LIBERTY UNIVERSITY
JOHN W. RAWLINGS SCHOOL OF DIVINITY

A MIXED METHODS STUDY CONCERNING BIBLICAL WORLDVIEW FORMATION IN CHILDREN AND ADOLESCENTS THROUGH INFORMAL LEARNING BY PARENTS AND/OR GUARDIANS

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by

Joan Ellen Appleton

Liberty University, Lynchburg, VA

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ABSTRACT

Children and adolescents need spiritual nurturing and teaching to instill biblical worldview and to make possible the development of lifelong spiritual formation. Informal learning as an educational format is foundational to and provides an avenue by which to impart early biblical worldview formation for children and adolescents. The purpose of this explanatory sequential mixed methods study was to examine and explore the knowledge and behaviors of informal learning of the study participants (parents and/or legal guardians) in five U.S. Southeast states to determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents. The mixed methods approach holds to the philosophical underpinning of pragmatism, allowing for both quantitative (QUAN) and qualitative (QUAL) assumptions. This study entailed gathering the perspectives of parents in five U.S. Southeast states through survey (QUAN) and focus group interview (QUAL) data collection. QUAN analysis of data showed that through informal learning, parents’ spiritually affirming behaviors by interaction with their children endorsed biblical principles at higher and lower composite scores. The recurring trend in the significant Pearson and Spearman correlations showed that there was a positive association between the spiritually affirming behavior and biblical worldview formation. Further, QUAL findings revealed four major themes that emerged from the focus group interview that gave clarity and meaning to the parent responses on the survey and the resultant findings yielded by composite scores and the correlation. This research is significant for adding to the body of literature of informal learning in evangelical Christianity in both leadership and education. Further research then holds potential for development of informal learning theory that can bring about lifelong biblical worldview formation and Christian-life development of present and future generations.
Keywords: informal learning, biblical worldview, parents, children, adolescents, nurture, spiritual formation
Dedication

I dedicate this dissertation to my Lord and Savior, Jesus Christ. He commissioned it, and I am doing as He prayed, “Your kingdom come, your will be done, on earth as it is in heaven” (New International Version, 1973/2011, Matt 6:10). Soli Deo Gloria!
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List of Abbreviations

Generation X (Gen X)

Generation Z (Gen Z)

New Testament (NT)

Old Testament (OT)

Qualitative (QUAL)

Quantitative (QUAN)

Research Question (RQ)

Statistical Package for the Social Sciences (SPSS)
CHAPTER ONE: RESEARCH CONCERN

Introduction

The nurturing and teaching of children and adolescents leading to outcomes of biblical worldview formation merits research for present and future generations. Barna Group and Impact 360 Institute (2018) surveyed adolescents ages 13 to 18 years, 2016–2017, with limited numbers admitting to having a biblical worldview. Instead, the youth reported the following: higher rates of atheism than adults, low interest in church, disillusionment concerning church teachings, instability in moral beliefs, post-Christian thought about religion and absolute truth, negative feelings about social media, and unstable gender and sexuality beliefs. This research study concerning informal learning and biblical worldview formation followed the trajectory of the teen study by Barna Group and Impact 360 Institute. Today’s fast-changing culture is leaving teens confused and disillusioned and apt to leave their faith, as “uncertainty and ambiguity cross paths with the historic Christian faith” (Barna Group & Impact 360 Institute, 2018, p. 59).

As declared by Scripture, it is God’s intention for parents to be the primary caregivers and teachers in the spiritual development of children and youth (Exo 12:24-27; Deut 4:9-10; 6:1-9; Deut 31:12-13; Ps 78:4-8; Prov 22:6). Children do not naturally grow into knowing how to live an upright life, morally and spiritually (Barna, 2003). According to Deuteronomy 6:6-9 and Ephesians 4:11, the family and the church should reach and disciple children and youth (Shields, 2008). Children can learn early in family life, through informal learning, how to begin pursuing a biblical perspective in a pluralistic world, consequently developing a worldview allowing them to see, understand, and interpret the world through biblical truth (Anderson et al., 2017). Sire (2009) confirmed, “A worldview involves the mind, but it is first of all a commitment, a matter of the soul” (p. 328). Early in life, parents can empower children to start realizing through God’s
Word the transformation that can take place by the renewing of the mind (Rom 12:2). Christian worldview formation takes time; as Barna (2003) contended, spiritual maturity or spiritual development and transformation are intensive and extensive work of the Holy Spirit.

In studying the processes of brain connections, scholars have come to view learning as a discovery, building on ideas and reorganizing concepts (Ward, 1998). Siegel (2012) believed that life’s experiences shape how the mind functions, stating, “Those that occur in the early years mold our synaptic connections and so may set the stage for continued transactions with the world” (p. 111). Dettoni and Wilhoit (1998) addressed a developmental perspective of learning that is important to the concept of informal learning: the contribution of environment to the learning process. The teacher—parents, in this case—and the environment influence learning but do not make an individual learn. The many experiences surrounding learning occur only when individuals engage with the stimuli, making adaptations to already-known experiences. Secure attachments and interpersonal connections begin in the first year of life, continuing to later growth and development in “healthy emotion regulation” (Siegel, 2012, p. 114). With intention, individuals can train their minds. Intentional, formal training of the mind can create relationships leading to well-being in nurturing spiritual development among children and young people. The informal educational format, as in socialization, promotes life-changing possibilities through biblical worldview formation (Anthony, 2008; Knight, 2006).

Informal teaching/learning (hereafter referred to as informal learning) can be defined as learning that is “learner initiated, occurs on as-needed basis, is motivated by intent to develop, involves action and reflection, and does not occur in a formal classroom setting” (Noe et al., 2013, p. 327). Closely related to informal learning is the “spontaneous learning” to which Doornbos et al. referred in their study on the workplace (2008, p. 131). Sevdalis and Skoumios
(2014) adopted a science-oriented perspective, describing informal learning as “the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from both daily experiences and exposure to the environment” (p. 14). Following a scientific orientation, Nicolaides and Marsick (2016) found informal learning occurring “naturally and organically in response to challenges that require adapting knowledge and expertise or acquiring new unanticipated capabilities” (p. 13). Other studies and theory-based articles presented descriptions of informal learning as “lifelong learning; learning from daily life activities; unstructured; mostly unintentional; natural accompaniment to everyday life; self-directed; incidental; tacit learning; any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions; and memory as an encounter with eternal truth and identity” (Brancatelli, 2015, p. 52; Fahlman, 2013, p. 3; Peeters et al., 2014, p. 181; Plavšić & Diković, 2016, p. 73).

The term worldview is at times contentious and ambiguous, with no one definition (Anderson et al., 2017; Hiebert, 2008). Defining worldview can be from a theoretical, anthropological, or a Christian standpoint (Anderson et al., 2017; Bertrand, 2007; Estep et al., 2008; Hiebert, 2008; Porter, 2013; Sire, 2009). From the theoretical, anthropological, and Christian descriptions of worldview emerge indications of an internalized, implicit vision and interrelationship with the world (Hiebert, 2008; Porter, 2013; Sire, 2004). Sire (2004) and Porter (2013) stated that every individual has a worldview. The most important origin of the concept of worldview is found in the Holy Bible in God’s creation. It is possible that the development of a biblical worldview through informal learning can help “convert” the worldview, with biblical “underlying assumptions, categories, and logic” (Hiebert, 2008, p. 267), not just behavior changes in rituals and attitudes.
Theory provides counsel for the practice of human endeavors (Ward, 1998). In this research, theory was the practice of informal learning in the nurturing, mentoring, and teaching of children and adolescents, with a conceptual framework based on biblical principles. Ward (1998) stated, “The Bible is God’s major means of revealing the being and the activities of God as creator, sustainer, and redeemer of the universe; it provides the authoritative means for human beings to know God” (p. 10). The function of a conceptual framework for informal learning in this research applied to the whole person, both physical and spiritual uniqueness (Ward, 1998). Hence, a sound biblical foundation was appropriate for examining informal learning and identifying outcomes of biblical worldview formation.

Chapter 1 provides the background of the research, the problem statement and explanation, and the purpose and research questions. The chapter presents assumptions, or what is believed to be true, of this research concern, followed by delimitations, or the boundaries of the study. Definitions of important terms and concepts related to the research are in the chapter. The researcher discusses the significance of the study and contribution to the discipline of Christian leadership and education, both theoretically and practically. Finally, this chapter presents a summary of the design used to answer the study’s research questions.

**Background to the Problem**

**Introduction**

On a brief personal note, this researcher’s passion for a study on the topic of informal learning and biblical worldview formation in children and adolescents emerged from a spiritual burden. The term *burden* in this context refers to two separate definitions—that is, “something that is carried” and “something that weighs down, oppresses, or causes worry” (Merriam-Webster, 2020a). This researcher sensed a lack of spiritual vitality in children and adolescents
over years of serving as a Sunday school teacher to elementary-grade children and spending time with youth, raising a child through the teenage years. Barna Group supported this lack of spiritual vitality in studies from 2001 to 2005 on families, teens, and children’s Christianity issues, as discussed in Chapter 2. Among their findings, Barna Group (2003) stated, “If people do not embrace Jesus Christ as their Savior before they reach their teenage years, the chance of their doing so at all is slim” (p. 35).

Despite realizing parents and family life are the key to strong spiritual foundations for children and adolescents, the researcher found no intervention by which to create a pathway until discovering the concept of informal learning. Experiencing parenthood for the first time showed the crucial need for the family environment to reflect the attributes that bring about children and young people who would “grow in the grace and knowledge of our Lord and Savior Jesus Christ.” (New International Version, 1973/2011, 2 Pet 3:18). Henceforth, every aspect of the child’s and youth’s life will “not conform to the pattern of this world, but be transformed by the renewing of [their] mind. Then [they] will be able to test and approve what God’s will is—his good, pleasing, and perfect will” (Rom 12:2).

A gap in the literature on informal learning in evangelical Christianity creates a fracture in the knowledge of informal learning for spiritually nurturing children and adolescents. The seminal works of Dewey in 1938, Knowles in 1950, and Lewin in 1951 providing the historical basis for informal learning are nonfaith-based from the studies of logic and theory, education and culture, and field theory in social science, respectively (Boydston, 2008a, 2008b; Knowles, 1950; Lewin, 1951). The informal learning theory, which was the basis for further research in seminal works by Marsick and colleagues in the 1990s, is human resource-related (Marsick & Volpe, 1999). Among the Christian scholarly works that relate closely to the seminal works and job-
related concepts of informal learning are the following: (a) Anthony and Benson’s (2003) exploration of the biblical source of informal learning with the ancient Hebrew peoples; (b) Knight’s (2006) work in philosophy and education, acknowledging the nature of informal learning; (c) Estep (2008b) acknowledging that informal learning is presented in Scripture; (d) Pazmiño (2008), who explored foundational issues of Christian education, with education in relation to life occurring “through shared identity and experience” (pp. 87-88), distinct, however, to only activities of life; (e) an investigation by Nash (2009) concerning informal learning and spirituality in youth education; and (f) English’s (2000) research on spirituality in informal learning for adult education.

Other social science works related to informal learning appear in scholarly journals, with various articles and studies of informal learning in the workplace. Some of the nonfaith-based content important to theory development on informal learning Tett and Burnett’s (2003) trait activation theory for informal learning; “a model of spontaneous and deliberate types of work-related learning” by Doornbos, Bolhuis, et al. (2004), based on the theoretical foundation of informal learning authors Marsick and colleagues; and Harris’s (2009) group socialization theory and Moloney’s (2016) social transformation.

There was a gap in the literature specific to the absence or lack of informal learning in evangelical Christianity scholarly works. However, through stated “practical implications for Christian educators” (parents, in this context), Estep (2008a) indirectly addressed the lack of study in informal learning for evangelical Christianity (p. 69). The researcher asserted, “Christian educators should endeavor to build a biblical rationale for education in the church based on the educational principles reflected in the biblical narrative” (p. 69). God established the tradition of passing down from generation to generation His mighty acts (Ross, 1985). There
were no other means except this teaching from parents to children by which people would know to keep the Law and trust in Him. Hebrew children learned through observation and experience by watching parents and others in the community (Anthony & Benson, 2003). The teaching and learning concept of the ancient Hebrew people was the beginning of what is today called informal learning.

Specific to the chasm of informal learning in evangelical Christianity, there is a paucity of literature connecting informal learning as an avenue of Christian-life development. In today’s post-Christian (postmodern) culture, informal learning having its origins in the ancient Hebrew culture has the potential for learning theory toward Christian-life development. This researcher sought to obtain insight, wisdom, and further scholarship on informal learning behaviors in parents, establishing a basis for learning theory in Christian leadership and education that provides knowledge and direction in Christian-life development. This research study was an exploration of the relationship between the informal learning of parents and the responses of youth using data from the 2016–2017 Barna Group/ Impact 360 Institute (2018) surveys.

**A Brief Introduction to Theological, Historical and Sociological, and Theoretical Perspectives**

Pazmiño (2008) addressed the profundity of the family as a place of Christian learning. The author proposed an interactive Christian model to explain how personal experiences in one’s environment is the totality of human development holistically. The in-depth study of education and theory began with foundations in Deuteronomy, with Pazmiño asserting, “Despite the multiplicity of educational influences today, parents are still the primary educators who actively or passively determine what influences their children” (p. 23). The Hebrews, God’s chosen
people, were intentional in their efforts to nurture and educate their loved ones, as established by Yahweh (Anthony & Benson, 2003; Psalm 78:5-7).

The most significant origin of the concept of worldview is found in the Holy Bible. God’s Word acknowledges that every individual has a worldview through God’s creation of man and woman (Gen 1:26a; 2:22a; Porter, 2013; Sire, 2004). Parents can empower children early in life to realize through God’s Word the transformation that can take place by the “renewing of the mind” (Rom 12:2). Through informal learning, children can pursue a biblical perspective in a pluralistic world (Anderson et al., 2017). The concepts of mindset and worldview are related as described and depicted by Dweck (2010), Hiebert (2008), Pazmiño (2008), and Story et al. (2014). Mindset in relation to worldview receives further discussion in Chapter 2.

Servant leadership can be reflected in the informal learning behaviors of parents. Servant leadership in the context of this study came from a faith-based standpoint, as presented by Barker et al. (2011), Howell (2003), Ledbetter et al. (2016), Sanders (2007), and Tidball (2012). Especially meaningful to this study pertaining to servant leadership was the seminal work of Greenleaf (1977). Greenleaf’s concepts of the servant leader were relevant to parents’ perceptions of informal learning behaviors, as shown by the subvariables of accountability, discipline consistency, tone of voice, one-on-one presence, and patience.

Bandura (1986) asserted that the majority of informal learning behaviors is tacit, receives little attention, and occurs through social modeling. Marsick and Volpe (1999) acknowledged that to maximize informal learning’s effectiveness, one must accept learning as an often unconscious process. Doyle (2005) found learning best described as a way of being than having meaning: not just having knowledge but being in a relationship with the one from whom the learning derives. Learning in the informal educational setting, intentional or unintentional, seems
to occur naturally, incidentally or unintentionally, through socialization (Anthony, 2008; Cross, 2007; Doyle, 2005).

The function of a conceptual framework for informal learning applies to the whole person, physical and spiritual uniqueness (Ward, 1998). Developmentalism through the field of social science fits well into the framework of informal learning in helping to reveal moral and spiritual development (Boydston, 2008b; Wilhoit, 1991). Harris (2009) presented “group socialization theory,” described as “how children become socialized and how personality gets modified during development” (p. 158). Moloney (2016) discussed the concept of social transformation through biblical reference to the Hebrew Bible (i.e., the Law, prophets, and wisdom texts), asserting the Hebrew Bible teaches how to learn. Tett and Burnett (2003) and Noe et al. (2016) presented the trait activation theory that relates to informal learning in its concept of influencing behavior in the informal learning environment. Another social science theory relevant to this study, the four fundamentals of the Yes Brain model by Siegel and Bryson (2018), provided the principles and strategies of balance, resilience, insight, and empathy and related to informal learning, with these principles and strategies crucial to spiritual nurturing.

Dettoni and Wilhoit (1998) offered the perspectives and basic elements of developmentalism as a way to impart a biblical worldview via informal learning. From a theoretical viewpoint and important to Christian leadership and education are definitions of worldview provided by Estep et al. (2008), Anderson et al. (2017), Hiebert (2008), and Sire (2009). Within these definitions of worldview, one can realize the critical need for understanding and carrying out the principles of informal learning by parents to a young generation. These definitions include the concepts of worldview as “a philosophical or theological system” (Estep et al., 2008, p. 266); “the conceptual lens” in interpreting the world (Anderson et al., 2017, p.
a “fundamental orientation of the heart” (Sire, 2009, p. 20); and “foundational cognitive, affective, and evaluative assumptions and frameworks” utilized to order life (Hiebert, 2008, p. 25-26).

**Why Informal Learning Research?**

In the post-Christian culture, the world seems to be in constant turmoil concerning the decline of biblical principles, Christian living, and biblical training of the young generations. This decline was evident to Barna Group (2017) regarding “the truth about a post-truth society” (p. 116). Barna Group asserted,

> If there are no facts that everyone accepts as fact, is it possible to change anyone’s mind—including our own? What does it look like to raise godly children in a culture where moral and ethical standards are based on what is fair to the exclusion of other considerations—such as what is true? (p. 7)

In *The Advancement: Keeping the Faith in an Evolutionary Age*, Bush (2003) stated, “We Christians living through the era of the Advancement no longer have the luxury of a majority consensus in Western society” (p. 5). Bush also asserts that the destiny of Christians as the body of Christ rests on God alone (Job 8). Through God’s promise in His Word and returning to an intentional theory of informal learning for Christian-life development, there is hope for future generations. Through personal prayer and the leading of the Holy Spirit, and through personal Christian ministry, this researcher believes it is of utmost priority to do all possible for bringing back Godly principles to our present time. Having confidence and trust in God’s Word shows that informal learning taken back to the principles of education through God’s chosen people could infuse biblical values in the lives of present and future generations, shifting the United States from a post-Christian plight to a nation that honors God as Creator of all.
The significant concern of this study was children and adolescents. Youth ages 2 to 18 years can shape society and the foundations of spirituality for Christian values, beliefs, and behaviors. First, though, parents must realize that “interpersonal relationships matter” (Kinnaman, 2011, p. 13), and informal learning is a key concept in leadership and education (Anthony, 2008; Evans, 2014). Despite the advances of science in medicine and psychiatry, there is evidence that the role of “social experience, in shaping the mind” (Siegel, 2012, p. xv), where informal learning is involved promotes emotional well-being. Kinnaman and Lyons (2016) stated, “All of us together as Christ-followers have an amazing opportunity to shape the next decade of Christian witness in the world” (p. 22). Recent research and statistics on Generation Z (Gen Z) by Barna Group and Impact 360 Institute (2018) substantiated the need for informal learning to the present and future generations.

This research added to the existing literature on informal learning, filling the gap specific to the area of evangelical Christianity in leadership and education. The findings of this study showed the potential for informal learning theory in Christian leadership and education that will invoke lifelong Christian transformation and facilitate further Christian-life development of children and adolescents.

**Statement of the Problem**

This researcher’s study of theological, theoretical, and related literature regarded Christian leadership and Christian education on the topic of informal learning. This study concerned the nurturing and teaching of children and adolescents toward biblical worldview formation through informal learning by parents in order to instill lifelong spiritual formation for the present generation and extending to future generations. The responses relating to the biblical worldview of teens ages 13 to 18 years, published in a recent study by Barna Group and Impact
360 Institute (2018), indicate a crucial need for informal teaching by parents and/or guardians. The literature review showed a gap in the research regarding informal learning in evangelical Christianity for leadership and education. This gap creates a fracture in the knowledge and practice of informal learning in the family environment in the spiritual nurturing of children and adolescents.

The literature on informal learning showed that the informal learning setting and practices of the ancient Hebrew life in biblical times can bring about transformation and the formation of a biblical worldview for youth ages 2 to 18 years. Christian leadership and education via informal learning, as evidenced by spiritually affirming behaviors, can significantly influence the spiritual transformation and formation of children and adolescents and their biblical worldview formation. For this study, data from recent research on Gen Z (ages 13 to 18 years) served as a basis for the present worldview issues concerning life priorities and perspectives pertaining to faith (Barna Group & Impact 360 Institute, 2018).

