime had proved unreliable for video chat (often losing connection), and Google Hangouts was familiar to most participants. Two participants were unable to attend because of heavy work commitments, and one was unable to connect to the group conference. There was amiability among the participants, especially in the conversation as we waited for everyone to sign into the meeting. Two participants found that they had had the same professor for a dual enrollment class. Two other participants knew one another but did not know that the other was part of this study; they expressed delight in seeing one another and said that they would reconnect after the focus group ended. The participants seemed at ease with one another and with me, and because they had received the questions two days prior to the group, they were prepared to share. The first focus group of seven participants lasted 66 minutes and the second group of four participants lasted 50 minutes; the sum of the focus groups was 1 hour, 56 minutes. The professional transcription service Rev Voice Recorder transcription service was utilized to transcribe both documents. These documents were uploaded to Google Docs and participants were given access to only the file in which they participated. Participants either edited these files online or emailed me to approve them, and the edited files were used for data analysis.

Document analysis. In November and December 2018, 13 of the 14 participants wrote two-page letters to a new homeschooler and submitted them via email. Participants were asked to share the influence that a K–12 home education had on their adult lives pertaining to their experiences in higher education, their relationship with parents, their spiritual journey, and/or their vocational choice. These documents were used for data analysis.

Coding, horizontalizing, and clustering. After the collecting of data via the long personal interview, focus groups, and letters to new homeschoolers, Moustakas's (1994) modified version of the Stevick–Colaizzi–Keen method of transcendental phenomenology was utilized to analyze each transcript and document. First, I read each transcript several times in order to find significant statements that pertained to the research questions. Moustakas (1994) describes horizontalization as occurring when “every statement initially is treated as having equal value” (p. 97). After reading and rereading the transcripts, I highlighted each significant statement that related to higher education in yellow; each significant statement that related to familial relationships in green; each significant statement that related to spiritual journey in pink; and each significant statement that related to vocational choice in orange. After this, I wrote short phrases in the margins which described the essence of the relevant statements. In *The Coding Manual for Qualitative Researchers*, Saldaña (2016) described a code as “a short word or phrase that symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language-based or visual data” (p. 3). I categorized these codes, and themes emerged. Table 2 outlines the categories, subcategories, and codes which emerged during the process of coding, horizontalization, and clustering.

Table 2

Codes

Code	Subcategory	Category
dual-enrollment classes co-ops curriculum	academically prepared for college	impact of homeschooling on higher education
dual-enrollment co-ops outside classes outside opportunities	outside classes and opportunities	
balancing heavy course load navigating new venue navigating new social dynamics	biggest challenges in college	
critical thinking self-motivated self-taught	independent learners	
resolution of conflicts quantity of time together	close relationship with parents	impact of homeschooling on relationship with parents
personalities clashed authoritarian parenting improved after graduation	strained relationship because of homeschooling	
Christian curriculum Bible teaching family devotionals	direct influence of Bible teaching	impact of homeschooling on spiritual journey
daily application of Christian principles watching lives of parents	indirect influences of modeling Christianity	
specific curriculum to support interests high quality curriculum	curriculum	impact of homeschooling on vocational choice
jobs/volunteering experiences that led to vocational choice	opportunities outside curriculum	

Themes. Following the process of horizontalization when significant statements were coded and the codes were clustered together and then categorized (Table 2), themes emerged. Five themes were developed that helped answer the central research question, “How do select four-year college graduates describe the influence of a K–12 education on their adult lives?” The following five themes emerged: college preparation, challenges in college, close to parents, faith foundation, and vocational choice.

College preparation. All 14 participants felt prepared for college. In Levi’s interview, he shared: “I was actually very well prepared, much more than I originally thought that I was.” During George’s interview, he stated, “In all honesty, it wasn’t that much of a transition.” Naomi shared in a focus group: “The academic side ended up being a breeze.” Even the two participants who were unprepared in math felt prepared for everything else. Kara shared during her interview: “I definitely could have been better prepared in math, but in everything else it was fine. I wouldn’t say it was academically challenging to transition from high school to college.” Belle responded in her interview: “I was super-well-prepared for college. Part of that was because I started doing college classes when I was a junior in high school.” She continued, “The one thing that stands out as the most helpful for college was the fact that I took some weed-out classes as a junior and senior. I took them at the local university.”

Each participant felt well-prepared for college, and nine of them attributed their preparation to experiences in dual enrollment classes (classes at local colleges), co-op classes, or outside classes for their academic success in college. In response to the focus group prompt, “What experiences in high school had the greatest impact on your success in college,” Fiona shared that dual enrollment classes “were really helpful for me in terms of learning how to successfully function in a class while still having the support of being home and having help

from parents if I needed it.” In response to the same focus group prompt, George shared that an online AP calculus class from Patrick Henry College was very helpful in preparing him for college because it “introduced that ability to work with people, solving problems, which really helps going forward with many things.” Julia credited her experience in co-op classes for her feelings of being well-prepared. In her interview she said, “I felt prepared. Doing classes outside the house in high school helped a lot . . . my dad taught our biology high school class, and it was 10 times harder than my college biology class, so that set me up for success there.” In response to the focus group prompt asking what experiences contributed to college success, Deborah shared the following:

For three out of my four years of high school, I was in a program where I took classes two days a week, similar to a college model where you went into class every day. There was significant homework to do outside of class, and that probably was hugely helpful in transitioning to college. Classroom learning and taking notes from lectures were things that didn’t happen as much at home.

Isabelle added to the focus group conversation: “I’m very thankful for my parents’ support in my artistic interests, since I’m going into art. They helped me out, gave me the opportunity to study with various artists and have experiences to enforce my skills there.” In response to the same focus group prompt, Charles shared the following:

I took a number of advanced classes. They weren’t all officially AP, but some of them were. That helped me, because it reduced the overall course load in engineering school, which is fairly heavy. It allowed me to have more time to focus on course work.

In her letter to a new homeschooler, Deborah advised: “Give your children the opportunity to be taught by others. Give them the chance to experience various standards and expectations before

their first job or college class.” Nine participants described dual enrollment, co-op, and/or outside classes as contributing to their college preparation.

Twelve of the 14 participants credited a quality described as “independent learning,” “critical thinking skills” or “independent thinking” for contributing to their college preparation. Belle, a college professor, described this quality in her interview: “Homeschooling makes people, including myself, into an independent learner, which is something that I know the university teaching community is really wanting in their students.” Elizabeth expressed it succinctly in her interview: “I would say that homeschooling taught me how to learn.” The first theme to emerge encapsulated these experiences of college preparation: “Prepared for college.” Participants felt prepared for college because they were independent thinkers/learners, and most participants credited dual enrollment, co-ops, and outside classes as being most helpful for college preparation.

Challenges in college. Twelve of the 14 participants described being challenged by balancing a heavy course load and navigating the new social dynamics of college. During his interview, Charles said that it wasn’t merely learning to prioritize his classes, but it was prioritizing at the expense of a less-important class:

It was impossible to really do a good job in everything. And so probably one of the most challenging things about the entire college experience was learning . . . how to essentially pick something and decide not to really care about it and turn in sub-par work just because that’s what was necessary.

In Julia’s interview, she said, “If you had three classes at the same time and had research papers in each one, it was a lot.” In Levi’s interview, he shared that it was challenging “to go into a program where I felt like every professor in every class had no idea what the rest of my

education looked like and their expectation was that their class was my number one priority.”

Mary shared in her interview: “I needed to study more than in high school.” During a focus group, Kara shared the following: “I wish I’d have had a little bit more exposure to technology, to a library database.” During Deborah’s interview she shared that she felt challenged in time management and study skills, but she also shared that college was “a natural next step”:

Sure, it was harder than 12th grade had been, but it was not insurmountably hard . . . it’s supposed to be a little bit harder, it’s supposed to be a little bit more stressful; that’s the definition of moving forward. I felt stretched, but not overwhelmed. It was a good experience in that regard.

Deborah continued sharing how she handled the challenge of time management:

I think that I made way more friends in college than I ever had in high school. I had to learn that staying up late means I fall asleep in class, and that if I don’t stay up late, I don’t fall asleep in class. There was a little bit of time management to learn, but nothing that was detrimental. It’s not like “Oh, I’m failing my classes – I have to stop having fun.” It was more like, “Okay, it wasn’t worth it to stay up late, even if I’m studying.”

In addition to balancing a heavy workload, participants described the challenge of navigating the new social dynamics in college. In George’s interview, he said, “Figuring out the social atmosphere of college – I didn’t really have a structure for that.” During his interview, Levi shared, “I think that I could have been better prepared for college if I’d have known what the structure was going to be.” Elizabeth shared during her interview that the most challenging aspects of college included “social dynamics.” In her interview, Isabelle shared that socially, she “struggled a bit.” In Fiona’s interview, she shared that it would have been helpful to have been introduced to more diverse social dynamics and history before college. Naomi contributed to a

focus group conversation in the same vein: “We’ve already talked a bit about what I wish had been handled differently, a little bit about diversity and variety.” The challenges that 12 of the 14 participants experienced are encapsulated in the second emergent theme: “Challenges in college.” The greatest challenges in college were balancing a heavy course load and navigating new social dynamics/venues.

Close to parents. Thirteen of the 14 participants described a close or very close relationship with one or both parents. In her interview, Fiona responded, “I think that we’re definitely very close; I get along great with my parents.” Most participants attributed the quantity of time spent together and the need to resolve conflicts as contributing to their closeness. Elizabeth shared during her interview: “Homeschooling meant that we spent a lot of time together . . . being together all that time meant that you couldn’t afford to not work out conflicts.” In her letter to a new homeschooler, Isabelle shared an experience that helped build the close relationship she shared with her parents. She wrote the following:

Because I spent a lot of time with them when I was young, I know that I can rely on my parents now, be it for advice, emotional support, or just as friends to do things with. I have a very strong relationship with my parents.