**Purpose Statement**

The purpose of this explanatory sequential mixed methods research was to examine and explore the knowledge and behaviors of informal learning by the study participants (parents and/or legal guardians) in five states in the U.S. Southeast and determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents (through and as evidenced by recent Gen Z statistics in 2016–2017), and subsequently, from the dominant QUAN phase, seek clarification and perspectives of QUAN findings in the QUAL phase (as evidenced by semistructured and structured interviews).
Research Questions

The following RQs guided the study and provided the structure for presenting the study results.

RQ1. What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

RQ2. What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

RQ3. How do the observation, semistructured interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

Assumptions and Delimitations

Research Assumptions

The first assumption was that the development and formation of a biblical worldview are crucial. This assumption is based upon the following statements concerning children and youth:

1. A person’s foundational beliefs as to a moral and spiritual mindset are set in place early in the life process, usually by 13 years of age (Barna, 2003; Kinnaman, 2011).

2. “Physicians assert that children begin to absorb values as early as two years of age” (Barna, 2003, p. 109).

3. It is during the crucial 8 years from ages 5 to 12 that ability to shape a life in “his or her moral, spiritual, physical, intellectual, emotional or economic development” is possible toward “lifelong habits, values, beliefs and attitudes” (Barna, 2003, p. 18).
4. Starting a process to develop a child’s or youth’s mindset in moral and spiritual wholeness and healthiness is a spiritual battle not to be delayed in building influence, as delays will result in difficulties to counteract negative influences that have been imprinted into values and attitudes (Barna, 2003).

The philosophical underpinning of constructivism represents the assumption that study participants responded in interviews and written instruments truthfully and unbiased responses. This was a necessary assumption, as the researcher grasped “frames of meaning” (Creswell, 2014, p. 8) from the responses, with this study’s measurement of behaviors and open-ended questions dependent upon the “complexity of views” (Crotty, 1998, p. 56) of study subjects.

A third assumption was that the research environment was a pleasant atmosphere conducive to accurate thought processes and responses. Fourth, the researcher assumed that the research instruments were valid and reliable and that analyses were truthful and correct (Creswell, 2014; Leedy & Ormrod, 2019).

**Delimitations of the Research**

A researcher sets delimitations to denote what the study will include and exclude (Roberts, 2010). Delimitations allow the researcher to narrow the scope of the study (Roberts, 2010). This study was delimited to five U.S. Southeast states considered to be in the “Bible Belt” (World Atlas, 2018). The exclusion of other states did not represent bias toward the Southeastern portion of the United States. The selection of these particular states was because of the researcher’s acquaintances with pastors in these areas.

Further delimitation of the study was the inclusion of parents to the exclusion of other community contacts, for example, school teachers, church leaders, and sports and community activity leaders. Another delimitation was the inclusion of the spiritually affirming behaviors of
parents toward children ages 2 to 12 years. Although the study was specific to children and youth ages 2 to 18 years, the intervention by parents was directed to ages 2 to 12 years. Barna Group and Impact 360 Institute (2018) represented teens, ages 13 to 18 years. A final delimitation was the inclusion criteria of evangelical Christianity and certain evangelical churches instead of other religions and churches.

**Definition of Terms**

The following are definitions of terms based upon the most recent literature as defined for the purposes of this study.

1. *Baby boomers:* Baby boomers are individuals born between 1946 and 1964 (Barna Group & Impact 360 Institute, 2018).

2. *Biblical worldview:* With a biblical and Christian worldview, an individual sees, understands, and interprets the world through biblical truth (Anderson et al., 2017).

   > The eye “[worldview]” is the lamp of the body. If your eyes are healthy, your whole body will be full of light. But if your eyes are unhealthy, your whole body will be full of darkness. If then the light within you is darkness, how great is that darkness! (Matthew 6:22-23)

3. *Children:* In this study, children were in the age range of 2 to 12 years. The definition for this study comes from the literature upon which the study is based, which Eliot (1999) stated as “early life” (p. 290).

4. *Church:* As used in this study, a church is a Christian community of faith. Chester and Timmis (2008) defined church as “a living community where things happen because God is at work” (p. 29).

5. *Engaged Christians:* Engaged Christians are individuals who identify as a Christian and believe in the Bible as inspired by God and containing truth (Barna Group, 2019a). Engaged Christians have a personal relationship with Jesus Christ, have more engagement with the church than merely attending, and believe in the crucifixion and resurrection of Jesus Christ as conquering sin and eternal death (Barna Group & Impact 360 Institute, 2018).

6. *Evangelical Christianity* An evangelical Christian is an individual who has a personal relationship with Jesus Christ, has made a personal commitment to serve Him, strongly holds to a belief system in all biblical truths, commits to being accountable to all biblical truths, and commits to sharing the gospel (Barna Group, 2019a).

8. *Generation Z:* Gen Z comprises teens presently 13 to 18 years who were born between 1999 and 2015 (Barna Group & Impact 360 Institute, 2018).

9. *Holistic development:* Holistic development draws its meaning from a theology of worship whereby a life lived in complete dedication to the Lord and Savior, Jesus Christ, journeys through spiritual formation based upon the whole of biblical principles in body, mind, and soul (spirit) and in a community, all being done “for the glory of God” (1 Cor 10:31b; Averbeck, 2008).

10. *Informal learning:* Learning that is informal results from daily living related to work, family relationships, or leisure activities (Plavšić & Diković, 2016). Informal learning is unstructured and most likely unintentional or by coincidence. Informal learning is an interactive process and occurs through social interaction (Rogoff et al., 2016), publications, or the Internet (Noe, Tews, & Michel, 2016).

11. *Legal guardian:* A legal guardian is a caretaker who is entitled or legally appointed to another person (Merriam-Webster, 2020c). The legal term is guardian ad litem, an individual appointed by court order as a caretaker for a minor, a legally incompetent person, or unborn person (Duchschere et al., 2017).

12. *Mainline churches:* Mainline denominations have descended from the Puritan movement and include American Baptist, Episcopal, Evangelical Lutheran Church of America, United Church of Christ, United Methodist, and Presbyterian Church USA (Barna Group, 2018; Lantzer, 2012).


14. *Nature:* For purposes of this study, nature refers to the family environment, with an emphasis on parental interaction (Eliot, 1999).

15. *Nurture:* In this study, nurture means loving, caring, and guiding children and adolescents (Siegel & Bryson, 2018).

16. *Parents:* As used in this study, parents were a father/mother dyad; a single parent, father or mother; and/or legal guardians.

17. *Post-Christian (postmodern):* Post-Christian or postmodern referred to relativism, the belief of individuals in no absolute truth, and “that religion and morality are relative to the people who embrace them” (Enns, 2014, p. 698).

18. *Spiritually affirming behaviors:* As supported by literature and in relation to this study, spiritually affirming behaviors develop and are passed on to children and youth via informal learning by loving as a fruit of the Spirit and “nurturing the child’s relationship with God” (Barna, 2003, p. 86; Gal 5:22).

20. *Worldview*: A worldview is how one fundamentally perceives life itself and all issues pertaining to it. A worldview is “the conceptual lens through which we see, understand, and interpret the world and our place within it” (Anderson et al., 2017, p. 12).

21. *Youth/adolescent*: For the purpose of this study, adolescents and youth were teenagers between 13 to 18 years old.

**Significance of the Study**

Kinnaman and Lyons (2016) stated, “All of us together as Christ-followers have an amazing opportunity to shape the next decade of Christian witness in the world” (p. 22). This assertion followed research on faith and culture, culminating in two perceptions that describe Christians as irrelevant and extreme (Kinnaman & Lyons, 2016). Informal learning practice by parents can influence the formation of a biblical worldview. Individuals ages 2 to 12 years who formulate a biblical worldview engage in culture as they grow, supporting healthy biblical living in body, mind, and spirit (Barna, 2003; Kinnaman & Lyons, 2016; Siegel & Bryson, 2018). According to Kinnaman (2011), it will take more than Bible reading and taking a child or youth to a local church to pass on and instill Christian faith. Findings from Barna Group and Impact 360 Institute (2018) on Gen Z substantiated the significance of this study and the crucial need for the practice of informal learning to the young generations.

**Statistics on Generation Z**

Barna Group and Impact 360 Institute (2018) discussed generational labels of individuals:

Gen Z are those individuals born from 1999 to 2015. Gen Z is now America’s largest generation at about seventy million. Research reveals that only 4% of Gen Z have a
biblical worldview. This compares with Baby Boomers at 10%, Generation X (Gen X) at 7%, and Millennials at 6%. Gen Z doubles in percentage to that of U.S. adults in identifying as atheist. More than half of the Gen Z population state “not too” (27%) or “not at all” (27%) important as to perception or engagement in church. Thirty-eight percent of church-going teens agree that church is overprotective of teenagers. Twenty-four percent of church-going teens agree the faith and teachings encountered at church are “shallow.” Twenty-one percent of Gen Z described the church through choosing an image of the Bible being taught. As to morality and values, only 34% believe lying is wrong. Twenty-four percent believe “what is morally right and wrong changes over time based on society.” Fifty-eight percent of teens agree “many religions can lead to eternal life” and that “there is no one true religion.” Gen Z state that “how we feel determines what is real.” Fifty-one percent of the teen population agree that the ultimate goal of life is happiness. As to technology and social media, 57% of teens use screen media four times per day. Thirty-nine percent of teens verbalize that viewing other people’s media posts “makes me feel bad about the lack of excitement in my own life.” As to gender and sexuality, 12% describe their own sexuality other than heterosexual. Thirty-three percent state gender is how one feels, not about birth sex. Twenty percent of Gen Z state “homosexual behavior is morally wrong.” This compares with 32% of Gen X and 25% of Millennials. (pp. 10-71, 111-112)

In *Households of Faith*, Barna Group (2019b), in partnership with Lutheran Hour Ministries, revealed findings of “spiritual development in the home” (p. 14). Using a mixed methods research design beginning with interviews of evangelical Christians of various households (e.g., race, nuclear to roommate), Barna Group conducted online surveys of
practicing Christians, defined as individuals who identify as Christians, state that their faith is important, and have attended a church service within the previous month. Out of 2,347 interview participants, 448 were ages 13 to 17. In the survey, participants provided detailed demographic information of generations and distributions of household types, theological beliefs, hospitality, faith formation, activities, atmosphere, the exit of grown-up children, relationships, moms, dads, and parental spiritual leadership. A finding that supported this research study was that practicing Christians who engaged in “spiritual conversations or worship” at home reported typically “loving, safe, peaceful, joyful, [and] nurturing” (Barna Group, 2019b, p. 64), among other appealing characteristics. Barna Group urged the local church to focus on “household ministry, not just family ministry” (p. 23). As a follow-up geared toward the general public, Barna Group and World Vision (2019) held a webcast concerning “what we are learning about resilient discipleship from the connected generation” (p. 1).

**New Theory Development for Informal Learning**

Further research related to the concepts and findings of this study can explain phenomena guiding the development of informal learning theory. Informal learning theory can help focus educational and leadership studies, both faith-based and nonfaith-based, which can influence lifelong Christian transformation and make it possible for further Christian-life development of present and future generations (Leedy & Ormrod, 2019; Ward, 1998). Leedy and Ormrod (2019) found theory-building supported by research findings both documented and reliable “by logically defensible reasoning” (p. 23). From this study’s findings and the conceptual frameworks of social cognitive theory, experiential learning theory, group socialization theory, biblical social transformation, trait activation theory, and a major emphasis on Christian developmentalism, theory in informal learning for Christian-life development can emerge (Bandura, 1986; Dettoni
Summary of the Design

The mixed methods research approach held to the philosophical underpinning of pragmatism (Creswell, 2014). The worldview of the pragmatist for research applies to a mixed methods focus with both QUAN and QUAL assumptions engaged in the study. This researcher drew from both QUAN and QUAL perspectives for a more solid understanding of parents’ informal learning behaviors in relation to the outcomes of biblical worldview formation in youth ages 2 to 18 years.

This explanatory sequential mixed methods study occurred in two phases. The QUAN phase entailed survey administration. A descriptive survey design allows a researcher to “generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population” (Creswell, 2014, p. 157). The sample population of parents extending over the five U.S. states in the Southeast and representing a portion of the Bible Belt completed a specially designed survey instrument called a measurement by scenario scale (Leedy & Ormrod, 2019). Assessing the independent variable of informal learning measured in five spiritually affirming behaviors was by identifying and measuring the matching scenarios on the survey questionnaire. The scenarios also incorporated the dependent subvariables of the categorized responses by teens in the 2016–2017 Barna Group and Impact 360 Institute (2018) study. Using this survey instrument as a questionnaire enabled the collection of demographic information, providing further clarification of informal learning behaviors and subsequent outcomes of biblical worldview formation in youth ages 13 to 18 years (as evidenced by recent Gen Z statistics) and in children ages 2 to 12 years based upon the
principles and theories discussed in Chapter 2. The significant results yielded by the QUAN phase relating to the continuous variables led to the development and refinement of open-ended interview questions to explore the perceptions of participants in the QUAL phase.

This chapter showed the crucial need for informal learning via leadership and education in evangelical Christianity toward Christian-life development in children and adolescents. Further, through the principles and theories presented, this chapter presented the influence of environment and lifelong learning processes of informal learning as essential to biblical worldview formation through biblical truths and the family environment. This study was a means to discover parents’ knowledge and behavior of informal learning and identify the relationship between parents’ behaviors of informal learning and outcomes of biblical worldview formation in children ages 2 to 12 years and youth ages 13 to 18 years.

Chapter 2 includes a review of the literature that indicated the need for this research study. The chapter provides a solid, evidence-based foundation through the theological, theoretical, and related literature sources concerning informal learning and worldview. The review of literature, in conjunction with Chapter 1, support the need for this study.
CHAPTER TWO: LITERATURE REVIEW

Overview

This literature review addresses the relevant sources and principles that gave foundation and direction to this research study. The chapter provides clarity and understanding of the critical need for biblical worldview formation, beginning at a young age. In a 2016–2017 survey, Barna Group and Impact 360 Institute (2018) found low percentages of teenagers having a biblical worldview. Biblical worldview formation begins at a young age where the individual grows holistically and learns the application of Christian principles. Biblical principles instilled early in life make possible biblical worldview formation throughout life in a constantly changing world. The literature presents the essential concepts of parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview and the influence of these concepts on children and adolescents. A gap in the literature on informal learning in evangelical Christianity for leadership and education was the basis of addressing this issue in the home and family environment. Based on this gap, the researcher sought to study the relationship between informal learning behaviors of parents and the formation of a biblical worldview in children and youth ages 2 to 18 years. For clarity, Chapter 2 appears in five major sections: theological framework, theoretical framework, related literature, rationale for the study and gap in the literature, and profile of the current study. A conclusion summarizes the literature and presents a foundation for the research methodology, which follows in Chapter 3.

Theological Framework

Introduction

The Word of God was the ultimate foundation for this research examining and exploring informal learning through spiritually affirming behaviors and the formation of a biblical
worldview in children and adolescents. Through the practice of informal learning, parents can be influential in the formation process of a biblical worldview in children and youth ages 2 to 18 years, enabling young people to make a difference for healthy biblical living in body, mind, and spirit as they engage in culture.

The concepts of parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview formation developed from the Holy Bible (the Old Testament [OT] and the New Testament [NT]; MacArthur & Mayhue, 2017). First, parents, as created in the image of God, are given the spoken Word and ability to “be fruitful and increase in number, fill the earth and subdue it” (Gen 1:26-27, 28a). Second is informal learning, which begins through God’s instruction to the Hebrew people as His chosen nation (Deut 7:6-9; 10:15; 1 Kings 3:8; Isa 41:8; 44:1; 45:4; Amos 3:2; Rom 11:2, 28-29 [God’s chosen people; MacArthur & Mayhue, 2017]; Gen 1:27-28; 18:18-19; Deut 4:9; 6:4-7; Prov 1:8; 6:20; Pss 44:1; 78; Eph 6:4; and 2 Tim 1:5; 3:15 [education through household and family life]).

Third, the concepts of spiritual nurturing and education develop out of God’s Word related to the influence of parents in the formation process of a biblical worldview. Spiritual nurturing of children and adolescents follows from the nurturing found in God’s commandment in Deuteronomy 6, through the Lord’s command to Moses and in Jesus’s teachings in the NT (Matt 28:19-20; Eph 6:4; 2 Tim 1:5; 3:14-15). These verses from Scripture present spiritual nurturing in a developmental sense that includes discipleship (Dettoni & Wilhoit, 1998). Biblically based education should connect God’s Word and life (e.g., Pss 78:1-6; 110:10 [foundation and purpose]; Richards, 1976; Wilhoit, 1991).

Lastly, the progression of critical concepts for this study leads to biblical worldview formation. Worldview originates through God’s creation of man and woman (Wolters, 2005).
Scripture gives meaning to the mind, human intelligence, and human emotions, all related to worldview formation (Gen 1:26a; 2:22a; 41:8; 1 Kings 10:1-2; 2 Kings 24:1; Matt 22). These concepts, together with a theoretical framework and evidence of related material, drove the research methodology toward answering the research questions.

**Parents**

*The Holy Bible and Parents’ Attributes*

The origin of the concept of parents is God’s creation of humankind in His image. Parents received their mandate in Genesis 1:28a. In this study, the concept of parents referred to both biological father and mother and those individuals considered to be legally the guardians of their child or children. Parents, as mandated through God’s Word are teachers/leaders, as well as affirmers, encouragers, guiders, correctors, protectors, informers, structurers, and launchers (Barna, 2003; Ward, 2012). In addition, parents are trustworthy, truthful, and reliable and possess integrity (Gen 27; Num 18:11; Deut 1:31; 6:4-9; 11:18-21; 15:20; 16:11; 1 Sam 1:10-16; 2 Sam 6:20; 12:16; 1 Chron 16:43; Prov 3:11-12; 13:1, 24; 19:18; 23:12-14; 29:15-17, 21; Prov 22:6; Isa 7:15; Lam 2:19; Matt 10:37; 12:48-50; Acts 26:4; Col 3:20; 1 Tim 4:7; 2 Tim 3:15-17).

As mandated by God’s Word, parents direct and are involved in “individual transformation” and “social transformation” (Moloney, 2016, p. 4). According to God’s Word, the parents are committed to bringing about the individual transformation and the social transformation as one educational process (Moloney, 2016; Deut 6:6-9). Parents seek wisdom and discernment and follow the Hebrew educational process as “a holistic, all-of-life approach to education” (Moloney, 2016, p. 3). This unique process brings about individual transformation and social transformation through a wholly relational process as mandated by God, which involves the parent (teacher) and the child (student) (Moloney, 2016; Deut 6:6-9; Prov 2).
Parents will first have the attribute of loving the Lord wholeheartedly and with all their being and life (Deere, 1985; Deut 6:5). The crucial attribute of God’s wisdom, as declared in Proverbs 2, makes it possible to teach as directed by Deuteronomy 6:7-9 and through discipleship, as shown through the teachings of Jesus in the NT Gospels (Moloney, 2016) Jesus spoke directly to the subject of the one who is “trained” and the “teacher” (Luke 6:39-40). The one “who is fully trained will be like their teacher” (Luke 6:40). In other words, the formation of a biblical worldview for children and adolescents for which parents can be the primary influence must begin with the modeling of the parent as leader and teacher and the one who trains and discipless (Luke 6:40).

**Parental Involvement**

Parents are involved in helping their children search for meaning in life’s situations, which many children first do while growing up at home and forming their identity (Blair, 2004; Schinkel et al., 2016). This parental involvement occurs through the educational process of informal learning, as discussed with the concept of spiritual nurturing and education. It is necessary for one to have the “tutelage of an elder in the faith” for learning (Moloney, 2016, p. 3). Parents can be the tutelage role model and provide the means by which youth comprehend and instill informal learning. The biblical education instituted by God to His chosen nation Israel was according to Deuteronomy 6:6-9, with daily family and community life by God’s Word being the topic of conversation naturally, anywhere and anytime (Deere, 1985).

In their studies of parenting, Tripp and Tripp (2008) presented life as a classroom. Their term of “formative instruction” holds the concept of “teaching and learning are in process twenty-four hours a day” (p. 15). Entirely based on biblical principles as to the home
environment, formative instruction through behavior and love relates to the concept of informal learning.

In *The Tech-Wise Family*, Crouch (2017) represented parenting as “character-driven” (p. 63). Parents of youth ages 4 to 17 years discussed with their children the following character-building attributes with the following frequencies: patience (49%), happiness (49%), fairness (43%), being a good friend (40%), forgiveness (40%), work ethic (40%), reliability (38%), conflict resolution (36%), and serving others (27%) (Crouch, 2017, p. 38). Of these same 1,021 parents, 44% strongly and 35% somewhat agreed on experiencing “more complicated parenting” than in their own generation when growing up (Barna Group, 2017, p. 101).

The Tech-Wise study indicates the crucial responsibility of parents to their children in combination with the critical role and stature of parenting. Parents reported experiencing greater difficulties than in past times, including technology/social media (65%), a more dangerous world (52%), “lack of common morality” (40%), financial factors (26%), school bullying (20%), increased academic pressure at the child’s school (16%), parents’ demanding work (15%), “living far away from family” (12%), and “exposure to more cultural and religious diversity” (9%) (Barna Group, 2017, p. 101). Crouch, author of *The Tech-Wise Family*, identified the technology-advanced age, difficulties in parenting, and the lack of parent motivation due to feeling less of an expert as concerns facing children and young people. Crouch said, “This is not just a parenting problem or a family problem; it’s a human problem” (Barna Group, 2017, p. 102). Asked what they would like to see different in the relationship with their parents, children in the 2016 Tech-Wise study answered, “I wish they would get off their screens and talk to me” (Barna Group, 2017, p. 102).
Significant to parental involvement in spiritual nurturing and education via informal learning is the Lifeway Research (2017) study, an online panel survey of young people ages 18 through 22 years on reasons for dropping out of church. The study results pointed to what can be thought of as a connection issue in a church family. The study defined regular attendance as being in church twice a month for 3 months. Regular attendance dropped from 69% at age 17 years to 33% at 22 years, remaining nearly stable at 34% at age 30. The four categories of reasons for dropout were: (a) life changes/situations; (b) church/pastor-related reasons; (c) religious, ethical, or political beliefs; and (d) student/youth ministry reasons. The following results for the top two responses are significant to this study of informal learning by parents:

Category (a) I moved to college and stopped attending church, 34%; my work responsibilities prevented me from attending, 24%; (b) church members seemed judgmental or hypocritical, 32%; I didn’t feel connected to people in my church, 29%; (c) I disagreed with the church’s stance on political/social issues, 25%; (d) I never connected with students in the student ministry, 23%; students seemed judgmental or hypocritical, 20%; (e) I was only going to church to please others, 22%. (Lifeway Research, 2017, pp. 12, 14, 17, 20, 22)

Based on the top seven reasons individuals ages 18 to 22 years gave for staying in church, finding the relationship between informal learning of parents and biblical worldview formation in children and adolescents can be significant. Informal learning for early spiritual transformation and spiritual formation development can be crucial in keeping young people connected to church families, receiving Christian support for the many issues faced within postmodern culture. Among the young people stated for remaining connected to a local church were: church was a vital part of my relationship with God (56%), I wanted the church to help
guide my decisions in everyday life (54%), I wanted to follow a parent/family member’s example (43%), church activities (e.g., youth group, church choir) were a big part of my life (39%), I felt that church was helping me become a better person (39%), I was committed to the purpose and work of the church (37%), and church was helping me through a difficult time in my life (26%) (Lifeway Research, 2017, p. 25).

Parents as Nurturers and Educators

Two foundational issues evolve from God’s Word pertaining to parents: spiritual nurturing and education of children and adolescents (Anthony & Benson, 2003; Barna, 2003; Durbin, 2001; Estep, 2008a; Evans, 2014; Hiebert, 2008; Kinnaman, 2011; Knight, 2006; Lebar, 1995; Moloney, 2016; Nash, 2009; Pearcey, 2005; Richards & Bredfeldt, 1998; Shepherd & Nash, 2014). Genesis 18:18-19 returns to the foundational covenant with Abraham in which God blesses all nations through Abraham and commands him, “For I have chosen him, so that he will direct his children and his household after him to keep the way of the Lord by doing what is right and just.” Voas and Crockett (2005) found a 0.3% likelihood of youth having a solid “believing and belonging” relationship with God when there is no direct parental influence (p. 21). This statistic seems especially relevant in today’s post-Christian culture.

Working directly with young people and their ideas, hobbies, and interests must start where the youth are: the home environment (Nash, 2009). Children and adolescents spend a considerable amount of time in the family household, which Barna Group (2019b) identified as “a spark for conversations and activities related to faith” (p. 14). It is never too early or late for parents to become involved in their children’s lives, providing attentive guidance, instilling Scripture, and applying biblical principles (Durbin, 2001; Evans, 2014; Moloney, 2016).
Boehlke (1962) referred to Christian education as Christian nurture, a word Merriam-Webster (2020e) defined in terms of both education and influence. Scripture about education points to nurturing, as well, as Deuteronomy 6 identifies parents as the primary nurturers. Psalm 78:4-8 refers to imparting information and inspiring trust and obedience. Proverbs 4:5-8 speaks of imparting wisdom. Genesis 18:19, Proverbs 1:2-4, and 2 Timothy 3:17 present how to attain the skills of holy living, and Proverbs 22:6 addresses preparing for adulthood (Barker et al., 2011). Jesus taught an important principle in Matthew 5:13-16 for parents to be Christian nurturers. Jesus speaks of the impact a Christ-follower will have upon the world using the illustration of salt and light. The salt component refers to one who “would create a thirst for greater information” (Barbieri, 1983, p. 29), drawing others who want to know how to be the same as the salt in the teacher’s life. Another interpretation of the salt illustration is as a preserver in keeping evil away. The illustration of Jesus using light connotes shining and giving direction, being seen, and radiating to the point that others will follow the path. The one being nurtured (in this study, the child and adolescent) learns that the nurturer reflects his or her teaching based on the Word of God. Youth learn that by faith, they can have an intimate relationship with a loving God through Christ Jesus.

In discussing the monastery life and strategies for Christian living in a post-Christian society, Dreher (2017) shared some important principles concerning the home and parents acting as nurturers. The ideas incorporated turning “[one’s] home into a domestic monastery” (Dreher, 2017, p. 124), which aligned with the Christian nurturing to which Barbieri (1983), Barna (2003), and Boehlke (1962) referred. Principles that are the responsibility of the parents are (a) family prayer at regular times, (b) placing great importance on a church family, (c) accountable spiritual role-modeling, (d) love and respect shown at all times to each family member, (e)
emphasis on obedience, (f) learning hospitality to others, (g) limitations on media for all family members, (h) teaching of biblical morals and nonconforming to the world, (i) avoiding idolizing the family above God, and (j) learning to build relationships in the local community (Dreher, 2017).

In writing about the characteristics of leadership, Howell (2003) referred to Apostle Paul as a “builder of faith communities” (p. 255). Just as Paul defended his apostleship and his authority to teach as an apostle as the Lord commissioned him in Galatians 2:8, 1 Corinthians 9:2, and Romans 1:5, so parents can defend their authority as teachers and nurturers of children through their commissioning in Deuteronomy 6:4-9. Paul exhorts believers to voluntary obedience to Jesus as their Lord, not in an authoritative, confrontational manner but authoritative through love, respect, and graciousness (Howell, 2003; 2 Cor 10:8; 13:10). The parents as teachers and nurturers of their children and adolescents can view the family as a faith community with the working of spiritual gifts and encouragement to, as Paul states, build up and not tear down the community of faith (i.e., the family unit within the household) (Barna Group, 2019b; Howell, 2003; 2 Cor 10:8; 13:10).

**Implications for This Study**

A critical implication for this research in examining and exploring the relationship between informal learning of parents and biblical worldview formation in children and adolescents came from over 2 decades of national studies in the You Lost Me project by Barna Group (Kinnaman, 2011). Kinnaman (2011) recognized the need for the project, asserting, “A person sets his or her moral and spiritual foundations early in life, usually before age thirteen” (p. 31). Barna (2003) stated, “If people do not embrace Jesus Christ as their Savior before they reach their teenage years, the chance of their doing so at all is slim” (p. 35). A solid foundation should
be in place to avoid young people changing their faith from the high school years to the late 20s (Kinnaman, 2011). The parents, as teachers and nurturers, are responsible for building the family life as a strong faith community and modeling the spiritual accountability critical to forming a biblical worldview in the formative years. The young person needs a strong foundation of faith and a solid faith community to make many upcoming decisions, such as education, marriage, family, relationships, and work. The following discussion connects the concepts of informal learning, spiritual nurturing and education, and biblical worldview as related to this research by virtue of biblical and theological principles.

**Informal Learning**

**Informal Learning Origin**

The first acknowledgment of family and the community in the educational process is in the Bible. In Genesis 1:27-28 and Genesis, Chapter 5, the family came into being. In Genesis 18:18-19, God gives His declaration for the household to become the entity by which children will be directed. Other Scripture referring to education through the family life are Deuteronomy 4:9; 6:4-7; Psalm 78:4-8; Proverbs 1:8; 6:20; Ephesians 6:4; and 2 Timothy 1:5; 3:15. Based on the Jewish views of family and education in ancient Hebrew life, informal learning came about by daily living (Anthony & Benson, 2003). Mosaic Law required parents to be intentionally engaged in their children’s teaching of the Law. Hebrew families taught by example throughout daily life (Deut 6:5-8; 11:19; 31:12). Informal learning in the community setting occurred in the processes of Mosaic festivals (Deut. 16:16). Moloney (2016) indicated that forming a relationship with an identity in God is a biblical process of informal education. Moloney discussed how the Mosaic Law viewed the formation of identity concerning pedagogical importance:
Mosaic Law does not seek an unmitigated obedience to the letter of the law as a minimum standard to which one must comply. Rather, it implores its readers and hearers to form their very identity on love for and obedience to YHWH as an ardent response to the redemptive grace first shown them (Deut 11). The extent to which this holistic redemption (political, economic, social, and spiritual) is appropriated as identity is the degree to which true social transformations may occur. (p. 2)

Anderson et al. (2017) provided clear insight into informal learning in conjunction with worldview. Parents can empower young children to realize through God’s Word the transformation that can take place by the “renewing of the mind” (Rom 12:2). Sire (2009) asserted, “A worldview involves the mind, but it is first of all a commitment, a matter of the soul” (p. 328; Deut 6:4-5). Children can learn early in family life through informal learning how to begin pursuing a biblical perspective in a pluralistic world (Anderson et al., 2017). Pazmiño (2008) presented informal learning as biblical education, in essence, through God’s command to Moses in Deuteronomy 6. God’s truth would be integrated into the life of the people in their day-to-day living. Pazmiño asserted that parents were at the time of Moses, and at present, the primary teachers of children and youth, with life situations as opportunities for discipling and nurturing through God’s Word.

**Depiction of Informal Learning**

According to Pazmiño (2008), educational formats in Christian education are on a continuum of formal to informal learning (see Figure 1).
Formal education occurs in a classroom setting, conducted in a systematic manner (Pazmiño, 2008). As education shifts to a nonformal setting and further to socialization in which some intentionality is involved, it moves closer to informal education occurring entirely through life experiences (Pazmiño, 2008). The Christian educator must realize that not all experiences will be positive unless God is the basis of the teaching instilled by Godly individuals through biblical principles (Pazmiño, 2008). Christian education carried out informally is not to form individuals who are “learned theologians,” but to pass on skills through life experiences and to be a “reflective practitioner” by the integration of knowledge and experience (Shepherd & Nash, 2014, p. 12).

God’s chosen people, the Hebrews, were intentional in their efforts to nurture and educate their loved ones, as established by Yahweh in Psalm 78:5-7 (Anthony & Benson, 2003). God established the tradition of passing down from generation to generation His mighty acts (Ross, 1985). There would be no other means but this teaching by which people would know to keep the Law and trust in Him. Hebrew children learned from parents by observation and experience in the family household and others in the community (Anthony & Benson, 2003). The
teaching and learning concept of the ancient Hebrew people was the beginning of what is now understood as informal learning.

**Importance of Family in Informal Learning**

Shields (2008) provided insight into informal learning, stressing the importance of early training in family life. Shields addressed a critical issue concerning youth ministry particularly relevant to the educational setting of informal learning: “Youth ministry is not God’s primary mechanism for reaching and discipling young people—God issued that directive to the family (Deut 6:6-9) and the church (Eph 4:11-13)” (p. 14). In *A Model for Biblical Worldview in Evangelical Christian Emerging Adults*, Erdvig (2016) noted that the family household can become “a biblical worldview academy” (p. 87). All the participants in Erdvig’s study reported that “their family had a major influence on their worldview” (p. 121). One adult participant stated, “My parents have shaped most of my beliefs today”; another noted, “Christian family was one of the biggest influences on my worldview” (p. 122).

**Spiritual Nurturing and Christian Education**

Informal learning starts from birth; therefore, the family environment and parents take the lead, with Scripture as the basis for how informal education should occur (Anthony, 2008; Anthony & Benson, 2003; Chester & Timmis, 2008; Knight, 2006; Lingenfelter, 2008; Pazmiño, 2008; Sampson, 2011). To depict the importance of how family can function as one of the primary factors of education, Knight (2006) presented an image (see Figure 2) of the small influence that formal schooling holds.
On the topic of discipleship and training, Chester and Timmis (2008) asserted that the family is the child’s primary instruction and influence, and most of the child’s learning of biblical values is in life situations with the parents. Chester and Timmis referred to parents as “teaching ‘along the road’” (p. 116), as reflected in Deuteronomy 6. Formal teaching of the gospel contains an aspect of classroom learning, as the local church family must be embedded “into the heart of all we do as the people of God and how we relate to the world” (Chester & Timmis, 2008, p. 117). These principles of both formal and informal learning apply early in the child’s life, with significant attention to the informal format via spiritual nurturing (Barna, 2003; Kinnaman, 2011). Sampson (2011) asserted that children are not born with moral emotions; this development occurs through the parents as they educate. Later discussion of related literature
will present the critical role of servant leadership in parents’ teaching of their children and youth. Bridges and Bridges (2009) asserted that without the leader modeling the desired leadership behavior to develop it in followers, it is unlikely that change will occur. In this study, leadership and education were viewed as co-occurring.

**Implications of Informal Learning for This Study**

Informal learning plays a crucial role in the training of children and youth in Christianity and instilling lifelong biblical principles that will provide an early biblical worldview. Informal learning through spiritually affirming parental behaviors was the intervention explored in this study to measure the behaviors and relationship between informal learning and biblical worldview formation in children and adolescents. Measuring such informal learning behaviors could be critical to future generations in turning the present post-Christian culture back to Godly principles and strong biblical beliefs. Another implication is the crucial need for informal learning theory in Christian scholarship, a foundation for building biblical informal learning education. Informal learning naturally occurs through spiritual nurturing and Christian education.

**Scriptural Foundation**

Having established according to God’s Word that parents are spiritual nurturers and educators, the Bible and Christian scholarship present spiritual nurturing and Christian education as one entity. The origin of spiritual nurturing and education in functioning together is the Holy Bible. Spiritual nurturing and education of children are not separate entities, according to God’s Word (Barna, 2003; Dettoni & Wilhoit, 1998; Pazmiño, 2008; Wilhoit, 1991; Deut 6:7; 11:19; Ps 11:10; Prov 1:7; 9:10; 22:6; 30:5; Matt 4:4; 21:16; Mark 12:24; Rom 15:3-4; 1 Cor 1:30; Col 2:3; 2 Tim 3:15 [foundation]; Gen 18:19; Exo 27:21; 30:30; Josh 24:15; Ps 78:4-8; Prov 1:2-4; 4:5-8; 22:6; 2 Tim 3:17 [purpose]).
**Education and Christian Education Defined**

The word *educate* derives from Latin *educere*, “to lead out” (Wilhoit, 1991, p. 13). The Merriam-Webster (2020b) definition includes “providing with knowledge, skill, competence, or usually desirable qualities of behavior or character,” which naturally leads to the meaning of Christian education. There is a consensus among Christian authors that life is the central matter of Christian education (Dettoni & Wilhoit, 1998; Knight, 2006; Lebar, 1995; Pazmiño, 2008; Richards, 1976; Wilhoit, 1991). Beyond the acquisition of knowledge, the Christian educator views learning as holistically related to life (Dettoni & Wilhoit, 1998). In a people-centered perspective, Christian education moves the person to discover meaning for life through God’s Word as the fundamental text (Estep, 2008a; Wilhoit, 1991). Discussing how Christian education and secular education cross paths at times due to human nature and learning, Lebar (1995) noted that Christian education is distinct in its foundation and orientation and that “every area of life that the Word of God enters is changed” (p. 25).

**A God-Centered Education**

Richards (1976) asserted carrying out Christian education as the primary focus of life is not toward the individual alone but the individual in the community, as the life of the Christian and the life of the church (body of Christ). Richards equated Christian education with nurturing, stating that it is the transmission of Christian education and its nurturing qualities that sets it apart. Pazmiño (2008) presented a framework of education (see Figure 3) that coincides with the discussion of education and its centeredness on life and the Bible as foundational. Pazmiño returned to the seminal works of Dewey and his assertion that education, as pertains to curriculum and content, must be in the context of community and society, a perspective that is a holistic theme (Boydston, 2008a,b). Pazmiño used a 1935 curriculum framework by Caswell and
Campbell (1935), focusing on three approaches centered on person, content, and society and adding the central premise of God-centered.

**Figure 3**

*The Foci of Education*

![Diagram of the Foci of Education](image)


**Nurturing and Spiritual Nurturing Defined**

The origin of the word *nurture* is the Latin *nutritura*, the act of nursing or suckling (Merriam-Webster, 2020e). All definitions presented in Merriam-Webster (2020e) for the word nurture can apply to spiritual nurturing: (a) “the breeding, education, or training that one receives or possesses; upbringing;” (b) “something that nourishes;” and (c) “the sum of the influences modifying the expression of the genetic potentialities of an organism” (nurture listings). With the dictionary definition and viewing nurturing through a developmental perspective, the basis that brings Christian education and spiritual nurturing together is the Bible. Scripture illustrates the holistic and developmental aspect of education and nurturing as follows: Luke 2:42, 52, Jesus
s growing up to his relationship with God and others; 1 Corinthians 13:11, the child to adult; and Hebrews 6:1, elementary ways to maturity (Dettoni & Wilhoit, 1998).

Richards (1976) presented spiritual nurturing as akin to discipling, whereby teaching and nurturing shape the individual in his or her community holistically to become the likeness of Christ Jesus, being transformed into His image (Rom 12:2; 2 Cor 3:18). Spiritual nurturing in conjunction with Christian education appears as transformational Christian education (Wilhoit, 1991). God-centered education and nurturing affect lives by enabling persons to find meaning through the promises and principles of God’s Word (Dettoni & Wilhoit, 1998; Lebar, 1995; Wilhoit, 1991). Lebar (1995) illustrated a significant theological principle of Christian education and spiritual nurturing in “the hardest lesson that Jesus had to teach” (p. 86): the kingdom of God. Jesus (the Master Teacher) did not teach His disciples and others the radical idea of the kingdom of God in an immediate manner (Lebar, 1995). His curriculum was skillfully planned and modeled, as can be studied in Matthew 15:32–17:23, Mark 8:1–9:32, and Luke 9:18-45 (Lebar, 1995). Lebar asserted that Jesus’ training of the disciples could be His greatest miracle of all, as shown in His many works of healing and exhibition of His power over natural forces. Jesus’s education and nurturing are the ultimate example and model for Christian education and spiritual nurturing.

**Implications of Spiritual Nurturing and Christian Education for This Study**

Informal learning is one of the formats of education. In this study, informal learning was central to spiritual nurturing and Christian education as discipling and transformational education in a holistic approach. Spiritually affirming behaviors are variables measured as interventions for children in their formative years. This study was an examination and exploration of informal learning behaviors to identify a relationship with the outcome of biblical worldview formation,
as evidenced in the 2016–2017 study of youth ages 13 to 18 years (Barna Group & Impact 360 Institute, 2018). Knight (2006) depicted the ultimate aim of spiritual nurturing and Christian education relating to the home environment (see Figure 4). Spiritual nurturing and Christian education modeled and implemented by the parents can both internalize and externalize God’s love and biblical principles to make it possible for children and adolescents to find meaning and fulfillment in life.