In Deborah’s letter to a new homeschooler, she credits this closeness to an abundance of time spent together. She shared the following advice with new homeschoolers:

Make family relationships a priority. Our family culture was shaped by home schooling and the fact that we spent so much time together. There are so many different things for homeschoolers now that many families run in 1000 different directions. You won’t have the family bonds if you’re all apart all the time.

While 12 participants described a close relationship with both parents, one described a strained relationship with one parent and one participant said there was no closeness in the relationship with either parent now. I chose to probe this issue more during the focus groups.

Creswell (2013) speaks of the “emergent design” of qualitative research: “This means that the initial plan for research cannot be tightly prescribed, and that all phases of the process may change or shift after the researchers enter the field and begin to collect data” (p. 47). In this study, a shift occurred during the interviews when two participants used the term “authoritarian” to describe the parenting style they perceived as having experienced. I chose to follow this concept further and edited the focus group questions accordingly. The amended question explored perceived parenting styles, using the terminology of the two participants which was based on the work of Diana Baumrind (1991). Of the 11 who participated in the focus groups, the two participants who did not feel close to both parents perceived the parenting style they experienced as being authoritarian: strict rules, high expectations, without commensurate warmth and responsiveness (Baumrind, 1991). During a focus group, a participant who perceived that she had experienced an authoritarian style of parenting shared this with the others:

When it comes to homeschooling, I hear you say how key that transition is from adult/child to adult/adult. What’s really challenging is if you have a homeschooling parent who is authoritarian and doesn’t make that transition into adulthood. So, when you’re 13, 14, 15 and you’re trying to become an adult, wanting to know why you’re doing what you’re doing . . . there’s no understanding or openness. . . . You don’t become friends.

In exploring the reasons why the two participants did not feel close to one or both parents, it was revealed that both participants perceived having experienced an authoritarian style of parenting (Afsheen Amir, 2017; Baumrind, 1991).

All other participants described their perceived parenting as authoritative (Baumrind, 1991). Julia shared the following during a focus group:

I feel like I'm just going to repeat what everyone else said. Yeah, my parents were, I'd say, authoritative . . . They definitely had rules for us and expectations, but it was also, "Let's have a relationship. Let's talk about things. If you disagree on something, let's talk about it." Kind of a mutual respect of opinions, I guess.

In his letter to a new homeschooler, George described the homeschooling parent-child relationship as follows:

And as you go through your time homeschooling, I'd encourage you to pay close attention to your parent/guardian who is instructing you. Assuming a solid situation, they are there are God's provision to you to instruct you (see the entirety of Proverbs!), but also in the context of homeschooling, their presence and your daily interaction with them can provide something more. This is someone who has elected to use their time to teach you, to strive to match your learning capabilities and needs, as well as to provide you with a (hopefully) well-rounded education. Learn from them, not just in the classroom, at the zoo, the museum, the art institute . . . but also learn from them as you interact with them throughout life.

Because 13 of the 14 participants described a close relationship to one or both of their parents, the third theme to emerge was, "Close to parents." Most participants had close or very close relationships with their parents.

Faith foundation. Thirteen of the 14 participants described experiences which helped build a strong faith foundation, and they said that their faith was similar to their parents. In her interview, Julia described how her parents wove Scripture into their curriculum and lifestyle:

It was part of everything we did, and very important to my parents. A lot of the curriculums that we used were either based around Scripture or my mom would find a way to make it based on Scripture, which I thought was very cool. So we had a designated Bible time almost every day, but then it was always incorporated. I know the Bible better than I would have if that wasn't the case. I have a better picture of the Lord and His love and Who He is, just even from watching my parents and having that 24/7 right in my face.

Naomi credited the Socratic aspect of homeschooling as impacting her faith. She shared the following during her interview: “The flavor and spirit of homeschooling was very Socratic, and so I was trained to think and not to blindly believe. That impacted my faith journey.” During a focus group, Naomi also shared that a program designed for homeschoolers was instrumental in her discipleship:

My faith was significantly impacted by my involvement with TeenPact – it's where I received the most intentional, rich, and consistent discipleship. I was challenged in my faith to be there for others, just the context that it was. So homeschooling played a huge role, because I wouldn't have had those opportunities for personal growth and personal development.

Thirteen of the 14 participants described having a faith similar to their parents. Therefore, the fourth emergent theme was “faith foundation.” Homeschooling helped lay a strong faith foundation, and participants' faith was similar to their parents.

Vocational choice. All 14 participants described a connection between their homeschooling experiences and their vocational choice. In her letter to a new homeschooler, Belle, a university engineering professor, shared the connection between homeschooling and her career in academia as follows:

These days, I have lots of fun with learning. I get to hang around at the university with students (many of whom were homeschooled, by the way), helping them learn strange and challenging things. I also learn lots of new things myself, more than ever. When I produce the content for a new class, it is like homeschooling. I have to read the book, understand it, and figure out how to explain it to other people. I also dabble in academic research, which is a different level of learning – more challenging, but also more rewarding when you put information together to understand something differently, or try an experiment that shows us how something new works.

During her homeschooling years, Abigail had her own music studio and taught piano to ~50 students per week; she later majored in music performance and is now a piano teacher. Fiona wrote plays for her family and participated in her church's drama team; she now teaches drama and public speaking in public schools. Kara worked in a Catholic Charities children's home during her senior year; she subsequently majored in psychology and is now a behavioral health specialist. Hope trained a horse and raised sheep, even administering medication; she is now a nurse. Levi began playing piano at his church on a regular rotation at age 10; he is now an accompanist. Without exception, participants described experiences that directly connected to their future career choice. Table 3 illustrates these connections. Therefore, the fifth and final emergent theme was, "Vocational choice." There was a direct or indirect connection between homeschooling experiences and vocational choice.

Table 3

Connection Between Homeschool Experiences and Vocational Choice

Participant	Vocation	Homeschool Experience
Abigail	director/teacher in school of music	taught ~50 students/week in own studio (business)
Belle	engineer/professor	dual enrollment classes – adv. math and science
Charles	post-doctoral researcher	took advanced classes, tutored chemistry and math
Deborah	home educator	taught in homeschool co-op
Elizabeth	math professor	taught pre-calculus to homeschoolers before college
Fiona	drama teacher	wrote plays for family, participated in drama team
George	doctoral candidate	visited family friend who ignited spark, mother chose adv. physics curriculum to support interest
Hope	nurse	cared for animals (administered meds), mother chose strong science curriculum to encourage
Isabelle	art graduate student	parents supported interests, e.g., art classes
Julia	SAHM	mother as role model, coached young children in soccer
Kara	behavioral health specialist	worked in a children's home during senior
Levi	accompanist	began playing piano regularly in church at age 10
Mary	nurse	Dad was doctor, encouraged love of science
Naomi	growth strategist	participated in TeenPact, learned to take initiative and became a leader; served as TeenPact State Coordinator for two years

Summary of themes. In summary, the five themes which emerged from the analysis of data were as follows: (a) college preparation, (b) challenges in college, (c) close to parents, (d) faith foundation, and (e) vocational choice. Table 4 displays the frequency of these emergent themes.

Table 4

Frequency of Emergent Themes

Theme	Frequency
College Preparation:	
Participants felt prepared for college	14
Dual enrollment, co-ops, and outside classes most helpful	9
Independent thinkers/learners	12
Greatest challenges in college: balancing heavy course load and navigating new social dynamics	12
Close to parent(s)	13
Faith foundation	13
Vocational choice	14

Note. Data contained in this table were generated based upon the responses of the 14 individual participants.

Textural and structural descriptions. After the themes were developed, analysis continued according to Moustakas's modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. The next steps included creating textural, structural, and textural-structural descriptions for each participant. Textural descriptions explained what the participants experienced that impacted the academic, familial, spiritual, and vocational aspects of adulthood. Structural descriptions explained how participants experienced the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of each life. Finally,

textural-structural descriptions explained the essences of participants' experiences with homeschooling and how those experiences impact adult life. By following Moustakas's (1994) orderly process, the researcher was able to create a composite of all of the participants' experiences. The following is this composite which describes the combined experiences of all 14 participants and the influence that a K–12 education had on their adult lives.

Composite textural description. Inherent within a transcendental phenomenology is the need to examine each participant's textural description of the phenomenon and combine these descriptions into a composite textural description. After examining the individual textural descriptions, I combined them into a group description: All participants described feeling prepared for college. As a group, participants felt challenged by heavy course loads and the new social dynamics. As a whole, they described close relationships with parent(s) and having a faith similar to their parents. Finally, participants described a homeschooling experience that directly or indirectly connected to vocational choice.

Composite structural description. All participants described feeling prepared for college and attributed their successful preparation to dual enrollment/co-op/outside classes and to having developed critical thinking skills which many described as a benefit of homeschooling. Most described the challenge of balancing a heavy course load and/or the challenge of new social dynamics. As a group, participants described the quantity of time together and the necessity to work through conflicts as contributing to the closeness they enjoy with their parents. Participants credited Christian curriculum, Bible teaching, and the role models of their parents for the faith they have experienced in their adult lives. Finally, though many did not initially acknowledge a link between homeschooling experiences and vocational choice, each participant did indeed disclose a specific experience that connected with his or her current vocation.

Composite textural-structural description. This last step in Moustakas's modified Stevick–Colaizzi–Keen method resulted in a universal description of the experience for the group as a whole (Moustakas, 1994). This description is the sum of the themes and is as follows: Participants felt prepared for college, in large part because of their independent learning skills and the dual enrollment/co-op/outside classes they experienced as homeschoolers. Their greatest challenges in college consisted of learning to balance a heavy course load, sometimes at the expense of less-important classes; they also had to learn to navigate new social dynamics. Because of Christian disciplines in the home, curriculum choices, and the example of their parents, participants described having a faith similar to the one in which they were raised. Finally, participants described a connection between homeschool experiences and vocational choice. This synthesizes the composite textural and composite structural descriptions and describes the essence of homeschooling for these 14 participants.