**Figure 4**

*Purposes of Christian Education That Inform Teaching*

![Diagram](image_url)

Biblical Worldview

Biblical Worldview Origin

The most important origin of the concept of worldview is the Holy Bible. God’s creation is the ultimate origin of the concept of worldview. Genesis 1:2 acknowledges the “Spirit of God.” Every individual has a worldview (Porter, 2013; Sire, 2004). The concept of worldview began with the creation of man and woman: “Let us make mankind in our image, in our likeness” (Gen 1: 26a). “Then the Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being” (Gen 2:7). “Then the Lord God made a woman” (Gen 2:22a). God created man and woman as complete and whole beings, the self, to “see, understand, and interpret the world and our place within in” (Sire, 2009, p. 12) and thereby to order life (Hiebert, 2008). Scripture about the mind answers the question about what the mind does—for example, change (2 Kings 24:1, make decisions (1 Chronicles 12:38), devise evil (Psalm 83:5), give guidance (Ecclesiastes 2:3), and vacillate (James 1:8). Scripture about the mind answers questions about human intelligence. The mind can, for example, seek knowledge (1 Kings 10:1-2), be closed (Isaiah 44:18), understand (Daniel 5:12), and be made dull (2 Corinthians 4:4). Scripture acknowledges that the mind is involved with human emotions and can, for example, be troubled (Genesis 41:8), be anxious (Deuteronomy 28:65), and doubt (Luke 24:38). In the Great Commandment, Matthew 22:37, Jesus commands His people to love Him “with all your heart and with all your soul and with all your mind” (Barker et al., 2011, pp. 2268-2269). God’s Word contains Scripture throughout on the believer’s mind and responsibility to the mind.

Anderson et al. (2017) presented the root of worldview, Weltanschauung, a German word with Welt meaning world and Anschauung meaning view. The conception of Weltanschauung
first appeared in Kant’s *Critique of Judgment* in 1790 (Wood, 2001). Weltanschauung became more widely used throughout Germany and Europe, and became incorporated into and important to other disciplines (Anderson et al., 2017). The second root of worldview was the field of anthropology. As anthropologists studied world cultures, they discovered the concept of worldview applied to differing ways of living among people, yet with some similarities across cultures (Hiebert, 2008). Several anthropologists used the theory of diffusionism in their study of cultures, showing how cultural patterns passed on from one group or culture to another. These studies are important to the understanding of worldview, as observing the speech and behavior of cultural groups indicated their beliefs and values. Hence, the discovery of the formation of beliefs and the meaning of worldview pertains to “the assumptions that people make about the nature of things, the categories in which they think, and the logic that organizes these categories into a coherent understanding of reality” (Hiebert, 2008, p. 15).

Several Christian scholars and philosophers set forth the importance of the concept of worldview in Christian philosophy. Orr presented a critical assumption for philosophical discussion, finding an underlying worldview to be the basis for debate between Christians and non-Christians (Naugle, 2002). Seeing Christianity as a worldview brings a philosophical debate, in that the prominent discussion is not solely about doctrine and belief (Anderson et al., 2017). Concerning Christian philosophy, Anderson et al. (2017) acknowledged Sire as “the most influential evangelical worldview proponent” (p. 13) over two generations. Sire’s (2009) worldview definition evolved from earlier editions of *The Universe Next Door: A Basic Worldview Catalog*, moving from a sole philosophical explanation of worldview to a holistic and broad definition:
A worldview is a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of presuppositions (assumptions which may be true, partially true or entirely false) that we hold (consciously or subconsciously, consistently or inconsistently) about the basic constitution of reality, and that provides the foundation on which we live and move and have our being. (p. 20)

**Further Discussion of Biblical Worldview**

The following are three examples of scholars who presented information pertinent to the discussion of Christian study in worldview.

**James W. Sire.** The holistic core or the interconnectedness of the physical, mental, social, and spiritual components of Sire’s definition of worldview is apparent. Sire (2009) saw worldview as a commitment deep within the self. While acknowledging the cognitive aspect of worldview, Sire stressed a spiritual component more than a mental element. There is a biblical foundation to Sire’s assertion: “wisdom (Prov 2:10); emotion (Exo 4:14; John 14:1); desire and will (1 Chron 28:18); spirituality (Acts 8:21); and intellect (Rom 1:21)” (p. 20). The author expressed worldviews as a master story in which individuals’ lives are the chapters. Sire believed that the questions asked about reality appear in propositional content, answering questions concerning fundamental reality, the nature of the world, the human being’s existence, death, the origin of thought, right and wrong, and the reason and meaning for human existence. Human beings will make assumptions, either consciously or unconsciously, that may or may not be true. Worldview is evident in words or actions and may not be known by self. Worldview is in the core of the being and subconscious and, without reflection to a great extent, will not be known by self (Sire, 2009). In the fifth edition of the book, Sire added a crucial question to the expression of worldview in propositional form: “What personal, life-orienting core commitments
are consistent with this worldview?” (p. 23). An individual will adopt stances and form a worldview explicitly to undergo an examined or unexamined life, with Sire concluding, “It is the assumption of this book that the examined life is better” (p. 24).

**James Orr.** Orr is a pioneer of Christian worldview, proposing its basis to be a “Christian vision of reality” in Jesus Christ (Naugle, 2002, p. 8). Orr believed the human mind aspires to comprehend the universe, putting together the facts, laws, and answers to major questions of life. In the lecture *Nature and Man*, Orr (2012) stated,

> The Christian doctrine of God and the Christian doctrine of man are in fact correlative.

> For how should man know that there is a personal, ethical, self-revealing God—how should he be able to frame the conception of such a Being, or to attach any meaning to the terms employed to express His existence—unless he were himself rational and moral—a spiritual personality? The two views imply each other, and stand or fall together. We may express this second postulate of the Christian view in the words, Man made in the image of God. (p. 88)

In the sense of a philological (word study) history, an example is Kant, who found the concept of worldview born and flourishing in theological and social science scholarly discussion (Naugle, 2002). Weltanschauung does not appear in philosophy texts, only discussion on the notion. In the philosophical history of worldview, the 19th century saw a spread of Weltanschauung discussion to scholars such as Kierkegaard, who used the terms worldview and lifeview, the meaning of life. Lifeview focuses on “aesthetic, ethical, religious” concepts, both Christian and secular (Naugle, 2002, p 81). An excerpt from Kierkegaard’s early writings reflects the theorist’s concept of lifeview:
Our early youth is like a flower at dawn with a lovely dewdrop in its cup, harmoniously and pensively reflecting everything that surrounds it. But soon the sun rises over the horizon, and the dewdrop evaporates; with it vanish the fantasies of life, and now it becomes a question (to use a flower metaphor once more) whether or not a person is able to produce—by his own efforts as does the oleander—a drop that may represent the fruit of his life. This requires, above all, that one be allowed to grow in the soil where one really belongs, but that is not always so easy to find. (Kierkegaard, year, as cited in Hong & Hong, 1980, p. 3)

Other examples of scholars on worldview in postmodern thought are Derrida and Foucault, Kuhn and Polanyi (natural sciences), Freud and Jung (social sciences in psychology), Mannheim and Berger (social sciences in sociology), and Kearney and Redfield (social sciences in anthropology; Naugle, 2002).

**Stanley E. Porter.** Porter (2013) called attention to a critical yet easily understood factor concerning worldview. Individuals do not often explicitly reflect on what the personal worldview entails; rather, they are more likely to hold contradictory values and beliefs, leading to wrong decisions and behaviors. As such, it is best to strive for an informed and consistent worldview. Porter specifically pointed to Christians as having a consistent and well-informed worldview. An effective approach in informing and holding a consistent worldview as a Christian is to first draw from the best sources, obtaining a firm foundation of belief of ultimate reality, practical beliefs, epistemology, and practical behaviors. Porter identified the sources from which to obtain an informed and consistent worldview as the Bible, history and tradition of Christianity, reason, and experience. First, as Christians, God’s Word is the central force of the worldview. The Bible wholly informs the individual of the principles essential for fully knowing God, having a sense
of self-identity and knowledge of the world. The problem lies in humans’ actions to place particular cultural values and belief systems into the Bible and subsequently justify an absolute or norm to be biblically based. A strong example of this action for cultural and worldview studies is in Romans 13:1-7, whereby obedience to an oppressive government follows from the misinterpretation of the Scripture. The Apostle Paul urges obedience to superiors who act within a moral code for the good of the people; these are the authorities “which God has established” (v. 1).

Second, Porter (2013) argued that traditions and history of Christianity as a source of beliefs go back to the first Christ followers and the early church. Some of these followers were those inspired by God to write the Bible and evangelize into the world. The early church struggled with self-identity in its faithfulness to Jesus Christ and the opposition directed toward Christianity. The early church also struggled to adapt to a changing cultural environment. A few historical traditions influence the development of worldview and problems with each. There is value in creeds from the early church, such as the Nicene Creed, and spiritual enrichment in how the early church formed its important and obligatory beliefs into the creeds. However, one must take caution in realizing the limitations of early church creeds to formulate a Christian worldview. According to Porter, another historical and traditional issue that influences worldview development is Christian institutionalization. For example, Jesus had many other partners in ministry aside from the disciples, the 12 followers He chose. Jesus’s family, including His mother and brothers and friends of his family, were likely His closest followers. Placing too much emphasis on the 12 men Jesus chose leads to cultural absolutes, such as gender roles inside the church.
A third source as an element of Christian worldview was reason, which is a necessary building block of worldview (Porter, 2013). Commonly stated is that all people have a worldview at the core of their beliefs and values. Not many people will analyze their worldview and see the contradictions within. An example is not giving sacrificially to the local church or outreach ministries when individuals own summer vacation homes that are of no financial gain or critical need. An entitlement to rest also appears in other worldview propositions. A fourth source of Christian worldview development is experience, impacting individuals both consciously and unconsciously. An important example relating to Christian worldview is church experiences and, especially, one raised in the church. It can be difficult to identify the experiences of church life, such as worship, communion, and ordination, with the meaning of a Christian worldview.

**Foundational and Practical Components of a Biblical Worldview**

Although arduous, individuals can formulate foundational and practical components of a biblical worldview when contemplating worldview according to four levels coinciding with the philosophical content of reality, truth, and value (Knight, 2006). The first level is on a metaphysical realm, the individual’s belief about “the nature of reality” (Knight, 2006, p. 9). It is essential for individuals to determine how they have grounded their worldview. The foundation upon the Christian worldview rests is the existence of a God and the revelation of Jesus Christ. The Christian worldview is consistent day to day with the guidance of the Holy Spirit. An inconsistent worldview is one that displays behaviors forbidden by God’s Word, such as materialism and worldly pleasure. The second level upon which a Christian worldview may emerge is, philosophically speaking, epistemology. Once the individual has discovered the
foundational component of the worldview, the next life practice is to find how one determines what the worldview involves.

Epistemology is the study of “the nature of truth and knowledge” (Knight, 2006, p. 9). Opening oneself to hearing what God is saying through His Word and Holy Spirit requires daily communion with God and discernment. The Western world widely acknowledges empiricism as a manner of knowing through the five senses. The problem is that empiricism applied to a Christian worldview does not access the spiritual aspect of life. On one end of the continuum is trust in inner feelings as a way of seeking knowledge. Emotions are crucial to life balance but not for seeking knowledge of Godly aspects of life and trustworthy knowledge of God Himself.

The third and fourth levels of developing a Christian worldview are by practical beliefs and practical behaviors, which align with the philosophical branch of axiology. Reality (metaphysics) and truth (epistemology) are foundational to value systems (axiology), with axiology being “the study of questions of value” (Knight, 2006, p. 9). Two axiological systems are ethics and aesthetics. A basic example of a value system for the Christian worldview is parents’ belief that their children must attend the top universities for finding the best jobs. This value system can be construed as an inconsistent belief and value that speaks strongly to materialism.

**Implications of Biblical Worldview for This Study**

Biblical worldview was the outcome intended for this study. As stated in Chapter 1, recent research shows that a low percentage of youth ages 13 to 18 years hold a Christian worldview. There is a decline of biblical principles and Christian living in the present post-Christian culture (Barna Group, 2017). This research concerned children and adolescents, measuring the variables of knowledge and behaviors by parents and examining the relationship
between the informal learning behaviors and formation of a biblical worldview. Through examination and exploration of parents’ informal learning behaviors and biblical worldview formation of children and adolescents, this researcher sought to develop informal learning theory for Christian scholarship and Christian-life development at present and in the future.

**Conclusion**

The Word of God was the foundation of this study examining and exploring informal learning through spiritually affirming behaviors and the formation of a biblical worldview in children and adolescents. This theological review has presented Scripture and work from theologians and biblical literature that explain the major concepts of parents, informal learning, spiritual nurturing and education, and biblical worldview. Further, this theological review has presented the importance of parents in the home environment as instructed through God’s Word to nurture and teach children and adolescents toward the formation of a biblical worldview. Theory provides counsel for the practice of human endeavors (Ward, 1998). The theoretical framework for this study was a strong foundation for this research.

**Theoretical Framework**

**Introduction**

A theoretical framework, an organized group of ideas and principles, helps to align the body of knowledge about a particular research problem (Bandura, 1977; Boehlke, 1962; Creswell, 2014; Leedy & Ormrod, 2019). Crotty (1998) defined theoretical perspective as the philosophical position that brings assumptions to the research methodology. A theoretical framework drives research, allowing further questions about a phenomenon (Leedy & Ormrod, 2019). Parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview as major concepts required a theoretical framework to support the integrated
principles of the body of knowledge. This mixed methods study was a means to examine and explore knowledge and behaviors of informal learning by parents and the relationship between informal learning behaviors and biblical worldview formation in children and adolescents. Thus, it was essential that social science conceptual models functioned as the overarching theoretical framework (Creswell, 2014).

**The Holy Bible**

The Holy Bible must be the ultimate foundation of all frameworks of this research. Ward (1998) viewed theory as a guide for human endeavors. Specific to this study, theory presents guidance for teaching/learning. Although the Holy Bible is not a scientific theory book, the foundation of the Word of God provides the guidance for all educational processes, beginning first with the means for humankind to have a relationship with God, the Creator (Moloney, 2016; Ward, 1998). God is the Divine Teacher and provides a holistic framework for teaching and learning (Moloney, 2016; Ward, 1998; Job 36:22; Ps 25:8; 2 Sam 22:31; Prov 2). The biblical and theoretical framework for this study was based upon discipleship as reflected by the OT and NT through Mosaic Law (the Hebrews’ educational process) and Jesus’s model of discipleship (Moloney, 2016). Jesus required that His disciples be simultaneously learners and teachers, therefore leading to social transformation (discipling of others). The framework of discipleship fitted seamlessly with the study of informal learning in the home environment. The spiritually affirming behaviors of accountability, one-on-one presence, patience, discipline consistency, and tone of voice through the informal educational format lead to the process of individual transformation (formation of biblical worldview) in the child or adolescent. The informal learning behaviors of the parents as influenced and learned by the child and adolescent lead to social transformation, as the young person grows and matures spiritually to disciple others.
Boehlke (1962) presented a biblical framework in viewing a theory of learning as a “theory for Christian nurture” (p. 184). Christian nurture refers to growth holistically by learning through the church—both the Christian family and the local church—which functions to nurture and be a place of worship and mission. The basic tenet, however, is God as a covenant partner, with the church being the covenant community through the guidance of the Holy Spirit. A holistic process (physical, psychological, intellectual), learning is a behavior of searching to reach and achieve goals through styles of learning—for example, kinesthetic and problem-solving. “Tension systems” activate as learning occurs with self-integrity and feedback from experiences, subsequently reorganizing for further learning (Boehlke, 1962, p. 183).

The concept of tension systems aligned with the double-loop learning that became a key component of this study’s focus group interview (see Appendix K). Implications for this study and Boehlke’s (1962) theory for Christian nurture are that informal learning by parents to children and adolescents in the home environment will bring about the processes through the Holy Spirit’s work to reach the most foundational level of education: change in the person. Boehlke asserted that the dynamic of the learning process through the Holy Spirit’s work is not a closed system (one not interacting with others) but an indwelling system, first eliciting a response to God’s Word and the leading of the Holy Spirit, followed by encounters with others (discipleship). Based on their views of God’s Word and discipleship as a framework for teaching/learning, Boehlke (1962), Moloney (2016), and Ward (1998) were essential to this study of an informal education format by parents. Boehlke stated, “The motive of discipleship is learned through God’s creative transformation of the learner’s engagement with the church in the world” (p. 200).
Relevant to this research, Porter (2013, 2014) identified the Bible as foundational for an individual to hold a Christian worldview that is informed, integrated, and consistent, both internally and externally. Implications for this study of informal learning behaviors by parents are that the spiritually affirming behaviors are crucial in the transformative years for the formation of biblical worldview (Barna, 2003; Barna Group, 2017; Chester & Timmis, 2008; Evans, 2014; Kinnaman, 2011; Siegel & Bryson, 2018). Porter (2013) also acknowledged the other sources from which an individual develops a biblical worldview, such as through the church, both local and the body of Christ; reason (reflection of all data available and processing and assimilating); and experience (what the individual encounters in life). The home environment is the place where the formation of biblical worldview begins through the teaching/learning process with the parents (Barna, 2003; Barna Group, 2017; Chester & Timmis, 2008; Evans, 2014; Kinnaman, 2011; Knight, 2006; Siegel & Bryson, 2018). Porter recognized that the formulation of a consistent biblical worldview “can be a lot of hard work” (p. 91). The individual (in this study, the child or adolescent) begins forming the fundamental factors of a biblical worldview—that is, belief of ultimate reality, knowledge, practical beliefs (where to obtain knowledge), and practical behavior (should coincide with practical beliefs).

Knight (2006) asserted that “only Christianity provides a sufficient framework in which to view the predicament of human existence” (p. 176). A biblical framework grounded in Christian philosophy was crucial to this study for examining and exploring parents’ knowledge and behaviors of informal learning and the relationship between informal learning behaviors of parents and biblical worldview formation in children and adolescents. Children who begin early to form a biblical framework of metaphysics, epistemology, and axiology will be solidly grounded in the Word of God from which to explicate the truth of all things. This solid
foundation through biblical philosophical tenets helps form the principles of the self created in the image of God, God’s Word as the source and authority of all knowledge, and values built upon Jesus’s teaching of the Sermon on the Mount (Gen 1:26a, 27; Heb 11:3; Ps 19:1-4; Isa 1:18; Matt 5—7; Rom 1:20; 8:22; 2 Tim 3:15-17). Knight argued that education, which begins in the home, according to Deuteronomy 6, is based upon the teacher’s understanding of psychological, sociological, and philosophical implications of human existence and interactions with others, the foundation of which is the Word of God.

Synopsis of Theories as a Framework for This Research

This section presented several crucial supporting theories in cognitive, learning, educational, and informal learning conceptualizations. However, social cognitive theory (Bandura, 1977), experiential learning theory (Kolb, 1983), and Christian developmentalism (Dettoni & Wilhoit, 1998) in the individual theoretical assumptions and integration of theoretical principles were the major theoretical bodies of knowledge guiding this research. Each of these theories reflects human nature, behavior, personality, cognition, and environment. Social cognitive theory presents a theoretical framework as an “interactional model of causation” (Bandura, 1986, p. xi), with personality factors (e.g., preferences), the environment, and behavior as all determinants interacting with one another. Experiential learning theory is a combination of experience, cognition, and the person’s perception and behavior (Kolb, 1983). Christian developmentalism adds the biblical and theological contemplations to the principles of continuous maturation, humankind as a holistic being, motivations of actions, and age-appropriate instruction (Dettoni & Wilhoit, 1998). These three social learning theories have similarities and differences.
Social cognitive theory, experiential learning theory, and Christian developmentalism consist of principles that focus on the foundations of learning and the structure of knowledge. The foundation of social cognitive theory is learning through the model of integration of determinants of personality and cognition, behavior, and environment that are reciprocal (Bandura, 1986). Experiential learning theory has a base of knowledge grasped and transformed through experience, a process that Kolb (1983) depicted through a model of adaptive learning modes. At its foundation, Christian developmentalism combines biblical principles and theology with developmental psychology and the theories of other contemporary developmentalists (Dettoni & Wilhoit, 1998). Christian developmentalism and developmental psychology, along with the models of other developmentalists, culminate in a model of major elements or components of Christian developmentalism. In these foundations of theoretical principles in social cognitive theory, experiential learning theory, and Christian developmentalism, one can realize the similarities among human nature, behavior, personality, cognition, and environment.

Among the three conceptual models of social cognitive theory, experiential learning theory, and Christian developmentalism are dissimilar or contrasting concepts. Social cognitive theory places priority upon behavior as part of the reciprocal triad with personality, cognition, and environment; in comparison, experiential learning theory, although not a behaviorist theory, has a component of behavior, albeit with a different view (as later discussed). Christian developmentalism emphasizes behavior through the perspective of inner transformation and response, as based upon motivation according to biblical principles (Dettoni & Wilhoit, 1998; Matt 15:11-19; Rom 14:17-18).

Social cognitive theory, experiential learning theory, and Christian developmentalism also have differing views of principles concerned with cognitive components. Social cognitive
theory and experiential learning theory share major emphasis on thoughts, including “symbolizing capability” (Bandura, 1986), knowing by apprehension and comprehension (Kolb, 1983) with actions or responses and outcomes. Christian developmentalism holds that the cognitive ability of humankind is a major structure that stems from the nature of God as Creator and which humankind is given the ability to scientifically investigate for the empirical understanding of nonempirical phenomena of the world (Dettoni & Wilhoit, 1998).

Concerning the concept of personality in the theoretical models, social cognitive theory presents cognitive factors in conjunction with personality in the sense of the person’s preference, which involves all basic capabilities of the theory (Bandura, 1986). In experiential learning theory, preferences function through the transformation process in all four forms of knowledge (as later discussed; Kolb, 1983). Christian developmentalism approaches the concept of personality (preferences) in its views of learning as developmental. Personality as a component of learning theory evolves from experiences and actions as integrated with basic developmentalism, which, in turn, has elements of developmental psychology, including continuous maturation, humankind as a holistic organism, motivation, and age-related differences in development (Dettoni & Wilhoit, 1998).

According to social cognitive theory, as with behavior and cognition, environment is a significant component of the triad of determinants model. The influence of environment touches all levels of learning, such as observational and enactive (Bandura, 1986). Christian developmentalism posits that the environment is inseparable from an individual’s development and, therefore, learning (Dettoni & Wilhoit, 1998). Experiential learning theory presents the concept of environment in a significantly contrasting perspective as opposed to social cognitive
theory and Christian developmentalism. Experiential learning as a social process brings about individual development through “the cultural system of social knowledge” (Kolb, 1983, p. 133).

**The Basic Tenets of Social Cognitive Theory, Experiential Learning Theory, and Christian Developmentalism and the Implications for the Major Concepts of This Research**

**Social Cognitive Theory**

As depicted in Figure 5, social cognitive theory as a model of human functioning is an interaction of behavior, cognition and personality, and environment in “triadic reciprocality,” with each component acting as a determinant of the other (Bandura, 1977; Bandura, 1986, pp. 23-24). Behavior, cognitive and personal factors, and environment operate and interact with one another but not necessarily simultaneously (Bandura, 1986). Producing the determinant factors on one another takes time, as does the influence of causal factors.

**Figure 5**

*Schematization of the Relations Between the Three Classes of Determinants in Triadic Reciprocal Causation*

**Note.** From Social Foundations of Thought and Action: A Social Cognitive Theory, by A. Bandura, 1986, p. 24, Fig. 1. Copyright 1986 by Prentice Hall. Reprinted with permission.
The nature of the person in the interactions of triadic reciprocality has the following basic capabilities: symbolizing, forethought, vicarious, self-regulatory, and self-reflective (Bandura, 1986). Symbolizing capability appears as thoughts that touch all aspects of a person’s life, giving the ability to alter and adapt to environmental forces (Bandura, 1977, 1986). However, individuals acting merely on thought would fail without reasoning skills, which they must develop (Bandura, 1986). Forethought regulates most behavior, with the interaction of symbolic action (thought) with forethought showing the likely consequences of actions. Vicarious capability allows a person to learn through action by observing others’ behaviors and their consequences. Bandura (1986) noted a critical implication for the concepts of parents, informal learning, spiritual nurturing and education, and biblical worldview formation, stating, “The more costly and hazardous the possible mistakes, the heavier must be the reliance on observational learning from competent exemplars” (p. 20).

Two more basic capabilities applicable to the triadic reciprocity of social cognitive theory are self-regulatory and self-reflective. Self-regulatory capability is a distinctive characteristic of social cognitive theory (Bandura, 1986). Individuals contribute to their motivations and behaviors by self-directedness, influencing the environment by recruiting cognitive guides and creating their own incentives. A critical implication of this research and the significant concepts related to self-regulatory capability is that personal standards based on biblical principles need early adoption through the informal learning behaviors of parents to instill standards in the person (child or adolescent). These standards enable the evaluation of self-reaction that will influence subsequent behavior.

Self-reflective capability is considered the most distinctive of human nature (Bandura, 1986). Individuals gain understanding through self-reflection, growing their ability to evaluate
their thinking. Self-reflective capability is a precursor of self-efficacy. Another critical implication of this research appeared in the parents’ spiritual nurturing and informal teaching to instill in the child principles that will enable the formation of a biblical worldview; key among these outcomes is the child’s concept of personal efficacy. Informal learning behaviors, as practiced through the spiritually affirming behaviors, not only bring about the biblical standards of personal efficacy development, but encourage actions such as adherence to study schedules, motivation to achieve, and healthy personal habits (Bandura, 1993). Familial influence and parental involvement are critical to the child’s perceived self-efficacy (Bandura, 1986, 1993). Personal efficacy as instilled through biblical principles at home begins with children knowing they are created in the image of God, thus facilitating the spiritual transformation process to create a lifelong biblical worldview (Barna, 2003; Barna Group, 2017; Barna Trends, 2018; Evans, 2014; Kinnaman, 2011).

**Experiential Learning Theory**

Kolb (1983) introduced experiential learning theory not as a way to replace behaviorist and cognitive learning theories, but as an integrative theory with a holistic perspective that expresses subjective experience, cognition, and behavior. Cognitive influence derives from Lewin (1951), Dewey (1938, as cited in Boydston, 2008b), and Piaget (1969). Kolb described some of the characteristics shared in these models that align with the experiential learning model. The Lewinian experiential learning model (see Figure 6) incorporates the following process: (a) here-and-now experience, (b) collection of data, (c) observations about the experience, (d) data analysis, (e) conclusions fed back to actors, (f) modified behavior, and (g) choice for a new experience. The four-stage learning cycle coincides with Kolb’s model in a concrete experience
as a basis for observation and reflection. Assimilation occurs as the learner goes through stages, with a new theory formed through the creation of new experiences (see Figure 6).

**Figure 6**

*The Lewinian Experiential Learning Model*

![Diagram of the Lewinian Experiential Learning Model]

*Note.* From *Experiential Learning: Experience as the Source of Learning and Development*, by D. A. Kolb, 1983, p. 21, Fig. 2.1. Copyright 1983 by Prentice Hall. Reprinted with permission.

Dewey’s model of learning is similar to the Lewinian model by which learning integrates “experience and concepts, observations, and action” (Kolb, 1983, p. 22). The actors observe and judge to intervene, with action essential for achievement. Dewey’s model involves the integration of opposing processes but with a symbiotic relationship of processes in which “mature purpose develops from blind impulse” (Kolb, 1983, pp. 22-23; see Figure 7).
Piaget proposed a cycle of the interaction among the dimensions of “experience and concept, reflection, and action, representing an interaction between the person and the environment” (Kolb, 1983, p. 23). The cycle consists of a “process of accommodation of concepts” and a “process of assimilation of events and experiences” (Kolb, 1983, p. 23). Representing cognitive growth progressing from concrete to abstract thought and active to reflective, the cycle is a continual transaction with assimilation and accommodation, going to higher levels of cognitive function as the cycle continues. Piaget’s model shows the major stages of growth and learning from birth to ages 14 through 16 years, with detailed learning processes for each stage (see Figure 8).
Kolb (1983) depicted a model of the “process of experiential learning theory of growth and development” based upon four modes of learning, that is, “concrete experience, reflective observation, abstract conceptualization, and active experimentation” (p. 40). These basic modes work through what Kolb describes as prehension (abstract/concrete), comprehension (grasping the learning experience and interpretation), and apprehension (felt qualities of the learning experience immediately). Knowledge happens when there is a combination of grasping the experience and transforming the learning. Kolb stated,
Experience grasped through apprehension and transformed through intention results in what will be called divergent knowledge. Experience grasped through comprehension and transformed through intention results in assimilative knowledge. When experience is grasped through comprehension and transformed through extension, the result is convergent knowledge. And finally, when experience is grasped by apprehension and transformed by extension, accommodative knowledge is the result. (pp. 41-42)

Kolb (1983) considers these functions as elementary and building blocks for higher learning processes related to development. As the development of the modes of learning occurs through the integrative complexity—that is, “behavioral complexity, symbolic complexity, affective, complexity, and perceptual complexity” (Kolb, 1983, pp. 140-141)—these complexities and integration of conflicts among the adaptive learning modes result in true creativity and development (growth). The developmental process of the human is represented by stages of development and maturation, that is, acquisition, specialization, and integration (Kolb, 1983). These stages of maturation can vary according to the individual and cultural experience. A single individual will go through successive oscillations as they progress through the stages and, perhaps, regress (see Figure 9).
Figure 9

*The Experiential Learning Theory of Growth and Development*

Note. From *Experiential Learning: Experience as the Source of Learning and Development*, by D. A. Kolb, 1983, p. 141, Fig. 6.3. Copyright 1983 by Prentice Hall. Reprinted with permission.

Stage 1, acquisition, lasts from birth to adolescence (12 through 15 years), as the individual gradually advances through the modes and complexities to secure a sense of self apart and distinctive from the world surrounding them (Kolb, 1983). In Stage 2, specialization comprises the period of life through formal schooling and career, and early adulthood
experiences of personal life and job experiences. The significant learning and development from the specialization stage is the achievement of individuality by adaptive competence to respond to life’s demands and choose a career. Individuals measure self-worth against the rewards of doing well in life’s work. Stage 3, integration, finds the individual facing the conflict of societal demands as opposed to personal opportunity and advancement (creativity). Depending upon the individual’s adaptation and emphasis on the learning modes of being a reflective person, by specializing in the active, concrete, and abstract modes, the person will overcome the conflict of societal demands (“subjugation of personal fulfillment needs” [Kolb, 1983, p. 144] to bring social security) to experience a deeper essence of self.

**Integration of the Learning Theories of Lewin, Dewey, Piaget, and Kolb and Implications for This Study.** Integrating the learning models of Lewin, Dewey, Piaget, and Kolb offers a distinctive perspective for learning and development (Kolb, 1983). First, learning is a process and not focused on outcomes. Individuals form and recreate ideas and thoughts through experience; “outcomes represent only historical record, not knowledge of the future” (Kolb, 1983, p. 26). Second, the continuous learning process has its foundation in experience. An example is that a person wakes from sleep and consciousness continues from thoughts before sleep. Kolb asserted that although this continuous experience gives one a sense of security, the individual must face the unpredictability and chaos of the surrounding world. The individual can enter learning situations with continuous experience and create new ideas. Third, all learning models present the nature of learning as a tension-filled process; conflicts occur among the modes of learning, although not detrimentally. These conflicts of experiential learning create new knowledge and skills.
The fourth unique perspective among the learning models of Lewin, Dewey, Piaget, and Kolb is that learning is holistic in its adaptation to the environment (Kolb, 1983). For example, learning does not belong to a special province of cognition or perception alone. Learning involves the total organism of thought, feelings, perception, and behavior. Fifth, although it seems unnecessary to state that learning involves the individual’s transaction with the environment, this concept does not apply when learning focuses on a person-centered view. The four learning theories all indicate that learning is active and directed by the self, occurs every day, and entails environmental experience. Last, learning is a process whereby knowledge is created. Lewin, Dewey, Piaget, and Kolb agreed that objective and subjective experiences result in knowledge through a process of learning as transactions occur between actions. There is a dialectic process in constant action; in other words, “To understand knowledge, we must understand the psychology of the learning process, and to understand learning, we must understand epistemology” (Kolb, 1983, p. 37).

Significant implications for this research in examining and exploring informal learning by parents in line with social learning theories were the concept of behaviors, person, and environment. This implication includes understanding how learning occurs. As the Word of God states that the family and parents are the primary spiritual trainers/educators and nurturers of the youth, the parents are the avenue by which the child advances through learning processes to arrive at the stage of specialization and integration (Barna, 2003; Deut 1:31; 6:4-9; 11:18-21; 21:18-19; Ps 78:5-8; Luke 8:39; Eph 6:4). Lifelong learning requires integrative development (Kolb, 1983). In forming a biblical worldview, the child and adolescent will appreciate lifelong learning to joyfully and skillfully serve God and further His kingdom (Deut 4:10; 5:1; 31:12-13; Prov 1:5; 9:9-11; John 7:14-16).
Christian Developmentalism

A Solid Origin Directly Regarding Learning Theory in Christian Education. At one time, Christian educators had not seriously considered learning theory for Christian nurture (Boehlke, 1962). Theory building in learning “attempts to penetrate to the heart of the matter” (Boehlke, 1962, p. 17); therefore, theological approaches to theory cannot be developed independently of learning in Christian nurture. Boehlke used the phrase “Christian nurture…to describe the growth of the whole person through experiences of learning within the context of the church” (p. 10), with the church including the Christian family and the local church body. A concept incorporated in this research was Boehlke’s view of Christian nurturing as formally enabling the church to create opportunities for learning so that individuals can intelligently respond to God’s call through His grace. Boehlke defined learning exclusively to other theories and inclusively for Christian nurture purposes. Learning is a dynamic process that brings an individual to change in relation to the perception of a situation. Boehlke represented learning theory as “a statement or statements that seek to explain the process and the conditions through which learning may occur or be expected to occur” (p. 11).

Boehlke (1962) discovered seven concerns upon his study of Scripture and Christian education theory and in anticipation of seeking a Christian learning theory. These were knowledge, understandings, attitudes, values, skill habits, motives, and changes in the self. Knowledge in Christian learning theory entails the essential tools for discipleship because Christian faith is about communicating the gospel. Examples are a deep root of divine election, Christian heritage as that of ancient Israel, the Holy Spirit, and the revelation of Jesus Christ. Understandings are the need for guidance to perceive a relationship with self, others, the world or environment, the church, and, most important, God. Attitudes, as described by Boehlke
comprise a stark realization of a demonic element but critically aligned with God’s Word.

Boehlke presented two principles that align attitude (inward change) to Christian nurture according to God’s Word: God’s grace and recognition of the demonic element in the learning relationship of teacher/learner/social elements. In other words, teaching about being nice and helpful is not sufficient without the teachings of Christ Jesus, nor is disregarding the effects of sin when teaching conduct and attitudes (Boehlke, 1962).

Values as a concern for Christian learning theory derive from the ultimate, not the relative (Boehlke, 1962). The basis for value in the life of the Christian and the church is about a life in Christ Jesus. Value is a perspective of valuing Christ and regarding Him as the Maker of all principles. Skill habits regarding motor and mental are of critical concern to Christian faith. Sharing the gospel, listening, worship, nurturing, and responsible behavior are examples of skill habits. The point that Boehlke (1962) makes as to the concern of motives pertains to avoidance learning. The meaning of motives related to Christian nurture is not a motive of avoidance for learning; rather, motives are things needing reconstruction. An example is God’s call to an individual to fulfill a particular mission. The Christian with the correct biblically based motive will fulfill the call as a follower of Christ with heartfelt desire and love for God (obedience). The concern of the self pertaining to Christian nurture and learning theory is not foremost viewed in a biological or philosophical manner; instead, it describes the self in the relationship with God as Creator of humankind made in His image.

Boehlke (1962) identified the theological foundations toward learning theory as follows: (a) revelation—God’s disclosure of Himself to man occurs between God and man; God’s disclosure and the church belong together; (b) man—learns his identity through relationship with God, is a covenant partner with God, is a sinner, destiny is recreated through Jesus Christ for
eternity; (c) the church—is a covenant community with God, is the body of Christ, is a community with the Holy Spirit; and (d) the Holy Spirit—is the life of God given to man, leads into all truth of Jesus Christ, has freedom to act and move upon man.

After evaluating learning theory through other secular theories (reinforcement theory, conditioning theory, Gestalt theory) based upon theological foundations, Boehlke (1962) posited “an outline of a theory for Christian nurture” (p. 181) called creation-engagement theory. “Creation” connotes God’s divine action, whereas “engagement” symbolizes whole-person learning. In the creation-engagement theory and its theological foundation, Boehlke proposed a definition for the learning process as viewed in Christian nurture, stating, “The concerns of Christian nurture are learned as God creates new selves through the engagement of persons with their field of relationships” (p. 188). The learner and God continue in an active relationship throughout the learning process. The perspectives of learning for creation-engagement theory are:

Responses are actions appropriate to the learner’s engagement of the field of relationships under the creative impulse of God. The learner is an active, intelligent, responsible but sinful self to be understood through observation, self-perceptions, the quality of his relationships and revelation. The context of learning is the church (the covenant community, the body of Christ, the fellowship of the Holy Spirit) through which the learner engages his personal and nonpersonal field of relationships. The dynamics of learning are operative as the learner is existentially motivated to engage and to restructure his fields of relationships, and as these perceptual processes are utilized by the Holy Spirit to bring about encounter and response to Jesus Christ. (Boehlke, 1962, pp. 188-195)
Based on Boehlke’s (1962) learning theory in Christian education, the continuing tenets of Christian developmentalism were significant to measuring the parent/child interactions and perceptions in the QUAN and QUAL phase. The conceptual framework connects the practical and theoretical principles for informal learning by parents in the home environment that will influence the child and adolescent.

**Developmentalism as a Meta-Theory.** Developmentalism applies the entire range of human attributes, presenting the elements and perspectives of and among various developmental theories (e.g., Piaget, Kohlberg, Erickson, and Vygotsky; Ward, 1998). The study of human behavior has yielded evidence about human nature for individuals and in social relationships. A useful taxonomy incorporates physical, intellectual, emotional, social, and moral development.

**The Bible Connects with Developmental Psychology.** Contemporary developmental psychology can usefully and skillfully combine with Christian education with support both biblically and theologically (Dettoni & Wilhoit, 1998). Among the points of connection are: (a) continuous maturation—humans actively participate in their development (Luke 2:52; 2 Pet 3:18); (b) organism versus machine—words in the Bible that connote human thought and humankind as dynamic (heart, mind, loins); (c) motivation—a distinction between human thought and rationale (Matt 15:11-19; Rom 14:17-18); and (d) developmental difference in relation to holistic development—age-appropriate learning (Luke 2:42, 52; 1 Cor 13:11; Heb 6:1; Dettoni & Wilhoit, 1998).

**Background for Christian Developmentalism as a Conceptual Framework.** Development is part of God’s creation of all things (Ward, 1998). Life comprises birth, stages of development, and the passing to death. Creation is dynamic, and through both natural revelation and special revelation, God’s mighty power can be realized as human developmental processes
unfold. In this study, the conceptual framework for informal learning applied to the whole person in physical and spiritual uniqueness. Developmentalism through the field of social science fits well into the framework of informal learning in helping to reveal moral and spiritual development. For example, developmentalism presents development through a study of ecology, showing the importance of social relationships. The basic presupposition from an ecological perspective is that human beings with all components are connected to an integrated whole of God’s system of creation and do not exist as individual entities. This principle depicts how the learning of an individual connects to many sources. The many sources to learn will affect physical, intellectual, emotional, social, and moral development.

The following perspectives, assumptions, and basic elements of Christian developmentalism, as presented by Dettoni and Wilhoit (1998), were essential to this study, not only in the foundational framework, but also to the participants’ survey and focus group responses. Therefore, they appear as quoted from the source:

**Developmental Perspectives Concerning Learning.** Growth comes from within, not from external causes. Development and learning occur based on developmental stages of persons attempting to learn. Meaning, change, growth, development, and therefore learning occur only because learners actively engage themselves with those stimuli and make various adaptations to what they already know, do, and are. Development is an inner change of how one processes experiences. Growth is influenced by our environments. Strong, nurturing, supportive environments will help us grow more quickly, limited only by our genetic make-up. People will develop regardless of their environment, but it is the responsibility of teachers to make that environment as conducive to growth and development as possible. (Dettoni & Wilhoit, 1998, pp. 31-33)
**Developmental Assumptions.** Human beings are more similar than they are dissimilar. Human beings will be only human. Human beings are made to grow. Growth may be uneven. Patterns of development are in the nature of the person. Patterns of development cannot be significantly altered. Human beings are integrated wholes. External environment either enables or hinders development. Development is a basic change in the internal categories of making meaning for oneself out of one’s experiences. Development and learning can be thwarted or stalemated. (Dettoni & Wilhoit, 1998, pp. 33-36)

**Basic Elements of Christian Developmentalism.** Humankind is assured the recognition of God the Father as Creator, the Son as Redeemer, and the Holy Spirit who is helper, encourager, and teacher (Gen 1:26-27; Rom 1:18-30; 3:21-31). Scripture is from God and is the special source of God’s revelation of Himself to all people. Within our environment we find significant influences of certain types of people, for example, parents, other primary caregivers, peers, professors and teachers, pastors, relatives, and community.

Sin seeks to frustrate all of God’s will for the world, including development into all that we have been created to be. Ultimately sin is the root cause of social and environmental evil that hinders positive contributions from environmental stimuli.