Research Question Responses

In order to answer the research questions, 14 participants were selected via purposive, snowball sampling in order to collect thick, rich data from college graduates who had been homeschooled throughout K–12. Personal interviews, focus groups, and artifacts were analyzed utilizing Moustakas's modified Stevick–Colaizzi–Keen systematic approach to transcendental phenomenology. This section provides answers to the research questions.

Central research question. The main question driving this research was, “How do select four-year college graduates describe the influence of a K–12 home education on their adult lives?” The answer to the central research question is that participants felt well-prepared for college, in large part because homeschooling created independent thinking skills and because of the dual enrollment/co-op/outside classes that they experienced as part of their home education.

George, a Ph.D. candidate in optical science and engineering, described critical thinking skills as having had the greatest impact on his life: “Critical thinking . . . being adaptive, and learning how to think things through . . . I’d boil down my experience down to thinking things through.” Hope described the impact of homeschooling as giving her “more freedom of thought.” Participants attributed independent thinking skills along with participation in outside classes as factors that prepared them for college. Naomi shared that participation in a high-quality co-op made her “extremely well-prepared.” Belle said, “I was super well-prepared for college,” primarily because of the dual enrollment classes she took at a local college.

Participants described their greatest challenges in college as learning to balance a heavy course load and learning to navigate new social dynamics/venues. Abigail shared that at first, she “wasn’t very good at preparing myself for upcoming deadlines.” Participants further described the impact of a home education as having created a close relationship with their parents and of sharing a similar faith with them, because homeschooling helped create a strong faith foundation. Abigail said that the continual example of seeing how godly people “handled the hard stuff” impacted her relationship with her parents as well as her own spiritual journey. Elizabeth shared that “just being around my parents day in, day out and seeing them walk out their own faith transparently was quite impactful for me.” Finally, participants described a clear connection between specific homeschool experiences and their vocational choice. Kara worked in a Catholic Charities children’s home during her senior year of high school, then majored in Psychology and works as a behavioral health specialist today. Isabelle took art classes and worked with art tutors, and is now pursuing a master’s degree in art therapy and counseling. Every participant shared experiences in their home education that directly or indirectly connected to their vocational choice.

Research sub-question 1. The purpose of this sub-question was to explore how a home education impacted participants' experiences in higher education. SQ1 asked, "How do participants describe the impact of homeschooling on their experiences in higher education?" The answer is that all 14 participants felt well-prepared for college, though they were challenged in learning how to balance a heavy collegiate course load and in navigating new social dynamics. During her interview, Abigail described feeling prepared: "When I got there, I thought, 'Well, this is easy!' My parents required way more than these professors!" In her letter to a new homeschooler, Elizabeth shared some of the experiences that led to her college preparation:

I learned to read and write at a young age. This was due to the influence of my father, who had us reading Shakespeare from age 10. He would assign us compare/contrast essays to write based on our readings in Shakespeare. He expected a formal, five-part essay, and would return our work to be revised if there were any spelling or grammatical errors in it. By the time I arrived in a college English class I had grasped the format of a formal essay, I had experienced reading for analysis, and I knew how to write in proper English.

Most participants attributed their experiences in dual enrollment classes (classes at local colleges), co-op classes, or outside classes for their academic success in college. Isabelle described this in a focus group:

I'd take two classes a semester at most. I took college-level writing and math which were really useful in not only meeting the requirements that college have, but helped me get used to the classroom setting and learn how to navigate through that.

Part of this college readiness encompassed a quality that participants described as "independent learning," "having critical thinking skills," and "being independent thinkers." George described

this quality as “thinking things through . . . to think through a problem analytically,” something that he said was not commonly seen in other college students. Many described this independent thinking/learning as actually being the essence of homeschooling. In her letter to a new homeschooler, Belle shared the following thoughts about independent learning:

One time I was at a national conference for engineering educators, sitting next to my boss, the Dean of the School of Engineering and Computer Science. We were in the biggest ballroom I’ve ever seen full of many rows of chairs and hundreds of people eagerly listening to find out from the keynote speaker what were the two most important things or students need to succeed in engineering school. She said, “Successful engineering students are 1) mentored one on one by faculty/teachers and 2) independent learners. These two things, apparently, are extremely difficult for the average engineering student to acquire in traditional school situations. I, however, had both.

These responses were synthesized as the first theme, “College preparation.” Participants felt prepared for college because they were independent thinkers/learners, and most participants credited dual enrollment, co-ops, and outside classes as being most helpful for college preparation.

While students felt prepared academically, most were challenged by having to navigate new social dynamics and/or by learning to balance a heavy course load. In her interview, Julia shared that simply managing a new campus was challenging: “The scariest thing for me was going to the community college and finding the classrooms.” In his interview, Levi said, “I think that I could have been better prepared for college if I’d have known what the structure was going to be . . . I had no sense of what it would look like as far as time commitment.” George concurred in his interview: “It would have been helpful to have had some dual enrollment

classes . . . to learn how a classroom functions, what a syllabus looks like . . . as well as to give insight to how the social spheres work in that setting.” Many others disclosed the challenge of navigating the new social dynamics. Elizabeth shared during her interview, “The only things I would have liked would be to have more social confidence, and to try things that I might not be good at.” Isabelle agreed, and disclosed during a focus group: “Socially, I was less set. I struggled a bit.”

In addition to being challenged by the new social dynamics of college, participants also disclosed the difficulty of learning how to balance a heavy work load. Participants were not unused to heavy course work in high school, but participants shared that it was more than carrying a heavy course load; it was learning to prioritize the more important classes at the expense of not excelling at lesser-important classes. Charles described this challenge in his interview as “prioritizing at the expense of something.” Deborah verbalized this during her interview, as well:

Balancing the importance of every class . . . I think high school was a lot easier because my classes were more coordinated, for example, the research paper is due this week, so there won't be an exam in another class. [In college] there might be two big papers due the same week, and you had to prepare for that, or be willing to give each half the time because you didn't have more time.

Abigail voiced this challenge during her interview, as well: “In homeschool, everything's due now, instead of next week. So at first, I wasn't very good at preparing myself for upcoming deadlines.” The essence of these responses is summed up in “challenges in college.” The greatest challenges in college were balancing a heavy course load and navigating new social dynamics/venues.

Research sub-question 2. Research sub-question 2 explored the impact that homeschooling had on relationships with parents. This question asked, “How do participants describe the impact of homeschooling on their relationships with their parents?” The answer to this question is that most participants described a close or very close relationship with their parents. George disclosed during his interview: “I was really tight with my mom, it just is. You spend 24/7 with someone, you get to know them really well.” Even though his father was not the primary home educator, he said, “I still go to him – I have school finance stuff that comes up, and ‘Dad, can you help?’ – there’s a link there.” In his interview, Levi summed up the benefit of home education’s impact on family relationships: “I got a lot from being homeschooled, but [being close to family] was one of the biggest things.” In her letter to a new homeschooler, Elizabeth shared the following:

I had few major conflicts with my parents in my teen years, I think probably because they had been consistently training my character, helping me mature in relating to others, and working through minor conflicts as they came up. Homeschooling gave my parents much more time for these activities. Issues could be addressed immediately, rather than waiting until after school.

Because 13 of the 14 participants described a close relationship with one or both parents, the answer to SQ3 is that most participants had close or very close relationships with their parents.

It is worth noting that while most participants felt close or very close to their parents, two participants described not feeling close to one or both of theirs. After probing this issue more during the personal interviews and in the focus groups, it was revealed that these participants perceived that they had experienced an authoritarian style of parenting (Baumrind, 1991) which was “unresponsive with strict rules, high expectations, expect blind obedience” (Appendix G).

Researchers have found that an authoritarian style of parenting creates a “parent-child relationship gap” (Afsheen Amir, 2017, p. 3) where children do not feel loved by their parents. One participant described this as “there’s no understanding or openness. . . . You don’t become friends.” However, 13 participants described having perceived being parented authoritatively. In the focus group discussion parenting styles, Charles shared:

I guess based on these categorizations, I’d say my parents were authoritative. I would say there were relatively clear boundaries, but it wasn’t like life or death or anything. . . . This didn’t push me away, but it also didn’t try to keep me unhealthily attached. So I think that the transition from dependence to independence happened relatively smoothly.

Research sub-question 3. Research sub-question 3 was written to explore how a home education impacted the homeschooler’s spiritual journey: “How do participants describe the impact of homeschooling on their spiritual journey from childhood until now?” The answer to this question is that homeschooling helped lay a strong faith foundation and that participants’ faith was similar to their parents. In her interview, Abigail described a poignant memory that illustrated the transmission of faith from one generation to the next:

I think [homeschooling] gave me a very strong foundation. We were memorizing Scripture. We had time to read our Bibles. We had family devotions where we’d all pray together. We had family altar time, so when someone had a request or there was a request in the family – like one year our well went dry, and we didn’t have any water. So we had to dig a new well, and they were digging and digging and they weren’t finding any water. So my parents said, “Okay, guys, we’re going to fast and pray for a day – all of you kids are fasting, we’re all fasting, because if we don’t find water, what are we going to do?” Because we were together all the time, we grew in our faith together.

Seeing how your parents responded to issues, like the well, that's powerful. If you were in school all day, you wouldn't have been able to see how godly people handle the hard stuff.

Although most participants described receiving a strong foundation in their faith due to the direct influence of Bible teaching via Christian curriculum, Bible teaching, and/or family devotions, many described their parents' example as having the most impact on their spiritual journey. Levi described this in his interview, as follows:

I've seen the greatness in my parents, and I've seen the sin in my parents. One thing that's really important, that the church in general doesn't do well with, is showing fault and showing what you do with that. Seeing my parents at their worst, and then how they address that – how they repent – had a huge impact on me, and how I am in my faith now. It gave me a very strong foundation.