In human development, each person is responsible to keep himself or herself developing. No one can blame the social structures, cultural norms, or lack of sufficient stimulation for lack of development.

The reality of cognitive, moral, and spiritual values based on the nature of God are revealed in five major structures that are foundational to the world of all humans:
wisdom, righteousness/justice, mercy, truth, and love (e.g., Prov 3:13, 19-20; Isa 45:18-25; Rom 3:25-26; 5:8). Though creation is God’s action, structures of creation can be discerned by behavioral scientists who scrutinize the created structures of human developments. Human life is valuable because it is created in the image of the Triune God which gives humanity a sense of self-reflective thinking, moral judgment and justice, right and wrong, agape love, community, and communication.

As to contributions of Christian theology in moral and faith development, justice is tempered with agape love; hence, a truly moral individual is one who acts lovingly toward one’s neighbor, not only justly. The true goal for a mature faith is attained through a true referent, God’s Word, as it is the content of faith that is critical to Christian development, not the fact of faith. Developmentalism seeks to find and utilize balance between theological/philosophical and empirical observations, seeing creation as a reflection of the Creator and looking for direction of meaning from Scripture. (Dettoni & Wilhoit, 1998, pp. 36-41)

**Implications of Christian Developmentalism for This Research.** Christian developmentalism from a biblical framework seeks to impart a biblical worldview. Christian developmentalism was critical to examine and explore the knowledge and behaviors of parents in informal learning and the relationship between informal learning behaviors of parents and the formation of a biblical worldview in children and adolescents. The perspectives, assumptions, and basic elements of Christian developmentalism follow the ancient Hebrew model of education of leading, nurturing, and teaching of children (Deut 6:1-9; Jesus’s teachings in the Gospels). An example of how Christian developmentalism was valuable to this research is in the spiritually affirming behaviors measured. Theoretical frameworks—including the knowledge and
understanding of various social learning theories (e.g., Bandura, Lewin, Dewey, Piaget, Kolb) in conjunction with Christian developmentalism—were integral to the knowledge and behaviors of informal learning so that the parent is aware of age-appropriate learning and the holistic needs of the child. Parents must understand that in Christian developmentalism, the child and adolescent are in a dynamic state (never static). Thus, parents should challenge children to learn continuously via informal learning, moving the child or adolescent toward spiritual development and formation of a biblical worldview (Gorman, 1998).

**Conclusion**

A social science theoretical framework guided this study. A theoretical framework was essential to support the integrated body of knowledge concerning the major concepts of this study, which were parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview. The integration of social cognitive theory, experiential learning theory, and Christian developmentalism supported this research through well-established origins and various conceptual models and principles. Above all other guiding theories, the Holy Bible contributed the overarching framework. Further support for this research by related literature follows.

**Related Literature**

**Introduction**

Other principles were essential to understanding informal learning behaviors and the formation of a biblical worldview in children and adolescents. Supporting related literature shows that through the educational format of informal learning by parents, a relationship emerges between informal learning behaviors and biblical worldview formation. (This relationship emerged in the present study, as shown later in Tables 4, 6, and 7.) This study was an examination and exploration of the knowledge and behaviors of parents and the relationship
between informal learning behaviors of parents and teen responses based on recent research by Barna Group and Impact 360 Institute (2018) of adolescents aged 13 to 18 years as to their Christian worldview belief system. Aligned with informal learning and biblical worldview was a range of research, including (a) brain function in babies concerning learning, (b) the different learning ideas about nature and nurture, (c) servant leadership as an attribute, (d) other learning theories, (e) informal learning in other fields of study such as science, (f) seminal works of informal learning and worldview, and (g) the related topic of mentoring. The literature review indicated the importance of this study to advance Christian-life development in children and adolescents. This discussion on related literature followed other crucial concepts of informal learning and biblical worldview. The major concepts addressed in prior research were parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview, all of which interrelate in their concepts and principles and had significance for the findings of this study.

**Informal Learning**

**Pioneering Studies**

Knowles (1950) was the first to study informal learning in adult education. Other pioneering authors and researchers of organizational informal learning include Marsick and Volpe (1999), Marsick et al. (1999), and Marsick and Watkins (2001). English (1999, 2000) pioneered work in spiritually based informal learning in adult education. These seminal authors agreed that informal learning is unplanned and inherent and occurs in socialization (English, 1999; Knowles, 1950; Marsick & Volpe, 1999; Marsick & Watkins, 2001). English, Knowles, Marsick and Volpe, and Marsick and Watkins studied adult education with respect to learning information in ways other than through a formal course. Used in conjunction with informal
learning, incidental learning, such as in work environments, encourages continuous education through socialization, such as asking questions, listening to others, reading instructions or other materials, observing peers, and mentoring (English, 1999; Knowles, 1950; Marsick et al., 1999; Marsick & Volpe, 1999; Marsick & Watkins, 2001). The work of these authors evolved out of the studies of Dewey in 1938 and Lewin in 1935 regarding learning from experience and between individuals’ behaviors and their environments, respectively (Boydston, 2008b; Knowles, 1950; Lewin, 1951; Marsick & Volpe, 1999).

Marsick and Volpe (1999) and Marsick and Watkins (2001) presented a restructured theory of incidental and informal learning based on the 1997 work by Marsick and Watkins (see Figure 10). The restructured theory emphasizing context connected to this study of informal learning behaviors in relation to parents understanding what is involved in the model of learning (informal and incidental learning) and the children and youth as recipients of the directed behaviors.
Figure 10

*Marsick and Watkins’s Informal and Incidental Learning Model Integrated With Cseh*

![Diagram](image)


Figure 11 presents the informal learning model of Marsick and Watkins in 1990, drawing from the early organizational works of Argyris and Schön in the 1970s and the social science theories of Dewey in 1938 and Lewin in 1935 (Marsick et al., 1999). The original informal and incidental learning model shows people learning from experiences when facing new problems. From this approach in work and business life, work is the major impetus and context to interpret the learning experience and begin examination and reflection. In the later adapted model of learning, context becomes center, as integrated with Maria Cseh’s 1990s work in organizational learning theory.
As was shown in Figure 10, when a trigger or experience stimulates the thinking, individuals’ worldviews framing the direction of their thoughts affects the interpretation of the experience and its comparison to prior knowledge (Marsick & Watkins, 2001). The individual interprets to make sense of the entire learning cycle and the decisions, strategies, and solutions.
These learning cycles occur without people’s conscious awareness, with their behaviors from the learning cycle continuously observed by others. The adapted model with Cseh, who studied learning in the business and company setting in Romania, emphasizes the context in which Cseh found most learning stimulation occurred. The adapted informal and incidental learning model applied to this study concerned the home environment and parent knowledge and behaviors of informal learning as well as the relationship between informal learning and biblical worldview formation in children and adolescents. According to Cseh, ambiguity in the context of life stimulates learning by the informal learning process.

Following the thought of education and awareness of how the learning cycle develops and sustains itself are expected outcomes from the informal learning behaviors. Although Knowles (1950) did not directly address an informal learning model, teaching strategies and informal education sources emerged from adult psychology studies. Knowles defined an informal course as a learning experience that occurs when people come together in several meetings to learn a topic or topics based on a desire to know. In the informal education course, there is a context from which thoughts are triggered and the learning cycle occurs among group members, along with behaviors through which the members learn from one another and the situation (Marsick & Watkins, 2001).

Of the four roles of informal courses presented by Knowles (1950), two were related to this study of informal learning behaviors and the formation of a biblical worldview in children and adolescents. One role is that the person in the informal course develops a special skill when desired. A key component of seeking education for a special skill is practice. For example, a government agency wishing to train large numbers of people in disaster skills might provide many small trainings of volunteers to educate by skills practice. Another role of an informal
course, as presented by Knowles, is the desire to bring about a change in attitude. When learning acquisition occurs through individual experience made real through others’ behavior, creative thinking as a group, pressures or differences of opinion in a group, and free expression, attitude change is likely. For example, a person who wants to associate with others in a more positive manner would more likely adopt a change of attitude to practice better relations than enroll in a formal psychology course to learn about behavior. The informal learning behaviors of parents directed toward children and adolescents will be important in these two roles according to the parents’ desire for the youth to develop special skills for living and maturing. In this way, the child or adolescent forges a Christian worldview of life and working toward changing ungodly thoughts and desires.

**Descriptions of Informal Learning**

Doyle (2005) described learning as a way of being rather than having, meaning not just possessing knowledge, but being in a relationship with the one from whom the learning derives. Learning in an informal educational setting can be either intentional or unintentional (Anthony, 2008; Cross, 2007; Doyle, 2005). Doyle asserted that much of an individual’s learning in daily life occurs incidentally or unintentionally. Anthony (2008) equated the least-recognized style of learning, informal learning, with socialization. Individuals learn through their experiences by living in a particular culture. Cross (2007) asserted, “Workers learn more in the coffee room than in the classroom” (p. 16), acknowledging that whether learning is intentional or unintentional, it is a “both-and” concept and part of life.

Next to the ancient and honored idea of learning as the acquisition of knowledge was 19th-century research from the fields of psychology and professional education (Ward, 1998). In the 1800s, learning as a process of connecting responses to stimuli was a new discovery. The
brain responds in a certain way when presented with a particular venture, with this connection evidence that learning has occurred. The study of the brain in learning and the process of connections make it possible to view learning as a discovery, building on ideas and reorganizing concepts. Dettoni and Wilhoit (1998) addressed a developmental perspective of learning essential to the concept of informal learning: the contribution of environment to the learning process. Whether parents, school teachers, church leaders, or members of the community, teachers influence learning but do not cause an individual to learn. Learning experiences occur only when learners engage themselves with the stimuli, adapting already-known experiences.

Informal learning is “learner initiated, occurs on an as-needed basis, is motivated by intent to develop, involves action and reflection, and does not occur in a formal classroom setting” (Noe et al., 2013, p. 327). From a work-related and business-oriented viewpoint, Noe et al. (2013) reported that as much as 75% of learning occurs from informal learning. Closely related to informal learning is spontaneous learning, to which Doornbos et al. (2008) referred in their study on the workplace. Spontaneous learning occurs through inner workings and social interactions taking place in the work environment. In an informal learning model, spontaneous learning, as opposed to deliberate learning, happens in the absence of having a goal of learning.

Sevdalis and Skoumios (2014) described informal learning as “the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from both daily experiences and exposure to the environment” (p. 14). However, the researchers found no organization or systematic direction involved; instead, they acknowledged that informal learning accounts for the majority of knowledge gained in a person’s lifetime. Following a scientific orientation, Nicolaides and Marsick (2016) found informal learning occurring “naturally and organically in response to challenges that require adapting knowledge and expertise or acquiring
new unanticipated capabilities” (p. 13). Other scholars and theorists identified informal learning as “life-long learning;” “learning from daily life activities;” “unstructured;” “mostly unintentional;” “natural accompaniment to everyday life;” “self-directed;” “incidental;” “tacit learning;” “any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions;” and “memory as an encounter with eternal truth and identity” (Brancatelli, 2015, p. 52; Fahlman, 2013, p. 3; Peeters et al., 2014, p. 181; Plavšić & Diković, 2016, p. 73).

**The Importance of Informal Learning**

The first acknowledgment of family and the community in the educational process is the Bible. In Genesis 1:27-28 and Genesis, Chapter 5, the family came into being. In Genesis 18:18-19, God gives His declaration for the “household” to become the entity by which children will be directed. Other Scriptures referring to education through the family life are Deuteronomy 4:9; 6:4-7; Proverbs 1:8; 6:20; Psalm 44:1; 78; Ephesians 6:4; and 2 Timothy 1:5; 3:15. Based on the Jewish views of family and education, informal learning came about through daily living (Anthony & Benson, 2003). Mosaic Law required parents to be intentionally engaged in their children’s teaching of the Law. Hebrew families learn by example throughout daily life (Deut 6:5-8; 11:19; 31:12). During Mosaic festivals, informal learning from the community occurred (Deut. 16:16). Moloney (2016) asserted that forming a relationship with God and identity in God is a biblical process of informal education.

Schinkel et al. (2016) presented a basic educational ontological and epistemological perspective concerning humans aligned with informal learning through the family. Humans are the only creatures who, in addition to rearing their children, also educate them; naturally, questions arise about how to teach the basics of life’s meaning and how to live. Schinkel et al.
argued, “If education is to contribute to meaning in life, it needs to do more to enhance children’s sensibilities, stimulate their imagination, and cultivate appropriate emotional dispositions” (p. 415). Peeters et al. (2014) identified the effects of informal learning on different life domains, finding that such learning enhances the appreciation of one’s learning capabilities, self-understanding, self-esteem development, and confidence for inclusion into social life. These attributes are critical components of early life learning derived from parental direction in the family setting. Ward (2012) offered insight into the process of teaching and learning in the informal learning setting of the family. Beyond delving into the research of the complex processes of learning and brain cells, Ward discussed the social experience of learning, touching on informal learning, stating, “Learning is clearly more than a cause-effect process in the mechanisms of the brain” (p. 47). Ward continued, “Learning is a natural phenomenon. …[It] cannot be turned off and on by choice any more than can breathing or the beating of one’s heart” (p. 47).

**Informal Learning Frameworks From Which to Gain Insight**

Harris (2009) presented group socialization theory as “how children become socialized and how personality gets modified during development” (p. 158). Foundationally, Harris believed that children learn how to behave from group identification, with the assertion that socialization is primarily what children “do to themselves,” not something that is “done to children” (p. 159). From group socialization theory, it is apparent that children learn behaviors in the presence of people. Moloney (2016) discussed the concept of social transformation through biblical reference to the Hebrew Bible (i.e., the Law, prophets, and wisdom texts), asserting the Hebrew Bible teaches how to learn. Social transformation, education that God divinely intends as recorded in Genesis 18:19, begins with individual transformation through knowing God
personally and continues throughout one’s life. Through social transformation, one can influence the community at large. The transformative process effects positive change and empowers others at the societal level. Social transformation is part of and intersects with informal learning. For example, Moloney noted that social transformative developed differently in the NT versus the Law of the OT. The NT primarily employs a discipleship method for informal learning—for example, the disciples learned under the informal teaching of Jesus while, at the same time, also teaching the message of Christ. The OT directed parents to teach by example (informal learning) and formally.

Noe, Tews, and Michel (2016) presented an informal learning study based on trait activation theory, looking at individual differences (behaviors) and workplace environment characteristics. Noe et al.’s research was relevant to informal learning in this study with its focus on informal learning behaviors and environment. As seminal studies of Marsick and Watkins (2001) of informal learning (a model as adapted with Cseh) developed a focus on context, Noe et al., too, highlighted context. Noe et al. asserted that informal learning is learner-initiated and places importance on context; accordingly, it is influenced by behaviors and environment.

Noe, Tews, and Michel (2016) examined individual differences and the influence of the work environment (setting and circumstances) on informal learning. The researchers drew upon trait activation theory to examine informal learning from the perspective of the person in a particular situation. Noe et al. explained, “Trait activation theory suggests that situational factors, such as those found in the work context, can act as moderators by amplifying or constraining the influence of individual differences on informal learning” (p. 2). The two situational factors found to influence the work environment were job autonomy and training climate. “Learning goal orientation” shows the individual’s preference to advance in competence by new
accomplishment acquisition and mastering new conditions. “Prove goal orientation” allows someone to demonstrate competence and avoid goal orientation by not showing incompetence and circumventing negative judgment from others as to personal abilities. Results of Noe et al.’s study were that age and general mental ability were negatively related and learning goal orientation positively related. The study yielded interesting findings on job autonomy and training climate as to goal orientation, with job autonomy by “avoid[ing] goal orientation interaction” and job autonomy by “prov[ing] goal orientation interaction” not statistically significant (p. 10). The cross-level interaction training climate to learning goal orientation yielded significant and positive results related to informal learning. Further results showed training climate to prove goal orientation not significant, with the relationship between training climate to avoid goal orientation and informal learning positive and significant.

Other findings relevant to this study were that goal orientation, training climate, and job autonomy yielded significant, positive, direct relationships with informal learning (Noe, Tews, & Michel, 2016). Further results indicated a supportive climate is important and necessary for workers to engage in behaviors of informal learning. With a positive climate and biblical training through nurturing, parents can instill in their children a mindset toward developing a proven goal orientation and thus engaging in learning through positive motivation and Godly desires.

**Parents as Nurturers and Servant Leaders**

**Nurturing**

As used in the present study, nurture is the act of loving, caring, and guiding children and youth (Siegel & Bryson, 2018). The works of two scholars, a neuroscientist and a psychologist, contributed a brief biological understanding of what makes nurture possible and how it happens in early life. Eliot (1999), having studied brain plasticity in babies and growth, and Siegel...
(2012), who researched the mind and relationships, found that parental nurturing is essential to early-life development. Eliot discovered that, in addition to the involvement of genes in brain development, experience is an important factor in the molding of the neural circuits. The brain is made to learn from birth, with genes programming the neural development and environmental factors shaping the quality of the neural development. Studies from visual development and the brain have shown the nature/nurture concept and how nurture dominates when there is competition among genes in the neural synapses. These studies of visual development clearly show that environment in the early years of life directly influences brain structure and function.

Siegel (2012) agreed that social experience through relationships shapes the mind. Siegel considered the mind as the core of energy flow and information because human relationships shape the neural processes. Parents’ mindful traits (e.g., being aware of immediate situations, being nonjudgmental, being nonreactive, being able to observe and describe internal processes, and self-observation) enable secure attachment with their children. By 1 year of age, a child’s brain has developed implicit learning, leading to secure attachment behavior. As development occurs, those synaptic processes and early implicit learning influence the child’s interactions and reinforce mental functions. Siegel’s attachment theory studies show the effects of early-in-life relationship experiences, such as emotional well-being, competence in social situations, intellectual functioning, and resiliency in facing problems.

Gardner (2006) affirmed the nurturing issue of children in early life in an educational study of nurturing intelligences in the measurement profile of young children in Project Spectrum. The development and nurture of cognition are best achieved within and through social domains, valued disciplines provided for individuals. Although Gardner mentioned parents in the tutoring of children in their school education, family life and direct one-on-one presence (a
subvariable of this study) were not components of the social domain or the nourishing environment. Harris (1995, 2009) did not view the parent as a component in developing the child’s personality that would have lasting effects. Rather, Harris asserted that parents need to spend time with their children beyond the necessary care, such as talking and reading to them; however, the researcher found no development or lifetime influence of these behaviors. Harris encouraged parents to love their children, enjoy them, and educate them as well as possible, conceding, however, that “how they turn out is not a reflection on the care you have given them” (p. 329).

**Spiritual Nurturing and Servant Leadership**

Spiritual nurturing was a paramount concern for the present research study. Spiritual nurturing is likened to spiritual leadership, which Jesus taught through servanthood (Sanders, 2007). Isaiah 42 identifies the characteristics of Jesus, the coming Messiah—specifically, dependence on God, God’s approval, modesty, empathy, optimism, and God’s anointing. Parents have been given God’s approval, as declared in Deuteronomy 6 and Psalm 78, with the last verse in Psalm 78 showing David skillfully leading. Drovdahl (1998) identified the teacher’s role as that of servant leader—in this case, providing spiritual nurturing and education. In the roles of servant and leader, parents (or spiritual nurturers and educator) apply their influence to all situations of life as a model for the child or adolescent. Parents in the role of spiritual nurturing can glean important principles from the knowledge of leadership and servant leadership.

**Leadership.** The concept of leadership has received various definitions among leadership scholars. Howell (2003) described leadership as identifying a need and “based upon one’s governing convictions, exercis[ing] initiative to address that concern” (p. 1). The leader influences others to join in to accomplish an objective, with two characteristics, initiative and
influence, central to leadership in all contexts. Whether leadership is constructive or unhealthy bears upon the leader’s character, motives, and agenda. Sanders (2007) and Ledbetter et al. (2016) also mentioned the characteristic of influence in their leadership descriptions. Acknowledging that definitions of leadership change over time, Ledbetter et al. presented a definition for the 21st century: “an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes” (p. 5). Sanders described leadership as “the ability of one person to influence others to follow his or her lead” (p. 29). Examples of characteristics are self-confidence, autonomous decision-making, ambition, creativity, independence, and personal reward-seeking. Bennis (2009) and Tidball (2012) mention the quality of vision in their descriptions of leadership, with Bennis asserting, “Leadership revolves around vision, ideas, and direction, and has more to do with inspiring people as to direction and goals than with day-to-day implementation” (p. 132). According to Tidball, leadership involves “vision and strategic thinking…[and] is proactive” (pp. 31-32). Burns (1978) described leadership as “the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers” (p. 425). Finally, De Pree (2004) presented the characteristics of leadership as service and responsibility to future leaders.