Isabelle shared in her interview: "I know my faith is partly built on my parents' faith. I did go through an experience where I had to find my own faith, but all the foundations of what I believed to be true came first from my parents." Julia shared, "I have a better picture of the Lord and His love and Who He is, just from watching my parents and having that 24/7 right in my face." In her letter to a new homeschooler, Elizabeth shared the following:

Extra time with my parents also positively affected my faith. With that extra time, they were able to teach me a lot of doctrine and Scripture-understanding. More than that, though, just being around my parents day in, day out and seeing them walk out their faith transparently was quite impactful for me. I remember my mom losing her temper when all of us kids were being contrary, but then apologizing to us. I could see that she was mad, then she was convicted that she had hurt us, and then she apologized. I could see

God working in her life and similarly in my dad's. . . . These were testimonies to me that God is real and He works in our lives.

In a focus group, Fiona shared the impact of her parents' example:

Seeing how their faith led them to make decisions . . . there's never been a doubt in my mind throughout all my years that my parents' faith is genuine, that it is responsible for making them who they are. . . . Knowing that I had their faith and the way they lived it out was almost kind of the baseline for what Christianity could and should be.

Participants described having a faith that was similar to their parents. In response to the interview question, "How similar is your faith now to that of your parents when you were homeschooling?" most participants responded that it was similar. Mary attends the same church as her parents. Fiona said, "At its core, it's very much the same: extremely strong belief, very strong personal connection to God, and frequent interaction." Others described very slight differences. George said his faith "is maybe refined in a few points, maybe sharpened to a different point, but I'm right there with them." Charles responded in a similar fashion, that his faith was "more complex now than it was at that time, but the roots and foundation are pretty much the same." The consensus on this sub-question led to the fourth theme, "faith foundation." Homeschooling helped lay a strong faith foundation, and participants' faith was similar to their parents.

Research sub-question 4. Research sub-question 4 was designed to examine the connection, or lack thereof, between homeschooling experiences and vocational choice. SQ4 asked, "How do participants describe the impact of a K–12 home education on their vocational choice?" The answer to this question is that every participant described a homeschool experience that directly or indirectly led to their vocational choice. In response to the focus

group prompt, “What experiences in your homeschooling contributed to your career choice,”

Deborah responded,

I was able to teach a pre-calculus class during high school, which was helpful for me in preparing me for career. I wanted to know if I would like to teach math, and that gave me the opportunity to find out that I did like teaching math.

Abigail started her own studio; after high school, she completed an associate degree in music at a local community college and then went to a four-year college to earn a bachelor’s degree in music performance. In her letter to a new homeschooler, she shared the following:

I taught up until I was 21. That’s when I went to college. . . . I already knew that I wanted this to be my career, because I’d liked it since I was 15, as opposed to getting through college and deciding that I really didn’t like it after all. It’s interesting, because when I was in music school, the people in music school had never taught or been in orchestras, or had these opportunities, because they hadn’t had time. They decided in their senior year that they really wanted to sing – it was kind of backwards for them.

Mary’s father was a doctor, and encouraged her love of science. She shared the following during her interview:

I remember doing a science text, and thinking that the way the body worked was really fascinating. I told that to my dad, and he said that it really is. He did a science project with me – I think we grew protozoa. Primarily, I think that what impacted my career choice was watching my dad and his ability to care for people. And my mom, too – I wanted to be a homeschool mom.

Mary is now a nurse and a homeschooling mother. Belle’s parents provided the opportunities that she needed to pursue her interest in math and science, which eventually led to a Ph.D. in

engineering and a future as a college professor. Belle described the connection between her home education and her vocation in her interview:

I got to do a lot more advanced science and math in high school than I would have been able to do in any other school situation. . . . Also, the fact that my parents were into it and encouraged me that way to the extent that when I exhibited interest, they would make sure to get books, do activities . . . and when I was older, my dad and I would sometimes go to lectures.

During high school, Elizabeth taught a pre-calculus math class to homeschoolers; as her vocation, she teaches math at the college level. Deborah taught classes in a homeschool co-op as well, and is now a home educator. During high school, Charles tutored in chemistry and math, which eventually led to a Ph.D. in engineering and a career in academia. In his interview, he explained the following:

I think that I started preparing in high school. For instance, there were several tutoring opportunities that I had where I would tutor some of the other homeschool kids in chemistry or math, and that was my first exposure to teaching. That really is actually more similar to a graduate teaching relationship than is a classroom, but it was preparatory to what I'm doing now. In terms of the actual engineering side of things, I've always optimized stuff, always calculated things and analyzed things. That was part of my curriculum explicitly, as well. Those are all included under "career preparation."

Each participant was able to share an experience that directly or indirectly connected to a future vocational choice (as illustrated in Table 3). After exploring this topic with each participant, the final theme emerged and the answer to SQ4 was revealed, "Vocational Choice": There was a direct or indirect connection between homeschooling experiences and vocational choice.

Summary

Chapter Four presented the findings of this phenomenological study which explored the influence of a K–12 home education on the adult lives of college graduates. Fourteen participants were chosen via a purposeful, snowball sampling and were described in this chapter. Data collection was triangulated via interviews, focus groups, and document analysis. Data were analyzed utilizing Moustakas’s modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. Codes, subcategories of codes, and categories of codes were shared (Table 2), which were precursors to the five emergent themes.

1. College preparation: Participants felt prepared for college because they were independent thinkers/learners, and most participants credited dual enrollment, co-ops, and outside classes as being most helpful for college preparation.
2. Challenges in college: The greatest challenges in college were balancing a heavy course load and navigating new social dynamics/venues.
3. Close to parents: Most participants described close or very close relationships with their parents.
4. Faith foundation: Homeschooling helped lay a strong faith foundation, and participants’ faith was similar to their parents.
5. Vocational choice: There was a direct or indirect connection between homeschooling experiences and vocational choice.

Findings will be discussed in the next chapter.

CHAPTER FIVE: CONCLUSION

Overview

There are approximately 2.3 million homeschooled children today, a number that is growing at a rate of 2%–8 % per year. Despite being the fastest growing form of education in the United States, little is known about the influence of a K–12 education on the adult lives of college graduates, which is understandable given that homeschooling has been legal in all 50 states for less than 30 years (Bhatt, 2014). The purpose of this study was to add to the body of literature on this topic and to describe the influence of a K–12 home education on the academic, familial, spiritual, and vocational aspects of the adult lives of select four-year college graduates. Chapter Five concludes this transcendental phenomenological study with a brief summary of the results and a discussion of the findings, followed by implications in light of the theoretical framework of the study as well as the relevant empirical literature. The study’s delimitations and limitations are discussed, recommendations for future research are outlined, and finally, the chapter closes with a short summary.

Summary of Findings

One central research question and four sub-questions guided this study. Fourteen participants were selected via purposive, snowball sampling, and data collection was triangulated via interviews, focus groups, and a written letter. The central research question asked, “How do select four-year college graduates who were homeschooled throughout K–12 describe the influence of a home education on their adult lives?” The answer to the central research question is that participants felt well-prepared for college, in large part because homeschooling created independent thinking skills and because of the dual enrollment/co-op/outside classes that they experienced as part of their home education. Participants described their greatest challenges in

college as learning to balance a heavy course load and learning to navigate new social dynamics/venues. Participants further described the impact of a home education as having created a close relationship with their parents and of sharing a similar faith with them, because homeschooling helped create a strong faith foundation. Finally, participants described a clear connection between specific homeschool experiences and their vocational choice.

Research sub-question 2 asked, “How do participants describe the impact of homeschooling on their relationships with parents?” The answer to SQ2 is that most participants had close relationships with their parents. Of the two participants who did not experience this, it was found that they perceived having experienced an authoritarian form of parenting (Baumrind, 1991); most of the other participants experienced an authoritative form of parenting (Baumrind, 1991).

Research sub-question 3 asked, “How do participants describe the impact of homeschooling on their spiritual journey from childhood until now?” This study revealed that homeschooling helped lay a strong faith foundation, and that most participants’ faith was similar to their parents’.

The final research sub-question (SQ4) asked, “How do participants describe the impact of homeschooling on their vocational choice?” Participants in this study described experiences which had a direct or indirect connection to their vocational choice, as illustrated in Table 3.

Discussion

This section will discuss the findings in light of the relevant literature which was synthesized in Chapter Two. The findings will first be discussed in relationship to the theory that framed this study, Vygotsky’s (1978) sociocultural theory of learning. Following this, the

findings will be discussed in light of the empirical literature pertaining to the influence of a K–12 home education on the adult lives of college graduates.

Theoretical

Vygotsky's sociocultural theory of learning describes the symbiotic relationship between learner and environment. Because homeschooling was not common at constructivism's inception, there was no application to the homeschool. However, this study suggests that constructivism may have application in the homeschool. Vygotsky's (1978) theory contends that children construct knowledge by interacting with their environments; learners are active participants instead of passive receptors. One of the most common reasons for homeschooling is the ability to individualize the learning environment and curriculum for each child (Ray, 2016). Three of the main tenets of constructivism which allow this customization of learning in the homeschool are Vygotsky's Zone of Proximal Development (ZPD), the More Knowledgeable Other (MKO), and the concept of scaffolding (Vygotsky, 1978).

Vygotsky defined the ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86), and theorized that the best learning occurred "in advance of development" (p. 89). Thomas and Pattison (2013) described the ZPD as "the intellectual space around an individual's knowledge to provide a zone of possibility for potential learning" (p. 145). Home educators work closely with their students, intricately involved in the learning process, aware of their children's abilities, skill-level, and their readiness to comprehend a concept. Because of the tutorial dynamic that is inherent in homeschooling, home educators are

able to target the child's ZPD and teach at a level that is "too hard for students to do on their own, but simple enough for them to do with assistance" (Wass & Golding, 2014, p. 671).

The More Knowledgeable Other refers to the one who has a higher level of understanding or an increased ability level compared to the child (McLeod, 2014); in home education, the MKO is the parent or the one to whom the parent delegates. The work of three separate researchers supports the importance of the MKO role in targeting the ZPD: The research of Blonsky (1925), Burt (1930), and Terman (1916) revealed that when classroom instruction targeted the average student, a low IQ was raised; an average IQ was maintained; and a high IQ was lowered. In a homeschool environment, educators are able to avoid teaching below the child's level of potential development because there are no other students in the classroom to accommodate. Home education allows the MKO to target "the intellectual space around an individual's knowledge to provide a zone of possibility or potential learning" (Thomas & Pattison, 2013, p. 145). Vygotsky's (1978) concept of scaffolding can be seen as homeschooling parents provide the assistance, facilitation, or help that the student needs in order to assimilate new concepts. These are the major tenets of constructivism and were demonstrated in the experiences shared by this study's participants.

The application of this theory was evident in the lives of each participant. Participants described experiences when parents acted as MKOs, planning lessons that targeted their ZPD and providing the assistance needed for the student to construct and assimilate new knowledge. For example, when Abigail's piano teacher suggested that she begin teaching others, Abigail's parents encouraged her to open a music studio as part of her high school education, a business that grew to include ~50 students. Because they customized Abigail's learning environment to fit her needs, Abigail developed business skills, math skills, music skills, and teaching skills that

helped prepare her for her vocation. Abigail's parents recognized that she was capable of starting this business with their coaching; it was within the realm of her ZPD. As Abigail became more proficient in her skills and knowledge, they gradually removed the scaffolding and she became fully responsible for her own business. Similarly, Kara's mother observed her love for orphans and her readiness to develop work skills outside of the home, and she encouraged Kara to volunteer at a Catholic Charities children's home during her senior year of high school; this experience made up the bulk of her senior year curriculum and led to Kara's pursuing a bachelor's degree in psychology and choosing a career as a behavioral health specialist. These scenarios illustrate application of the sociocultural theory within homeschooling.

George is another example of constructivism as applied to homeschooling. George had worked all summer at a camp and on the way home with his family, stopped to visit a family friend. George shared:

We sat down and talked about how they refitted their house to return some of the wasted energy through fans, and stuff like that. We talked about the physics behind it; we talked about the math and the science and the concepts. Afterward, my mom said to me, "Man, you really understand what he's talking about."

George's mother noticed his interest and aptitude displayed during the discussion and soon ordered an advanced physics curriculum to use for George's final elective in high school. George's mother understood that the concepts in an advanced physics program fell within George's ZPD, and the curriculum would become a tool that would serve as an MKO. She built scaffolding around his strengths and interests by providing the assistance he needed to complete the course, and five years later he earned a bachelor's degree in physics and is now a doctoral candidate in an optical science and engineering program. Home educators have the opportunity

to target their children's ZPD, to either act as an MKO or delegate to another. Within the home, parent-educators are able to customize the learning environment in order to facilitate optimum cognitive development. Findings from this study seem to extend the application of constructivism to the homeschool.

Empirical Literature

Findings in this study support earlier research pertaining to the academic preparedness of homeschoolers, structured vs. unstructured approaches to homeschooling, and homeschoolers as adults.

Academic preparedness for college. The experiences described by participants in this study corroborate previous quantitative and qualitative studies conducted on academic preparedness for college. Findings of this study indicate that all participants felt prepared for college. Two participants were not fully prepared for math, but felt confident in every other subject. Although some researchers have challenged the academic achievements of homeschoolers (Kunzman & Gaither, 2013; Lubienski et al., 2013; Martin-Chang & Levesque, 2017; Murphy, 2014; Snyder, 2017), the findings of this study found otherwise. Therefore, these findings corroborate conclusions reached by researchers who found that homeschooled students were adequately prepared for college and were commensurate with traditionally educated students in performance (Cogan, 2010; Drenovsky & Cohen, 2012; Murphy, 2014; Payton & Scott, 2013; Ray, 2016; Snyder, 2013; Yu et al., 2016).

Structured vs. unstructured homeschools. Existent literature delineates two philosophical approaches to home education, and Van Galen (1988, 1991) coined the terms *ideologues* and *pedagogues* to describe them. Ideologues create more structured learning environments that usually include curriculum, and pedagogues create a more unstructured

environment that usually excludes formal curriculum (Hanna, 2012; Kunzman & Gaither, 2013; Martin-Chang et al., 2011). Martin-Chang et al. (2011) found that children educated in structured homeschools scored significantly higher than public schooled students on standardized tests. Their study illuminated the importance of the homeschool environment: structured homeschool environments resulted in higher academic achievement than did unstructured homeschool environments. These researchers stressed the need for more empirical studies on homeschooling, and Snyder (2013) suggested further study on homeschool pedagogy as well. The findings of this study concurred with existent literature: 13 out of the 14 participants whose academic achievements include earning a bachelor's degree from an accredited four-year college were educated in a structured homeschool. Only one participant was unschooled throughout the majority of his education. Table 5 illustrates the philosophical approach to structure and the method of homeschool instruction (as described in Chapter Two) that each participant experienced.

Table 5

Approach and Method of Homeschool Instruction

Participant	Approach	Method of Instruction
Abigail	Ideologue	eclectic/traditional
Belle	Ideologue	eclectic/traditional
Charles	Ideologue	eclectic/unit studies/traditional
Deborah	Ideologue	Charlotte Mason/classical
Elizabeth	Ideologue	eclectic/traditional
Fiona	Ideologue	modified classical
George	Ideologue	unit studies (K–8), classical (9–12)
Hope	Ideologue	eclectic
Isabelle	Ideologue	eclectic
Julia	Ideologue	Charlotte Mason
Kara	Ideologue	traditional (elem.), modified classical (high school)
Levi	Pedagogue	unschool supplemented independent study (LIFEPACS)
Mary	Ideologue	eclectic/unit studies
Naomi	Pedagogue (K–6) Ideologue (7–12)	unschool eclectic/classical co-op

This study corroborates the findings of those researchers who found that academically successful homeschoolers experienced structured homeschooling.

Homeschoolers as adults. There is a disparity in the sparse existent literature on homeschoolers as adults. Ray (2004) conducted a large survey of 7,300 18–24-year-old homeschool graduates and found that 75% had taken college courses and were unhindered in

finding employment, 71% participated in service activities, 88% belonged to an organization, and only 4.2% thought that government and politics were too complicated to comprehend, and so 76% had voted within the previous five years. Finally, Ray discovered that 59% of participants were very happy with life and were happy that they had been homeschooled. Clearly, Ray's study cast a positive light on homeschooling. However, two research groups challenged Ray's findings: Cardus (Pennings & Wiens, 2011), a Canadian research and educational institution, and the Homeschool Alumni Reaching Out (HARO) challenged Ray's findings and cast a dim light on home education.

The NRHE (McCracken, n.d.) summarized the Cardus report by stating that “the study indicates fairly negative outcomes for religious homeschoolers in the United States . . . religious homeschool graduates were less likely than public school graduates to obtain quality higher education” (para. 18). It was the hope of this researcher to add to the body of literature on homeschooled graduates as adults, and while the previous studies were not replicated, the results of this phenomenology favor Ray's findings over those of Cardus or HARO. The results of qualitative research are not meant to be generalized (Creswell, 2013); however, findings of this study align with Ray's (2004) research, which speak of homeschoolers transitioning well to college, finding employment, and being happy that they were homeschooled. This study found that most of its participants were prepared for college because they were independent thinkers/learners, were close to their parents, shared the faith they were taught as children, and found a connection between homeschool experiences and chosen vocation.

Ray's (2018) research found that one of the most common reasons for homeschooling is to “enhance family relationships between children and parents among siblings” (p. 2). Findings of this study corroborate this, and most of the participants described close relationships with their

parents. Of the two who do not, it was found that they perceived having experienced an authoritative style of parenting. Research supports the negative impact that this style of parenting causes (Afsheen Amir, 2017; Ang & Goh, 2006; Baumrind, 1991; Darling, 1999). However, the majority of participants described having a close or very close relationship with their parents, which supports Ray's (2018) findings. This research also found that those who described a close relationship also described having experienced an authoritative style of parenting (Baumrind, 1991; Darling, 1999).

Moore and Moore (1981) maintained that homeschooling transferred conservative Christian values to the next generation. One of the chief reasons parents homeschool is to transmit treasured morals and values to their children (Jamaludin et al., 2015). This study found a successful transmission of faith through homeschooling. Results showed homeschooling helped lay a strong faith foundation, and that participants' faith was similar to their parents.

Finally, this research hoped to explore the influence of homeschooling on career choice. An earlier study (Parker, 2012) found that role models influenced career choice, and this research corroborated these findings. There was a connection between homeschool experiences and vocational choice, as illustrated in Table 3. Parents recognized interest and aptitude and provided opportunities and experiences that led to a career choice.

Implications

This transcendental phenomenological study exploring the influence of a K–12 home education on the adult lives of college graduates holds theoretical, empirical, and practical import for stakeholders, including current and future homeschool parents and students, homeschool associations, college and career counseling centers, and advocates of school choice.