**Servant Leadership.** Greenleaf (1977) developed the concept of servant leadership through explorations of college education, when the words *serve* and *lead* emerged as prominent. Greenleaf described a servant leader as one who first has the “natural feeling” (p. 13) of service as a goal, leading consciously into thought to lead. Related to this study was an assertion by Greenleaf that aligned with the concept of parental nurturing and education. In discussing the
characteristics of the servant leader—for example, listening, understanding, self-reflection, acceptance, empathy, foresight, perception, and persuasion—Greenleaf asserted that the educator should nurture the potential in others to become servant leaders, a teacher/leader method that could give a person a new purpose or change one’s life course. Ledbetter et al. (2016) found that servant leadership resonated with Christian leadership in its explicit connection with the NT, quoting Mark 10:45: “For even the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many.” Tidball (2012) acknowledged that Christian leadership is servant leadership modeled by Jesus, citing Matthew 20:25-27, and noting that Jesus Christ, the ultimate servant leader, displayed many servant-leadership attributes in humility and service (John 13:1-17; Phil 2:7). Rather than the term servant leadership, Sanders (2007) denoted spiritual leadership, and Howell (2003) specified biblical leadership; both scholars provided the qualities of servant leadership, such as confidence in God, humility, obedience to God, seeking God’s will, integrity, and caring for others. Sanders and Howell acknowledged that leadership in service to others can take place in many roles and settings. The servant leader exhibits natural qualities, such as self-confidence and independence, merging with spiritual leadership. However, the divine guidance of God is required.

Two nonfaith-based studies showed similar characteristics for those who lead in servant leadership, with one setting corporate and academic and one an NHL team (Ben-Hur & Jonsen, 2012; Crippen, 2017). The studies identify a servant leader as a person of character, putting others first and displaying moral authority and accountability through skilled communication, compassion, systems thinking, humility, vision, and skilled teaching, cultivating these qualities in followers. Both sets of scholars acknowledged that servant leadership merited consideration for effective leadership under challenging situations.
Caldwell et al. (2012), Rai and Prakash (2012), and Jit et al. (2017) discussed servant leadership with a focus on the followers. Jit et al. stated that a servant leader with “empathy, compassion, and altruistic calling and healing, builds a mentally and emotionally healthy workforce but inculcates a sense of cohesiveness, collaboration, and sustainable relationships among followers by understanding and addressing their feelings and emotions” (p. 81). Rai and Prakash asserted that servant leaders motivate their followers, thereby influencing them to reciprocal action. Caldwell et al. acknowledged a focus of servant leadership “on the good of those who are being led and those whom the organization serves” (p. 180).

**Spiritual Nurturing by Parents**

Leadership principles combine with spiritual nurturing. In spiritually nurturing their children and adolescents, parents should develop the spiritual formation process at all times toward biblical worldview formation. Tripp (2016) stated, “You must be committed as a parent to long-view parenting because change is a process and not an event” (p. 9). Stonehouse (1998) stated that the goal of spiritual nurturing by parents was not religious teaching or Christian education, but a spiritual formation during the child’s life. Greenleaf’s (1977) serve and lead principle presents the parent nurturing the child as a spiritual formation parenting practice. Durbin (2001) recommended that teaching children with Scripture can begin at 2 years of age through the teen years in age-appropriate and creative ways. In the book *Parenting With Scripture*, Durbin focused on many behaviors as a reflection that God’s Word covers all the childhood and youth topics necessary to address as the child or youth grows spiritually. Spiritual nurturing is an intentional process by the parent; in other words, parents must have knowledge of what comprises spiritual nurturing and education and be aware of its constant presence for the child. Through individual journeys of parent/servant leader/spiritual nurturer/educator, parents
will engage in continuous spiritual formation and spiritual nourishing of self as well as the child or adolescent.

There are nonfaith-based instructional guides to “building mental strength” in children (Morin, 2017, p. 5). Morin (2017) discussed being twice widowed as a young adult and raising foster children as a single parent. As a licensed social worker and psychotherapist, Morin wrote 13 things parents should not do to raise mentally strong children (e.g., don’t condone a victim mentality, don’t parent out of guilt, don’t allow fear to dictate their choices, don’t expect perfection, don’t shield their child from pain). There are principles to be learned from secular writings when foremost taking Scripture into account.

Another secular piece of literature comes from Siegel and Bryson (2018). The scholars shared a conceptualization based upon interpersonal neurobiology—“multidisciplinary research from around the world” (pp. 3-9)—that focuses on the “no brain” and “yes brain” factors (p. 13). According to Siegel and Bryson, “the four fundamentals of the yes brain” cultivated in the child are:

(a) Balance: a skill to be learned that creates emotional stability and regulation of the body and brain; (b) Resilience: a state of resourcefulness that lets us move through challenges with strength and clarity; (c) Insight: the ability to look within and understand ourselves, then use what we learn to make good decisions and be more in control of our lives; (d) Empathy: the perspective that allows us to keep in mind that each of us is not only a ‘me,’ but part of an interconnected ‘we’ as well. (Siegel & Bryson, 2018, pp. 186-187)
**Mentoring**

Estep (2008b) described mentoring as reaching a higher level of maturity in the teaching/learning relationship, assigning mentoring to the category of spiritual nurturing and education. Drovdahl (1998) agreed with this stance on maturity in referring to mentoring. Drovdahl used the terms discipleship and mentoring in tandem, with mentoring viewed more in secular scholarship and discipleship in Christian scholarship, yet with a similar relationship. Discipleship/mentoring is best described in relation to the NT as taught by Jesus and practiced in the early church. In the NT early church, the perception of discipleship/mentoring was more with respect to followership and viewed developmentally in Luke 2:52. Jesus was the model Luke described, saying that He grew in wisdom as He grew in stature (Luke 2:52).

**Implications for This Study**

The major concepts of this study—parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview—all fall within the combination of servant leadership, spiritual nurturing, and mentoring. Integrating spiritual nurturing through the behaviors of informal learning toward the child or adolescent is a means to develop the spiritual formation process and formation of a biblical worldview. Worldview and biblical worldview discussions follow to apply this literature review to the argument of this research: that the avenue by which biblical worldview formation can take place at a young age must start in the home environment where the individual grows holistically and learns the application of Christian principles for biblical worldview formation in a constantly changing world.
Worldview, Biblical Worldview, and Implications for This Study

Introduction

For this brief discussion and review of related literature concerning worldview, it is necessary to view worldview from both a synchronic and a diachronic theme (Hiebert, 2008). This means learning about worldview, focusing on a specific time period, and assessing the development and evolution of worldview over time, respectively (Hiebert, 2008). Biblical worldview and its implications for this study follow.

Roots of Worldview

Paul G. Hiebert. As the study of cultures developed over time, terms emerging in the literature included ethos, cosmology, outlook on life, world order, world picture, cultural core, collective unconsciousness, and worldview. Focusing only on the roots of philosophy with an emphasis on cognitive aspects of cultures presented problems to the study of worldview (Hiebert, 2008). These philosophical roots disregard the affective and moral facets and how the dimensions interrelate. Another concern with the study of worldview is the lack of emphasis on the oral aspects of cultures, which, in many cultures, are more powerful than written words. An example important to Christian leadership and education that strengthens the argument for emphasizing the oral aspect of cultures in worldview study is found in Scripture in the story of creation: “And God said…” indicates the power of spoken word from the beginning of time. Lastly, the problem of worldview having meaning both corporately and individually can be confusing to study. Humans hold individual worldviews, with their core beliefs, values, and traditions shaped primarily by the social structures of cultures.

Hiebert (2008) indentified six culturally and socially related functions of worldview. First, Hiebert asserted, “Worldviews are our plausibility structures that provide answers to our
ultimate questions” of identity, world nature, wrongs in the world, and remedies for solving problems to obtain wholeness in life (Walsh, 2006, p. 244). Second, worldviews give emotional stability, especially as evidenced by life rituals such as birth, marriage, death, and celebrations, acting as renewals and emotionally reinforcing beliefs (Hiebert, 2008). Third, worldviews function to validate deep-lying cultural beliefs and values that direct behavior. Fourth, worldview integrates the cognitive, affective, and evaluative views the human holds of reality, however compartmentalized those views may be, which helps to make sense of the world. Fifth, worldview provides direction and stability in selecting assumptions that conform to one’s society to conserve and preserve traditions while rejecting any assumptions that will be detrimental. Last, worldview provides psychological consolation and advocacy, giving comfort and a sense of the world as a personal home. Hiebert argued that a worldview crisis occurs when the functions of the individual- or culture-level experience conflict with underlying beliefs and worldview themes, leaving a gap between the worldview and the sense of reality.

Knowing the roots of a notion as important as worldview is essential; perhaps more valuable is understanding where worldview exists within the person. Hiebert (2008) defined worldview as “the fundamental cognitive, affective, and evaluative presuppositions a group of people make about the nature of things, and which they use to order their lives” (p. 15). Hiebert conceptualized the levels of the presuppositions that make up the belief system of a person through an anthropological view. The top level consists of visible elements, such as behaviors, below which are rituals that define one’s culture. Under the surface level are belief systems, a type of encoding of cultural knowledge. Finally, under the systems of beliefs are structures not visible that “underlie the explicit culture—the worldview” (pp. 32-33; see Figure 12).
**Figure 12**

*Levels of Culture*

![Levels of Culture Diagram]

*Note. From Transforming Worldviews: An Anthropological Understanding of How People Change, by P. G. Hiebert, 2008, p. 33, Fig. 2.1. Copyright 2008 by Baker Academic. Reprinted with permission.*

**Biblical Worldview**

Another conceptualization helps give meaning to the research study of informal learning behaviors by parents and the formation of a biblical worldview in children and adolescents. Figure 13 presents the cognitive, affective, and moral levels working together as judgments are made about right and wrong and other experiences based upon the implicit, explicit, and sensory levels of cultural products, rituals, belief systems, and core worldview.
Naugle (2002) discussed three Christian traditions influencing worldview thought: (a) an exploration into Christian meaning through biblical perspectives to have worldview shaped into minds, (b) a study of worldview in a pluralistic age of many cultures, and (c) humans of all cultures seeking self-identity consequently experiencing conflict. Hiebert (2008) and Naugle agreed that the Christian worldview affords an individual meaning of life. A Christian worldview is a biblical worldview based on the unifying truths of Scripture as God’s story, with the truths from God’s Word comprising the “diachronic worldview theme” (Hiebert, 2008, p. 266). As a synchronic theme, an individual’s worldview based on the truths of God’s Word affirms God’s covenant with Abraham and the truths of the NT through Jesus Christ, the same God revealed to humankind for salvation. The work of salvation through Jesus Christ is where spiritual formation and Christian worldview formation begins. The heart of the individual is where the worldview
exists: “The human heart is its home, and it provides a home for the human heart” (Naugle, 2002, p. 330). The knowledge, reason, belief systems, rituals, behaviors, and cultural products all formed historically, philosophically, theologically, and biblically create the “semiotic system” (Naugle, 2002, pp. 329-330). The semiotic system (how all the parts or signs come together to make meaning) forms the worldview and, for this study, the Christian worldview.

A Brief Word Concerning Worldview Versus Mindset

Mindset is “the direction of one’s thinking” or “a fixed state of mind” (Merriam-Webster, 2020d). As a comparison term, Pazmiño (2008) defined worldview as “a collection of underlying presuppositions from which one’s thoughts and actions stem” (p. 85). Hiebert (2008) asserted that the mental level of worldview underlies the system of beliefs comprising mindset as revealed through the behavior patterns and cultural products. Story et al. (2014) suggested that the concept of mindset indicates “behaviors, strategies, and practices” (p. 132). Mindset enables the “mental fluidity” (p. 133) to be open and adaptable to possibilities.

Summary and Implications for This Study

This research study focused on the overarching concepts of informal learning behaviors and biblical worldview formation. Informal learning emerged in this literature review as evidence-based related to education and the ability to learn biologically and developmentally. Strong support followed from parenting studies (e.g., Barna, 2003; Crouch, 2017; Tripp, 2016; Tripp & Tripp, 2008). Having evidence-based research on the educational format of informal learning brings scholarly strength, filling the gap in the literature specific to evangelical Christianity in leadership and education via informal learning for children and adolescents. Likewise, evidence-based studies of worldview relevant to informal learning supported the focus of this research for future study and direction for Christian leadership and education.
Hiebert (2008) noted the importance of understanding transformation in relation to what constitutes the meaning of worldview. Spiritual transformation is a process that should start early in life (Anderson et al., 2017; Barna, 2003; Barna Group, 2017; Barna Group & Impact 360 Institute, 2018; Evans, 2014; Kinnaman, 2011). As Hiebert stated, “A biblical view of transformation…is both a point and a process” (p. 310). Through a worldview perspective, a parent helps the child and adolescent to begin forming a biblical worldview. Guidance comes from informal learning, the spiritually affirming behaviors of accountability, one-on-one presence, patience, consistent discipline, and tone of voice. Early-life biblical worldview formation can lead to lifelong obedience, discipleship, and spiritual accountability in every area of living. This beginning formation and process of transformation will encompass all levels of the cultural view of worldview—that is, explicit behaviors, rituals, belief systems, and implicit worldview themes. Through spiritual nurturing and the educational format of informal learning by parents, a relationship that leads to spiritual transformation and lifelong spiritual formation for children and adolescents can exist. Romans 12:1-2 is one key scriptural example of the foundation of biblical worldview formation through spiritual nurturing and informal learning, as Apostle Paul exhorts individuals to “be transformed by the renewing of your mind.”

Rationale for the Study and Gap in the Literature

Rationale for the Study

Children and youth of current and future generations need the spiritual nurturing that started with biblical principles, as declared in Deuteronomy 6. A 2016–2017 study on teens indicated the significance of and rationale for this research on informal learning behaviors and biblical worldview formation and the crucial need for informal learning by parents to the present generation of children and youth ages 2 to 18 years. Barna Group and Impact 360 Institute
(2018) conducted qualitative field studies of focus groups of teens ages 14 to 17 years, Christian and non-Christian, with two groups in Atlanta, Georgia, and two groups in Los Angeles, California. The goal of the study “was to get a sense of [the teenagers’] priorities for life and perspectives on faith, to inform design of the quantitative survey instruments” (Barna Group & Impact 360 Institute, 2018, p. 111).

The quantitative portion was two “nationally representative studies” of 1,490 U.S. teenagers ages 13 to 18 years in 2016 and 507 U.S. teens in the same range in 2017. Both surveys were an online consumer panel with data “minimally weighted to known U.S. Census data in order to be representative of ethnicity, gender, age, and region” (Barna Group & Impact 360 Institute, 2018, p. 111). The organizations conducted three other research studies in conjunction with these qualitative and quantitative studies, as follows:

- Interviews with 335 U.S. Protestant youth pastors in 2016–2017, culminating in a pastor panel and participation in online surveys
- Online consumer panel survey with 403 Christian parents in 2016 meeting four criteria and the definition of *engaged Christian*
- Online panel survey with 1,517 adults in the United States ages 19 and older; data were minimally weighted to known U.S. Census data to be representative of ethnicity, gender, age, and region

The following are data and statistics reported by Barna Group and Impact 360 Institute (2018) significant to this research on informal learning behaviors of the study subjects (parents) and Christian worldview formation in children and youth ages 2 to 18 years:

Gen Z are those individuals born from 1999 to 2015. Gen Z is now America’s largest generation at about seventy million. Research reveals that only 4% of Gen Z have a
biblical worldview. This compares with Baby Boomers at 10%, Generation X (Gen X) at 7%, and Millennials at 6%. Gen Z doubles in percentage to that of U.S. adults in identifying as atheist. More than half of the Gen Z population state “not too” (27%) or “not at all” (27%) important as to perception or engagement in church. Thirty-eight percent of church-going teens agree that church is overprotective of teenagers. Twenty-four percent of church-going teens agree the faith and teachings encountered at church are “shallow.” Twenty-one percent of Gen Z described the church through choosing an image of the Bible being taught. As to morality and values, only 34% believe lying is wrong. Twenty-four percent believe “what is morally right and wrong changes over time based on society.” Fifty-eight percent of teens agree “many religions can lead to eternal life” and that “there is no one true religion.” Gen Z state that “how we feel determines what is real.” Fifty-one percent of the teen population agree that the ultimate goal of life is happiness. As to technology and social media, 57% of teens use screen media four times per day. Thirty-nine percent of teens verbalize that viewing other people’s media posts “makes me feel bad about the lack of excitement in my own life.” As to gender and sexuality, 12% describe their own sexuality other than heterosexual. Thirty-three percent state gender is how one feels, not about birth sex. Twenty percent of Gen Z state “homosexual behavior is morally wrong.” This compares with 32% of Gen X and 25% of Millennials. (pp. 10-71, 111-112)

A Gap in the Literature for Informal Learning in Evangelical Christianity Concerning Children and Adolescents

The focus population of this study was children and youth ages 2 to 18 years, with the study intervention directed to this group and the relationship sought based upon responses from
youth ages 13 to 18 years. Children and adolescents can shape society and the foundations of spirituality for Christian values, beliefs, and behaviors if parenting and mentoring have at their foundation that “interpersonal relationships matter” (Kinnaman, 2011, p. 13) and informal learning is a key concept via leadership and education. Together with scientific advances in medicine and psychiatry, there is evidence that the role of “social experience, in shaping the mind” (Siegel, 2012, p. xv) where informal learning is involved promotes emotional well-being. Kinnaman and Lyons (2016) stated, “All of us together as Christ-followers have an amazing opportunity to shape the next decade of Christian witness in the world” (p. 22).

A gap in the literature in evangelical Christianity for leadership and education via informal learning created a fracture in the knowledge of informal learning in the spiritual nurturing of children and adolescents (Anthony, 2008; Anthony & Benson, 2003; Aown, 2011; Boydston, 2008a; Boydston, 2008b; Conlon, 2004; Doornbos et al., 2004; Doornbos et al., 2008; English, 2000; Fahlman, 2013; Grosemans et al., 2015; Harris, 2009; Illeris, 2015; Knight, 2006; Lewin, 1951; Marsick & Volpe, 1999; Montoro, 2013; Nash, 2009; Noe et al., 2013; Noe et al., 2016; Pazmiño, 2008; Peeters et al., 2014; Plavšić & Diković, 2016; Rogoff et al., 2016; Schinkel et al., 2016; Tett & Burnett, 2003; Thomas & Pattison, 2013; Westerhout et al., 2010; Zervas, 2013). There was no statement as to a lack of informal learning in evangelical Christianity scholarly works; however, through stated “practical implications for Christian educators” (parents, in this context), Estep (2008a) indirectly addressed the lack of study in informal learning for evangelical Christianity. The scholar asserted that “Christian educators should endeavor to build a biblical rationale for education in the church based on the educational principles reflected in the biblical narrative” (p. 69). This chasm of informal learning in evangelical Christianity toward children and adolescents led to a paucity of literature connecting
informal learning as an avenue of Christian-life development. In the present post-Christian (postmodern) culture, informal learning with its origins in the ancient Hebrew culture providing the daily leadership, spiritual nurturing, and education of children and adolescents, has potential for providing the scholarship toward learning theory in Christian leadership and education toward Christian-life development.

This researcher sought to provide insight, wisdom, and further scholarship toward informal learning theory in Christian-life development through an examination and exploration of the behaviors of informal learning by parents and the relationship between the informal learning behaviors of parents and the responses of youth in the 2016–2017 surveys by Barna Group and Impact 360 Institute (2018). This study’s findings added to the literature on informal learning, specifically in the area of evangelical Christianity. This research created the potential for newly developed principles of informal learning and informal learning theory that will invoke lifelong Christian transformation and make it possible for further Christian-life development of the present and future generations of children and adolescents.

**Conclusion**

This review of the literature presented the major concepts of parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview. This review showed that biblical worldview formation can occur at a young age, starting where the individual grows holistically and learns the application of Christian principles for biblical worldview formation in a continually changing world. The Holy Bible was the overarching foundation of the intersecting major concepts of parents, informal learning, leadership, spiritual nurturing and education, and biblical worldview, with the supporting seminal and more contemporary works of literature. In addition, three major theoretical perspectives and conceptualizations served as a framework for
the research to enhance and add to the body of knowledge on informal learning in evangelical Christianity (Bandura, 1977; Dettoni & Wilhoit, 1998; Kolb, 1983). The overall goal of this study was to inform, through evidence-based study and education, parents and society of the crucial concepts of instilling biblical worldview into the young generations for lifelong biblical worldview formation and Christian-life development. Fulfilling this goal enables the present and upcoming generations of children and youth to keep the faith for future generations, all to the glory of God (2 Tim 4:7-8). Further, the application of these findings can enable all children and adolescents to experience the joy and hope of the Lord throughout life, despite earthly problems and trials, becoming strong and solid leaders and educators themselves (Ps 16; 2).