Theoretical

Three of the major tenets in Vygotsky's sociocultural theory can be seen in home education: the Zone of Proximal Development (ZPD), the More Knowledgeable Other (MKO), and the concept of scaffolding. Home educators serve as the MKO, planning lessons and experiences to help their students reach their potential development. This is especially meaningful in light of researchers Terman (1916) in the United States, Burt (1930) in England, and Blonsky (1925) in Russia who conducted independent studies that support the importance of the MKO role. These researchers each found that when instruction targets the average ability-level in a classroom, children who come to school with a low IQ tend to raise it; children who come to school with an average IQ maintain it; and children who come to school with a high IQ tend to lower it. The optimum time to teach concepts is when it falls within the child's ZPD (Vygotsky, 2011). In home education, parents tailor instruction to meet each child's ZPD, assisting each child to reach potential developmental stage. Constructivism has been illustrated in the classroom, but findings of this study imply that constructivism aligns with home education as well.

Empirical

For parents wondering if homeschooling is a viable educational option to successfully equip their children for college, participants in this study corroborated research findings that homeschoolers were prepared for college (Bolle-Brummond & Wessel, 2012; Hoelzle, 2013; Kranzow, 2013; Payton & Scott, 2013; Snyder, 2017). Participants in this study attributed their feelings of readiness to having become independent learners/thinkers, which corroborates research conducted by Shields (2015). Furthermore, this research also corroborates Ray's (2016) findings that parents homeschool in large part to transfer their own morals and values to their

children; most participants in this study hold the same or similar foundational faith as their parents'. For homeschool associations, co-op leaders, and dual enrollment administrators, an implication of this study is that these outside classes, especially during high school, contribute to college preparation. Participants in this study credit their experience in these classes as instrumental in helping them succeed in college. Involvement in these classes boosted feelings of college-readiness for this study's participants.

Practical

The findings of this study hold several practical implications for the parent-teacher. First, homeschooling is a viable option to successfully prepare students for college. All participants in this study graduated college or graduate school with bachelor's, master's, and/or Ph.D. degrees. As a group, they attributed their success in college to having become independent thinkers/learners through homeschooling and to their experiences in dual enrollment, co-op, or other outside classes. For parents, this implies the need to look for resources to teach those more-challenging high school-level classes. Many colleges and universities offer dual enrollment programs to high school juniors and/or seniors; homeschoolers who take these classes are introduced to the structure and academic level of college classes, which the participants in this study found very helpful. Additionally, a one-semester college course not only gives the student a semester's worth of college credit, but it also gives the students a year's worth of high school credit. Dual enrollment classes are an efficient use of the student's time, and students who utilize this option graduate high school having already earned college credits.

Furthermore, a practical implication pertaining to academics is to employ an ideological approach to homeschooling. Thirteen of the 14 participants who now hold bachelor's, master's, and/or doctoral degrees described having experienced a structured approach to homeschooling;

this supports the findings of Martin-Chang et al. (2011). This structured approach to home education needs to be balanced with another practical implication for parents, which is to look for resources to nurture their children's interests because in this study, there was a connection between homeschool experiences and choice of vocation (Table 3). For Charles, it was tutoring in math and chemistry that led to a career in academia; for Elizabeth, it was teaching calculus to homeschoolers that led to becoming a college math instructor; for Hope, it was caring for animals (even administering medication) that led to a career in nursing; for Kara, it was volunteering in a children's home that led to a career serving troubled youth. An example of balancing the nurturing of interests with structure was seen in the experiences of George: he described a family trip when his mother recognized his great interest in the concepts of physics. Soon thereafter, she ordered an advanced physics curriculum for him to use for his final high school elective. George's mother nurtured his interest within the structure of their homeschool environment. Homeschooling parents: Observe your children, notice their strengths and interests, and look for opportunities to nurture them.

For parents, another practical implication of this study pertains to the transference of faith and values to the next generation. As participants of this study shared, it was more than the teaching of theology or doctrine: it was their example that impacted their children the most, the daily Christian disciplines in action, the way Christians "handled the hard stuff" of life. Knowing this, parents should pay as much attention to their own example as they do to the intentional spiritual training they give. Deborah advised, "Require of your children what you require of yourself. Model a good attitude about what you don't want to do and help your children do the same with any schoolwork that they would rather avoid." Parents may also want to heed the caution that, homeschooling aside, their style of parenting may impact their future

relationship with their child. The two participants who do not enjoy a close relationship with one or both parents reported an authoritarian style of parenting (unresponsive, strict rules, high expectations, expecting blind obedience); however, most of the participants reported an authoritative style of parenting (warm and responsive, clear rules, high expectations, supportive).

Delimitations and Limitations

The delimitations of this study pertain to its methodology and participants. I chose a phenomenology because a review of the literature revealed that the voice of the college graduate who had been homeschooled throughout K–12 was not heard pertaining to how a K–12 home education influenced adult life in the areas of higher academia, relationship with parents, faith journey, and vocational choice (Bolle-Brummond & Wessel, 2012; Drenovsky & Cohen, 2012; Snyder, 2013). A phenomenology attempted to fill that gap, because in a phenomenology, the voice of the participant is heard (Creswell, 2013). However, the optimum size of a phenomenological study is only three to 15 (Creswell, 2013; Moustakas, 1994), which delimited this study because of the small size of its sampling. This study was further delimited by the boundaries set for eligibility: participants had to have been homeschooled throughout K–12 in the United States, and had to have graduated from an accredited four-year college. I chose to limit eligibility to a K–12 home education in an effort to add to the credibility of this study, but this prevented others who had been homeschooled for a shorter period of time from participating.

This research was limited by its demographics, which were not representative of the current national homeschool population. Ray (2018) found that national demographics of homeschoolers are changing and now include approximately 30% non-White homeschoolers. This study was limited because it did not reflect current demographics; only two of its 14 participants were non-White, which was only 14%. It was further limited because it relied on the

memories and judgments of its participants. Although data collection was triangulated, recollection of experiences was subjective and so possibly inaccurate. Finally, this research was limited by its use of a human instrument (Lincoln & Guba, 1985) as its researcher, which increased the chance of human error. With my experience in home education, I was mindful of possible bias and attempted to bracket it; however, human instruments are inherently flawed, which contributed to this study's limitations.

Recommendations for Future Research

There are several areas worthy of future research. First, this study could be replicated with a more diverse sampling, drawing from a more diverse demographic set. As the homeschool population increases, it should increase the probability of finding a more diverse sampling among college graduates who were previously homeschooled throughout K–12. Additionally, the purposive, snowball sampling of this study resulted in the recruitment of 11 women and only three men; subsequent studies might include more men. Another delimitation of this study was its use of participants who were homeschooled throughout the entirety of K–12; subsequent research may include those who were homeschooled for a shorter length of time, so that participants are able to compare another method of education with their experiences in the homeschool. There were several times that participants began their responses with, “Well, I don’t have anything to compare with my homeschool experiences, but. . .” Choosing participants who experienced another form of education might provide another perspective. Furthermore, future research might focus on participants with graduate degrees only. Also, future research might include older participants. The only age requirement of this study was that of being an adult 18 or older; as homeschooling ages, it would be interesting to study the impact of a home education as perceived by participants in their 40s or older.

Future research is needed pertaining to the relationship between homeschooling and parenting style. In this study, the two participants who did not have a close relationship with both parents perceived having experienced an authoritarian form of parenting. Future research on this topic might include quantitative inquiry which could include a large sampling, and/or qualitative research, such as a multiple case study or a phenomenology on this topic in order to explore this dynamic at a deeper level. A multiple case study could illustrate the differences between parenting styles as seen in homeschools.

Finally, another topic for future research could be the exploration of which method of instruction and/or curriculum best prepares students for college, even for specific college majors. Review of the literature found that a structured ideologue approach best prepares students for academic success, and this study corroborated those findings. Building on this topic, a researcher might delve into specific styles of homeschooling and/or specific curriculum regarding their impact on college preparation. Quantitative studies could include a more measurable way to assess this topic, perhaps correlating homeschool approaches or curriculum to SAT scores; qualitative studies could explore the relationship between approach/curriculum and academic success at a deeper level through case studies or a phenomenology.

Summary

This transcendental phenomenological study explored the influence of a K–12 home education on the adult lives of college graduates, specifically in the areas of higher education, familial relationships, spiritual journey, and vocational choice. The central research question that guided this study was, “How do select four-year college graduates who were homeschooled throughout K–12 describe the influence of homeschooling on their lives?” Sub-questions included the following: SQ1 – How do participants describe the impact of homeschooling on

their experiences in higher education? SQ2 – How do participants describe the impact of homeschooling on their relationships with their parents? SQ3– How do participants describe the impact of homeschooling on their spiritual journey from childhood until now? SQ4 – How do participants describe the impact of homeschooling on their vocational choice? Fourteen participants were recruited utilizing a purposive, snowball sampling via homeschooling contacts in Maine and online recruitment through Homeschoolers of Maine and various homeschool Facebook groups. Data collection was triangulated via interviews, focus groups, and a letter to new homeschoolers. Data were analyzed utilizing Moustakas’s (1994) modified Stevick–Colaizzi–Keen approach to transcendental phenomenology. Responses to research questions were as follows: (a) Participants felt prepared for college because they were independent thinkers/learners, and most participants credited dual enrollment, co-ops, and outside classes as being the most helpful for college preparation. (b) The greatest challenges in college were balancing a heavy course load and navigating new social dynamics/venues. (c) Most participants had close relationships with their parents. (d) Homeschooling helped lay a strong faith foundation, and participants’ faith was similar to their parents’. (e) There was a connection between homeschooling experiences and vocational choice.

These findings hold theoretical, empirical, and practical implications. For researchers, it corroborates many previous studies on homeschooling. For home educators, it introduces the concept of constructivism (Vygotsky, 1978) in the homeschool, suggesting that parents are the MKOs, and that they should intentionally plan lessons that correspond to their children’s ZPD, providing the scaffolding support necessary for optimum cognitive development. For homeschool associations, co-op leaders, and dual enrollment administrators, it should encourage the value of outside classes, especially during high school. For parents, it should encourage

modeling the faith that they want their children to live. It is my hope that this research will add to the body of literature on this topic, that stakeholders will benefit, and that future homeschoolers will be encouraged by its content.

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APPENDIX A: IRB APPROVAL LETTER**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

July 30, 2018

Jennifer Rose Elliott

IRB Approval 3346.073018: The Influence of Homeschooling on the Lives of College Graduates: A Transcendental Phenomenological Study

Dear Jennifer Rose Elliott,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

6. Collection of data from voice, video, digital, or image recordings made for research purposes.

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. [45 CFR 46.101\(b\)\(2\)](#) and (b)(3). This listing refers only to research that is not exempt.)

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,



G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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APPENDIX B: RECRUITMENT LETTER

Dear Potential Research Participant,

I received your name and email address from a contact who thought that you may want to participate in a research study pertaining to homeschooling. I am a former home educator and Christian school teacher, and a current graduate student in the School of Education at Liberty University. I am conducting research as part of the requirements for the degree Doctor of Education, and I invite you to participate in my study. The working title of my study is “The Influence of Homeschooling on the Lives of College Graduates: A Transcendental Phenomenological Study.” I hope to give a voice to college graduates who were homeschooled K–12, about the influence of homeschooling on their lives.

Participation in this study will be comprised of five steps: (1) provide a parent’s email or address for verification of a K–12 home education, (2) scan and email your college diploma, (3) participate in a 30-minute interview (and then check the transcript for accuracy), (4) participate in a 45–90-minute focus group with three to six other participants face-to-face or via video conference (and then check the transcript for accuracy), and (5) compose a letter to a new home educator. Your participation will be completely anonymous, unless you choose to participate in a focus group, at which time other participants would see you. In my dissertation, all participants will receive pseudonyms and all identifying information will be changed. Additionally, all data that is collected will be maintained in a password-protected laptop and a locked file cabinet.

If you are interested in participating, please complete and return the attached short survey. The survey will determine whether you meet the qualifications for participation in this research. Once you have been selected for participation, I will mail you an Informed Consent form. After you sign and return the Informed Consent, I will schedule your interview.

If you have any questions about this study or your possible participation in it, please do not hesitate to contact me.

Sincerely,

Jennifer R. Elliott
Doctoral Candidate
Liberty University

APPENDIX C: SURVEY

1. Were you homeschooled in the United States?
2. For what grades were you homeschooled?
3. May I contact a parent to confirm your home education?
4. From which college did you receive a four-year degree?
5. Are you willing to scan and email me a copy of your college diploma?
6. As an adult, do you feel that homeschooling significantly influenced your life (pertaining to experiences in higher education, relationship with parents, spiritual journey, and/or vocational choice)?
7. Are you willing to talk openly about your homeschool and homeschooling experiences knowing that all data collected, audio recordings and transcriptions, will be kept in strict confidence?
8. What is your preferred means of contact (phone, email, Facebook Instant Messaging, Facetime, Skype, etc.)?

APPENDIX D: INFORMED CONSENT FORM

Shared Experiences of Homeschoolers Who Earned a College Degree:
A Transcendental Phenomenology
Jennifer R. Elliott
Liberty University
School of Education

You are invited to be in a research study on the influence of homeschooling in the lives of four-year college graduates. You were selected as a possible participant because you were homeschooled in the United States throughout K–12 and graduated from an accredited four-year college. Please read this form and ask any questions you may have before agreeing to be in the study.

Jennifer R. Elliott, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to describe the influence of a home education on the lives of four-year college graduates who were homeschooled throughout K–12.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Share a parent's email or home address so that I may verify a K–12 education.
2. Provide a scanned copy of your college diploma.
3. Participate in a 30–45 minute interview, which will be audio-recorded and transcribed so that you can check for accuracy.
4. Participate in a 45–90 minute focus group which will be audio-recorded and transcribed so that you can check for accuracy.
5. Write a two- page letter to a new home educator, sharing the influence that homeschooling had on your lives pertaining to your experiences in higher education, your spiritual journey, your relationship with your parents, and/or your career choice.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Insights gained from this study will benefit new or struggling home educators by letting them read “the end of the story” while they may still be in the first chapter. This study may also benefit those homeschoolers who are planning a college-prep course of study for their students.

Compensation: Participants will be compensated for participating in this study. At the conclusion of the study, participants will receive \$20 gift cards. If you withdraw from the study, no compensation will be offered.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. In the event that I may publish any of the findings of this study, all identifying information will be removed.

- Pseudonyms will be used and identifying descriptions will be changed.
- Hard copies of data will be kept in a file cabinet to which only I have the key.
- Digital data will be kept in a password-protected laptop to which only I have access.
- All data collected from this study will be stored on a password-protected laptop for three years and then will be destroyed. Hard copies will be kept in a locked filing cabinet for three years and then will be destroyed.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you (apart from focus group data) will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Contacts and Questions: The researcher conducting this study is Jennifer Elliott. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty chair, Dr. Gary Smith, at gsmith61@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

Signature of Participant

Date

Signature of Investigator

Date

APPENDIX E: DEMOGRAPHICS QUESTIONNAIRE

Dear Participant,

Because it is customary to include information about the demographics of research participants, would you please answer the following questions? Please be reminded that all data collected in this study will be kept under lock and key and in a password-protected laptop (and eventually destroyed). Additionally, all names and identifying descriptors will be changed in the dissertation.

1. What is your age? _____
2. Ethnicity? _____
3. Are you married? _____
4. Do you have children (please list ages)? _____
5. Do you plan to homeschool your (current or future) children? _____
6. How many children were in your family of origin? _____
7. Where did you fall in the birth order? _____
8. What was the religious affiliation of your family of origin? _____
9. What is your religious affiliation now? _____
10. What was your family of origin's income bracket (\$0 to \$50,000, \$50,000 to \$100,000, \$100,000 to \$150,000, etc.)? _____
11. Please list your college degree(s): _____
12. Father's education level: _____
13. Father's vocation: _____
14. Mother's education level: _____
15. Mother's vocation: _____

APPENDIX F: INTERVIEW QUESTIONS

1. How was your homeschool environment structured?
2. What curriculums do you remember using?
3. How were your homeschooling days structured?
4. How would you describe your parents' style of homeschooling?
5. How would you describe your parents' style of parenting?
6. How were you prepared for college?
7. How could you have been better prepared for college?
8. Would you please tell me about your experiences in transitioning to college?
9. What were the most challenging aspects of college?
10. If you ever choose to homeschool your own children, how would your homeschool resemble the one you experienced?
11. Would you please describe one of your fondest homeschooling experiences?
12. If you could go back and advise 12-year-old you regarding college preparation, vocation, relationships with parents, and/or faith journey, what would you say?
13. How do you think homeschooling influenced the relationship you have with your parents today?
14. What role do you think that homeschooling played in your faith journey?
15. How similar is your faith now to that of your parents while you were homeschooling?
16. What experiences in your homeschooling contributed to your career choice?
17. How did you prepare for your career?
18. If you had to boil down the influence that homeschooling has had on your life to its very essence, how would you describe it?

APPENDIX G: FOCUS GROUP QUESTIONS

Ice breaker: How important were hands-on experiences in your home education? Please describe a favorite.

1. What experiences in high school had the greatest impact on your success in college (e.g., specific curriculum, dual enrollment, online classes, co-ops, tutors, CLEP/AP classes, apprenticeships, jobs, etc.)?
2. Now that you are established in a career (or from your current vantage point), what homeschool experiences were especially helpful in preparing you for a career? Do you wish anything had been handled differently?
3. How did your parents' style of parenting* affect 1) your satisfaction (or dissatisfaction) with home education, and 2) your relationship with your parents (then and now)?
*styles of parenting: *authoritarian* (unresponsive, strict rules, high expectations, expect blind obedience); *authoritative* (warm and responsive, clear rules, high expectations, supportive); *permissive* (warm and responsive, few or no rules, indulgent, lenient); *neglectful* (cold and unresponsive, no rules, uninvolved, indifferent).
4. What experiences in your home education affected your faith today?

APPENDIX H: SAMPLE TRANSCRIPT OF INTERVIEWS

JRE: What were the most challenging aspects of college?

Mary: Definitely the nursing classes – they were just academically challenging. I remember being in the nursing clinical: I had a big exam coming up, so I got up at the crack of dawn, ate breakfast, and then spent the rest of the day studying until dinner (I skipped lunch), and then after dinner I went right back to studying. I'd say the number of hours I spent looking at my textbooks made college one of the most intense seasons of my life.

JRE: I have another participant who said that she'd stay up until 2:30 and then have to get up at 4:30, but the good thing was that all the other nursing students were doing the same thing. It was just intense.

Mary: There was an incredible camaraderie in this miserable war scene. You really feel like you're in the trenches together. And then you graduate together! And then work was not nearly as bad – it was fun, and much less intense. I felt like when I became a nurse, that school had not prepared me for bedside nursing. But the learning process there wasn't as difficult. I'd say that the most difficult part of college was that incredibly academically intense nursing program.

JRE: If you ever choose to homeschool your own children, how would your homeschool resemble the one you experienced?

Mary: Probably the same as the parenting style I described. I'd want to have an organized and disciplined home. We had a pretty big homeschool community, and the families I knew who did not do well homeschooling had parents who were not organized. I remember my mom saying you had to have two things in order to homeschool: you had to be organized, and you had to get along well.

JRE: Would you please describe one of your fondest homeschooling experiences?

Mary: I would probably point to something outside of the classroom. One of the things I really enjoyed was being able to go outside and down to the pond to catch fish and catch turtles and catch frogs. I think that that's something that homeschooling permits. If you study hard, you can go out and enjoy that type of stuff as a continuation of the educational process. If I homeschool, I'd like to study the Pilgrims and in the springtime, go out and tap a maple tree – that kind of complete involvement in the community and in nature. The opportunities that homeschooling provided outside of the classroom were my fondest memories.

JRE: If you could go back and advise 12-year-old you regarding college preparation, vocation, relationships with parents, and/or faith journey, what would you say?

Mary: I would look back at that season as one where I had really good counsel, and I wouldn't change much of what I did. I studied really hard, had really supportive

relationships with my siblings, had a super strong church community and youth group so friendships and my relationship with the Lord were very very positive. I studied hard and had good things to do outside of school. I remember thinking about what I wanted to do when I grew up. At that point, I really wanted to be a medical missionary. I wondered what I could do to help prepare myself physically, emotionally, mentally, and spiritually. It was probably about a two-minute thought process. I thought that I wanted to help provide medical care but I didn't want to be a doctor because it would take too long. My dad's a doctor, and I saw him have a lot of ministry opportunities through that. When he was deciding what he wanted to do, deciding between seminary and medical school, he heard on the radio that you can pastor your patients but you can't doctor your congregation. Now he's started a church and is co-pastoring with another person. So I found that he had a lot of opportunities to serve our community and I thought that that would be helpful. So in terms of 12-year-old me, I'd say that the only thing that I really lacked was a thick skin. I think it's common for girls to be very sensitive and to want people to like them, but as I became a more experienced nurse and more emotionally mature adult, I realized that not everyone's going to like you, and you can't make everybody like you. I probably would have gotten hold of that earlier; it would have made me less insecure and less sensitive to things that people said or thought.

JRE: And it's probably hard to have a tender heart without a thin skin.

Mary: Right – it's a tough combination. You have to be sensitive and loving, but not take offense easily.

JRE: How do you think homeschooling influenced the relationship you have with your parents today?

Mary: It had a very positive effect. I had a lot more time to develop a relationship with them. I have a one year-old who I stay home with now, she's not in childcare, and I think that the relationship that she has with me is stronger than if she was with someone else in childcare three or four days a week. I have to assume that it would be the same with me if I'd have had different teachers. Teachers really impact children; they'll point to a teacher as the one who gave them a love for math, or gave them a sense of importance in the world. For me, that was my mom and dad. So I'd say that that is the primary effect that it had.

APPENDIX I: SAMPLE TRANSCRIPT OF FOCUS GROUP

Jenni (host): What experiences in high school had the greatest impact on your success in college? For example, maybe it was a specific curriculum that really prepared you well, or dual enrollment classes at a college, online classes, co-ops, tutors, AP classes, apprenticeships, jobs? For what experience could you really say, “Boy, that really helped me succeed in college, or prepared me well”? Charles, do you want to go first?

Charles: Yeah, I'll go first. So, I think there were probably two. I took a number of advanced classes. They weren't all officially AP, but some of them were. That helped me, because it reduced the overall course load in engineering school, which is fairly heavy. It allowed me to have more time to focus on course work. I'd also say tutoring, in that I did a fair amount of tutoring in high school. I believe it was already mentioned that it really does help you to learn something when you teach somebody else, but it was also my principal source of income during undergrad. I tutored a lot in college, but what I had done in high school certainly helped me to get that job in the first semester, right away. It gave me experience.

Naomi: I would say two things, because I don't think one could have happened without the other. Being a part of a co-op: I had shared with Jenni that I had a great home-school experience. It was pretty un-schooling, up until middle school. At that point I asked my mom, “Can I go to high school?” She was like, “Oh, shoot.” So, she put us all into co-op, and it was a great – it had a huge impact on my life – it was a really high quality community and amazing teachers that really did set me up well for understanding, setting me up well to study other requirements I needed. Also, I shared with Jenni that a lot of college, the prep for college, the academic side, ended up being a breeze. It was amazing. It was really, really amazing. I felt really set up well through the resources of my community and their dedication and their sacrifice in my life. That was huge. Then, the other opportunity that really opened up my understanding of my potential, and was really impactful, was TeenPact Leadership School, a program of just really sharing that young people can make a difference, and the things that you can do and be a leader now. I think those two things impacted the success of college for me.

Jenni (host): Belle, did you want to say something earlier?

Belle: Sure. I think the thing that was the most . . . well, the one thing that stands out as the most helpful for college was the fact that I took some weed-out classes as a junior and a senior. I took them at the local university, which was academically pretty good and similar to the place where I did my undergrad. I took a whole year of general chemistry and a whole year of calculus there during high school, and just spent an inordinate amount of time on them.

Jenni (host): Nice. What do you mean by a “weed-out” class?

Belle: The one that people fail or drop or change their major because of, because they're like, “Oh, shoot, this is a bunch of work.” Yeah.

Jenni (host): George, you wanted to add something?

George: Well, I don't think there is anything necessarily specific that would be different from what most people have been mentioning. Especially, additional courses, specific courses. I took an AP Calc class online through Patrick Henry. I think I'd probably point to that one as being really useful. I was introduced to working with other people to solve problems, which really helped going forward.

Belle: George, which AP class did you take?

Jonathan: It was an AP Calculus course. I want to say Rebecca Darby was the instructor.

Belle: Okay, sweet. That's awesome.

Julia: I would say co-ops that we did were probably the biggest thing. I think I told you my dad taught our high school biology class, and it was 10 times harder than my college biology class. So, that set me up for success there. Yeah, I think the Co-ops were the biggest thing that helped me.

Jenni (host): Neat. Mary?

Mary: I would say actually . . . probably the Saxon curriculum. A lot of people did it. It's kind of dry, but it's relatively intense as I got into the higher Math. It really did require that I sit down and focus on it for a long, long time to try and understand the concepts. Nursing was like that. Specifically, anatomy and physiology. There was just a lot of time spent sitting in front of my textbooks, studying anatomy and physiology and trying to understand the way that electrolytes and waste products filter in and out of them, and it was technically complicated. Having done a textbook that was technically complicated, and that I needed to just sit there for a couple of hours and look at it and work on it, kind of gave me the mind-set for how I needed to be able to study for that. I would say that was pretty helpful.

APPENDIX J: SAMPLE ARTIFACTS

Dear New Homeschooling Parent,

As you embark on the journey of home education, it is my hope that my story can provide some encouragement and maybe even some helpful guidance. My brother and I were homeschooled from preschool until my high school graduation. Our parents took our education seriously, and much of home life revolved around it. Although neither of my parents have completed a bachelor's degree, this did not prove to be much of a hurdle for us, as there are numerous curriculum options and other resources which can equip an engaged homeschool parent for the task. While this does not imply that homeschooling is for everyone, success is perhaps more accessible than it seems when first starting out. Our homeschool program, with all the requisite time and effort, brought our family closer together, provided opportunity for serious and meaningful faith interactions, and afforded a dynamic education to my brother and me, well-preparing us for the distinct paths we took after graduation. For my part, I credit the quality of my homeschool education for both personal development and academic success, summarized by a National Merit Scholarship, a B.S. in Mechanical Engineering *summa cum laude*, and a subsequent Ph.D. leading to an academic career of engineering research and teaching.

I don't say these things for recognition, or even primarily to show what a good job my parents did, but to use my life to demonstrate that homeschooling can work. The great body of tradition and expertise held by the educational community is not lost when you choose to educate children at home, even if you haven't been formally trained to teach. Home education provides an opportunity for the entire family to learn not just middle-school science, but the more important skill of how to learn and facilitate learning in general. That's what happened in our house. When grammar and math become vehicles for critical thought, problem solving, and

developing wisdom, education of the whole person emerges. If home life is not excessively chaotic or distracting, then a family may become a great place to practice these things because familial relationship run so deep. In this context, learning subjects is important but takes a back seat to the strengthening and maturing of students as people, which makes them more capable students in higher education and beyond.

Another beneficial aspect of homeschooling is its flexibility. Many opportunities may be available to home educated students which those in more traditional school programs cannot access, due to the necessarily limited time and resources of managing an entire class, to say nothing of the regulations and testing requirements causing further constraint. Homeschooling can allow you to focus on the interests and needs of individual students, giving them valuable experiences like running a business, volunteering with a political campaign, or spending time in international travel. Of course, it's not that these opportunities happen automatically with homeschooling, or that others can't participate, but the nature of home education lends itself to customization and individualization. I encourage you to explore the possibilities, don't be afraid of making mistakes, and always be willing to learn along with your students.

Sincerely,

Charles

APPENDIX K: SAMPLE AUDIT TRAIL

November 9, 2018: One focus group down, one to go. I regret choosing Google Hangouts, but wonder if every video chat option would seem as choppy? Regardless, it feels like I'm interacting too much according to the purpose of a focus group, and should probably step back a bit in the next one. I just love these participants, though! Sure wish it could have taken place around my dining room table – perhaps the interaction would have been more natural, more organic in nature, if it was in person vs. video conferencing – but all in all, it went very well and there was good input from all seven members of the group. It felt a little more structured than I'd hoped, but part of that could have been because there were so many math and science majors – concrete thinkers! – in attendance. I'm curious to see how group dynamics will look in Focus Group 2. Funny how Focus Group 1 was predominately attended by the math and science participants and Focus Group 2 is mostly made up of participants who majored in the arts. I'd hoped to be more intentional about who attended which group, but as it turned out, most participants were limited by their schedules and could only attend one or the other.

November 10, 2018: And just like that, focus groups are over! I felt SO bad that Abigail couldn't connect to the group tonight – I wonder why we could use Google Hangouts for the personal interview, but not for the group? I know that she was very disappointed, too. ☹ Even though I'm happy to be this close to having all data collected, I've got to say that this (data collection) has definitely been the best part of the whole dissertation process. I've loved loved loved getting to know these incredible participants. I'm so thankful for the Epoche portion of data analysis, because it really helped me to bracket my opinions and position myself to hear what they were saying without having to pass through a large filter of my own bias. Even when a couple of participants had some strong criticism for portions of homeschooling, all I wanted to

do was to understand what they really meant without trying to persuade them toward anything and without taking offense.