**Profile of the Current Study**

This research concerned informal learning by parents in the home environment and the nurturing and teaching of children and adolescents and their formation of a biblical worldview. The purpose of this explanatory sequential mixed methods research was to examine and explore the knowledge and behaviors of informal learning of the participants (parents and/or legal guardians) in five states in the U.S. Southeast. Based on the findings, the researcher could determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents (through and as evidenced by recent Gen Z statistics in 2016–2017), and subsequently, from the dominant QUAN phase, seek clarification and perspectives of QUAN findings in the QUAL phase (as evidenced by semistructured and structured interviews).

Guiding the study were three RQs focused on knowledge and behaviors of the study participants in a specific population and sample, a relationship between variables of informal learning and biblical worldview, and further expansion and clarification of these variables by
interviews of RQ1 and RQ2 findings. An extensive review of literature indicated a gap for informal learning (Anthony, 2008; Anthony & Benson, 2003; Aown, 2011; Boydston, 2008a, 2008b; Conlon, 2004; Doornbos et al., 2004; Doornbos et al., 2008; English, 2000; Fahlman, 2013; Grosemans et al., 2015; Harris, 2009; Illeris, 2015; Knight, 2006; Lewin, 1951; Marsick & Volpe, 1999; Montoro, 2013; Nash, 2009; Noe et al., 2013; Noe et al., 2016; Pazmiño, 2008; Peeters et al., 2014; Plavšić & Diković, 2016; Rogoff et al., 2016; Schinkel et al., 2016; Tett & Burnett, 2003; Thomas & Pattison, 2013; Westerhout et al., 2010; Zervas, 2013).

Chapter 3 presents the research methods. QUAN phase data collection was by survey administration and participant (parent) responses, with analysis through SPSS to yield findings as presented in Chapter 4. Findings of the QUAN phase guided the development of interview questions for the QUAL phase. Participant perceptions and expressions in the focus group interview clarified and gave meaning to the QUAN findings concerning spiritually affirming behaviors and the relationship between informal learning behaviors and biblical worldview formation of children and adolescents. The foundations of theological and theoretical supporting literature of this study and findings as discussed in Chapter 5 were of value not only in this study, but in (a) the future nurture and education by parents through informal learning for biblical worldview formation of children and adolescents and (b) a foundation to further this research study through theory development and education and leadership. Chapter 3 presents in detail the study procedures through evidence-based research principles and practice.
CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

This chapter presents the research processes. This investigator identified a key concept concerning parental interaction with children and adolescents, which led to this argument: The role of Christian leadership and Christian education via informal learning by parents, as evidenced by spiritually affirming behaviors, can have a major influence on the spiritual development of children and adolescents and, subsequently, biblical worldview formation. The literature review showed a disparity on informal learning in evangelical Christianity for leadership and education (Anthony, 2008; Anthony & Benson, 2003; Aown, 2011; Boydston, 2008a, 2008b; Conlon, 2004; Doornbos et al., 2004; Doornbos et al., 2008; English, 2000; Fahlman, 2013; Grosemans et al., 2015; Harris, 2009; Illeris, 2015; Knight, 2006; Lewin, 1951; Marsick & Volpe, 1999; Montoro, 2013; Nash, 2009; Noe et al., 2013; Noe et al., 2016; Pazmiño, 2008; Peeters et al., 2014; Plavšić & Diković, 2016; Rogoff et al., 2016; Schinkel et al., 2016; Tett & Burnett, 2003; Thomas & Pattison, 2013; Westerhout et al., 2010; Zervas, 2013). A mixed methods approach provided a more thorough understanding of the research problem through survey design and focus group discussion. This methodology section presents the research design, the population, sampling procedures, limitations and ethical considerations, data collections and instruments, research procedures, and analyses of the data and statistics used to interpret the findings.

Research Design Synopsis

The Problem

Having identified the disparity in the literature on informal learning in evangelical Christianity for leadership and education, the researcher identified the need for the development,
accurate process, and dissemination of this research concerning biblical worldview formation of children and adolescents. The researcher sought to examine and explore the variable of informal learning and show a relationship between the subvariables of spiritually affirming behaviors and the findings of the 2016–2017 research by Barna Group and Impact 360 Institute (2018) on youth ages 13 to 18 years. This study was of critical importance, considering the Gen Z respondents reporting: lower rates of having a biblical worldview, higher rates of atheism than adults, low interest in church, disillusionment concerning the teaching of youth by the church, instability in moral beliefs, post-Christian thought as to religion and absolute truth, negative feelings about social media, and unstable gender and sexuality beliefs. These responses by teens indicated the critical need for spiritual nurturing and teaching of children and adolescents to be knowledgeable and solid on biblical principles (Barna, 2013; Barna Group & Impact 360 Institute, 2018; Chester & Timmis, 2008; Evans, 2014). Another rationale for the importance of this research was the progression toward informal learning theory that provides knowledge and direction in Christian-life development (Dettoni & Wilhoit, 1998; Knight, 2006; Lebar, 1995; Pazmiño, 2008; Wilhoit, 1991).

Having searched the literature covering the ancient Hebrew informal learning setting of education to present scholarship on informal learning, the researcher proposed that the informal learning setting has the potential to bring about spiritual transformation and formation of biblical worldview for children and youth ages 2 to 18 years. A supposition was that parents can lead and educate in the servant leadership, spiritual nurturer, and educator roles to create the informal learning setting to empower and enable the spiritual transformation and formation of a biblical worldview for children and adolescents. The outcomes of this study related to both parents and children and adolescents. The gap in literature indicated the need to provide education to parents.
The generation targeted for informal learning practice was children and adolescents ages 2 to 18 years. Data from recent research on Gen Z (ages 13 to 18 years; Barna Group & Impact 360 Institute, 2018) served as a basis for studying worldview issues concerning life priorities and perspectives of faith. Youth can shape society and the foundations of spirituality for Christian values, beliefs, and behaviors if parents recognize that “interpersonal relationships matter” (Kinnaman, 2011, p. 13) and informal learning is a key concept via leadership and education.

**Purpose Statement**

The purpose of this explanatory sequential mixed methods research was to examine and explore the knowledge and behaviors of informal learning by the study participants (parents and/or legal guardians) in five states in the U.S. Southeast and determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents (through and as evidenced by recent Gen Z statistics in 2016–2017), and subsequently, from the dominant QUAN phase, seek clarification and perspectives of QUAN findings in the QUAL phase (as evidenced by semistructured and structured interviews).

**Research Questions**

**RQ1.** What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

**RQ2.** What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

**RQ3.** How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children, ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?
Research Assumptions

The first assumption was based on the following statements concerning children and youth:

- A person’s foundational beliefs as to a moral and spiritual mindset are set in place early in the life process, usually by 13 years of age (Barna, 2003; Kinnaman, 2011).
- “Physicians assert that children begin to absorb values as early as 2 years of age” (Barna, 2003, p. 109).
- It is during the crucial 8 years from ages 5 to 12 that ability to shape a life in “his or her moral, spiritual, physical, intellectual, emotional or economic development” is possible toward “lifelong habits, values, beliefs and attitudes” (Barna, 2003, p. 18).
- Because starting a process to develop a child’s or youth’s mindset in moral and spiritual wholeness and healthiness has the underlying philosophy of the process being a spiritual battle to prioritize in building influence, delays will result in difficulties to counteract negative influences that have been imprinted as to values and attitudes, informal learning toward development and formation of a biblical or Christian worldview is crucial (Barna, 2003).

A second assumption was that the environment of the study participants will be a pleasant atmosphere conducive to accurate thought processes by the person as to their responses. Third, based on a philosophical underpinning of constructivism, the researcher assumed that study participants would produce the clarity and meaning-making as interviewees critical to the purpose of this study (Creswell, 2014; Crotty, 1998). Finally, the researcher ensured that the sampling was without bias and enhanced the generalizability of the study, that the research
instruments were valid and reliable, and that analyses were truthful and correct (Creswell, 2014; Leedy & Ormrod, 2019).

**Research Design and Methodology**

The mixed methods approach holds to the philosophical underpinning of pragmatism (Creswell, 2014). The worldview of the pragmatist for research applies to a mixed methods study using both QUAN and QUAL assumptions (Creswell, 2014). This researcher sought to draw from both QUAN and QUAL perspectives for a more solid understanding of the problem concerning informal learning behaviors of parents in relation to the outcomes of biblical worldview formation in children and youth ages 2 to 18 years.

The explanatory sequential mixed methods research occurred in two phases. Data collection in the QUAN phase was by survey administration. Applying a descriptive research survey design allows a researcher to “generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population” (Creswell, 2014, p. 157). The single-group sample population of parents extending over the five states in the U.S. Southeast, representing a portion of the Bible Belt, completed a specially designed survey instrument called a measurement by scenario scale (Leedy & Ormrod, 2019). The independent variable of informal (through five subvariables or spiritually affirming behaviors) was represented in each scenario on the survey questionnaire. The scenarios also reflected the dependent subvariables of the categorized responses by teens in the 2016–2017 study by Barna Group and Impact 360 Institute (2018). From the significant results yielded relating to the continuous variables by the QUAN phase, interview questions were developed to explore the perceptions and perspectives of the sample participants in the QUAL phase (Creswell, 2014; Hancock et al., 1999; Leedy & Ormrod, 2019).
Population

The study participants were parents who would have direct influence on children ages 2 to 12 years. The parents lived in one of five states in the U.S. Southeast representing the Bible Belt within a local church congregation or within the community. Youth ages 13 to 18 years were the focus of a recent study and statistical data from Barna Group in partnership with Impact 360 Institute on Gen Z “identity, worldview, motivations, and views on faith and church” (Kinnaman, 2011, p. 10). Children ages 2 to 12 years in the direct influence of parents were represented by God’s command, as stated in Scripture and theological discussion. Representation of children from ages 2 to 12 years in the direct influence of parents was also by the principles and theories of Siegel (2012), who stated, “Secure attachments and interpersonal connection continue from the first year of life to later growth and development in healthy emotion regulation” (pp. 114, 307).

Identifying a sample size in QUAN research using inferential statistics (studying large populations with a relatively small sample) that will lead to increased statistical power entails computation to determine the needed percentage to be sampled from a population (Leedy & Ormrod, 2019). With consideration for homogeneity of the population in this study (within a local church congregation or within a community), the sample for this study \( N = 22 \) was minimally representative of families from five states in the Southeast. However, Fowler (2014) asserted that small fractions “of the population included in a sample will have no effects on the ability of a researcher to generalize from a sample to a population” (pp. 37-38). Even so, the population and sample should be the same in other aspects, as reflected by this study’s inclusion criteria. The population represented as the family comprised both dyad (mother and father and/or legal guardians) and a single parent or legal guardian. The sample had varying demographics.
Sampling Procedures

This study used sequential mixed methods sampling in which “the final sample used in the QUAN strand” will serve “as the sampling frame for the subsequent QUAL strand” (Teddlie & Yu, 2007, p. 90). Also included was nonprobability sampling through purposive sampling (Bradt et al., 2013; Leedy & Ormrod, 2019). The QUAN strand data required including participants of homogeneity for the QUAL strand (Teddlie & Yu, 2007). Bradt et al. (2013) stated, “Whereas quantitative sampling techniques strive for representativeness of the sample, sampling in qualitative studies focuses on the purposeful selection of participants to understand the research problem” (p. 136). The researcher chose this purposive sample to select participants from the QUAN component, adding a rich case for the interviews and achieving representativeness (Teddlie & Yu, 2007).

Creativity and flexibility in the researcher’s decision for sampling are essential to achieving a study’s purpose (Teddlie & Yu, 2007). However, researchers must be careful to adhere to mixed methods sampling guidelines. Researchers make decisions about sampling based on the resources and opportunities available. In this study, it was necessary to address the following in light of the change in prospective sampling. The decision in sampling came about at the onset of a declared national emergency at the beginning of a global pandemic (Department of Homeland Security, 2020). This pandemic most certainly held the potential to impede focus and attention among pastors, church congregations, and parents within the local church and communities targeted for recruitment. This researcher received responses by e-mails, text messages, and phone calls reflecting decisions made not to participate in this research study due to the COVID-19 virus spread and subsequent closing of the church building and disruption of work and family life.
Taking into consideration the low QUAN study sample ($N = 22$), the researcher followed procedures based on Teddlie and Yu’s (2007) mixed methods sampling procedure, making a compromise “between the requirement of the QUAN and QUAL samples” called the “representativeness/saturation trade-off” (pp. 86-87). This trade-off meant less emphasis on the representativeness of the QUAN sample and more emphasis on the saturation of the QUAL sample. The representativeness/saturation trade-off procedure receives further discussion in the Research Procedure section of this chapter. The QUAL focus group sample ($N = 4$) met through Zoom software for all focus group activities in addition to debriefing, with the interview totaling 2 hours and 30 minutes.

**Limitations of Generalization**

Limitations are things over which researchers have no control that could lessen a study’s generalizability (Roberts, 2010). The limitations of this research study entailed the generalization of the settings within mainline and evangelical Christian churches and among communities for recruitment; thus, the findings might not be applicable to settings such as educational institutions and other organizations. The setting was five states in the U.S. Southeast, which is not an adequate representation of other regions in the country with regard to culture and ethnicity. The researcher attempted to measure with accuracy the data related to the focus of the study. Also sought was a representative population sample; however, there was a risk of obtaining a less-representative sample due to sampling procedures. The findings were limited to the truthful and accurate responses by participants to the survey and interview questions.

**Ethical Considerations**

This researcher adhered to ethical guidelines for academic integrity, including honesty, institutional review board (IRB) guidelines, privacy rights, protection from harm, and participant
informed consent (Leedy & Ormrod, 2019). This researcher practiced academic integrity by (a) conveying the truth about the topic of informal learning examined and explored in the study; (b) keeping confidential participants’ survey and interview responses; (c) providing privacy to participants; (d) giving explanations of exclusion of participants; (e) describing all procedures, including missing data, necessitating processes to adequately conduct statistical analyses (e.g., spiritually affirming behavior subvariables not revealed); (f) identifying researcher biases (e.g., the researcher’s affiliation with evangelical Christianity); and (g) reporting explicitly and truthfully on research findings. This researcher, as a doctoral candidate, submitted to the guidelines of Liberty University policies and procedures and Institutional Review Board (IRB) requirements. This study of human subjects was in accordance with the American Educational Research Association (2019) in its definition of scientifically based research and the required policies and guidelines.

In addition to the discussed academic and professional codes of ethics, the researcher adhered to a personal code of ethics. Micah 6:8-9 functioned as an overarching precept to the six dimensions of character considered when conducting words and actions in all areas. “To act justly and to love mercy and to walk humbly with your God” reflected the six dimensions of character—establishing trust, oriented toward truth, getting results, embracing the negative, oriented toward increase, and oriented toward transcendence—that the researcher brought to this study (Cloud, 2006).

Data Collection Methods and Instruments

Data Collection Methods

After early IRB approval to seek permission from pastors at churches (see Appendix D), permissions granted from churches (on file with IRB), and approval to proceed with the study
(see Appendix B), the researcher distributed a recruitment flyer by e-mail to the participating churches and to contacts in the community (see Appendix H). Potential participants received and viewed the flyer by e-mail, at a church location, or through another contact. Individuals interested in participating who met the listed eligibility requirements contacted the researcher for eligibility screening. Next, participants received via e-mail a participant recruitment letter that contained two links: (a) a 10-minute video featuring the researcher and describing informal learning and worldview and (b) the online Qualtrics software link for signing the consent form, completing the survey, and taking the option of a focus group interview (see Appendices E, F, and G). The 10-minute video educated the participants about informal learning and worldview.

The use of a video presentation was based on the principles of spiritual leadership suggested by Sanders (2007), who asserted that leadership principles are essential qualities and responsibilities of leadership: wisdom, initiative, decision, executive ability, guidance, and inspirational power. The video presentation guided the study participants to the survey instrument with clear written instructions. The measurement by scenario survey contained specific instructions for completing demographic information and responding to questions presented in the form of stories or scenarios (see Appendix I).

**Instruments**

As a research instrument, the video presentation allowed the participants to understand the importance of informal learning and worldview and the research study process, thereby enhancing the participants’ responses to the survey. The video presentation as a research instrument allowed the study participants to form personal relationships with the researcher, which increased the likelihood of valid responses. The survey instrument consisted of Part 1, which covered demographic information, and Part 2, the measurement by scenario survey of
items to which the study subjects responded. The survey of items in the format of scenarios was related to the independent subvariables of spiritually affirming behaviors, which were accountability, consistent discipline, tone of voice, one-on-one presence, and patience. The scenario survey items also reflected the dependent subvariables from the categorized responses by teens in the 2016–2017 study by Barna Group and Impact 360 Institute (2018), which were morality related to right and wrong, Bible truth, church connection, and morality related to sexuality. Instructions in the participant recruitment letter and the consent form (see Appendices E and F) explained the QUAL phase, which consisted of focus group interview. After analyzing the QUAN data, the researcher scheduled the QUAL interview.

The study instruments for the QUAL phase consisted of a focus group semistructured and structured interview with audio recording utilizing an interview guide and chart (see Appendices J and K). The focus group interview (see Appendix J) and debrief (see Appendix L) took place by Zoom video software. The structured interview was based on the theoretical model of theory-in-use (Argyris & Schön, 1974; see Appendix K). According to Roberts (2010), “Response rates for personal interviews are about 95%” (p. 156). This researcher employed several interventions to increase the interview response rate, creating an educational video to clarify how the interview would occur, placing the option to participate in the survey instrument, offering a gift card incentive, and sending professional reminders through e-mail.

Quantitative and Qualitative Components

Validity and Reliability

This researcher acknowledges the intricate work of measuring behaviors and perceptions. However, when a study’s purpose is to get to the human root issue of a problem, as expanded on in Chapter 1, the study will likely begin with a person’s behaviors and feelings or perceptions
about that issue. It was important to make further research possible; thus, the study entailed the careful operationalization of variables and the best measurement possible. Warne (2018) discussed the intricate work of measuring a variable in social science research; it is not a straightforward process as occurs in physical science research. For accurate measurement and, therefore, strong validity, the researcher operationalized parents’ behaviors and perceptions with an informal learning process through careful description of the variable and conversion for statistical analysis. Therefore, this researcher strove for the highest possible validity and reliability that this study would allow, realizing the inherent limitations.

The external validity of the QUAN phase can be realized through the sample or subset of the population of parents as representative of the total population (Leedy & Ormrod, 2019). In their diversity of demographic representation, the sample of 22 parents reflected the characteristics of the population of parents of children ages 2 to 12 years in five states in the U.S. Southeast representing the Bible Belt.

Face validity is “whether or not the survey instrument makes sense to the average person and whether or not it will help that person learn more effective behavior” (Grusendorf, 2016, p. 104). This researcher utilized both written explanations and personal video education to improve face validity. A 2-week pilot of the survey in Qualtrics took place with parents of mother/father families and one single-parent family. With the permission of an associate pastor, the researcher used purposive sampling to select the pilot participants. The survey pilot took place in one church congregation in Texas and the surrounding community and a community in Alabama, both Bible Belt states. Participants became aware of the research study pilot by communication with the church pastor, through the church to the community, and with this researcher. Upon commitment, the participant received by e-mailed a pilot participant letter (see Appendix C). The
pilot participants ($N = 7$) tested the questions’ clarity and the online survey software’s user-friendliness. Responses from pilot parents led to three changes made to the survey to increase face validity. First was clarifying instructions in response to parents’ wanting to explain their yes or no answer. The next change was to the answer format of each question in the 10 scenarios, with an open response for typing yes or no changed to clicking on the yes or no option, preventing the participant from typing an explanation. The yes or no answer increased the valid response of the parent perception of the family scenario and thereby increased the true measurement sought by RQ1 and RQ2. Third, based on two responses of pilot study participants categorizing their parental status incorrectly, the revised demographic question presented fathers and mothers in each category of a father/mother family, single-parent family, and legal guardian families (see Appendix I). Last, as a result of the survey pilot, the researcher made a change to the participant letter, updating the video link to take the participant immediately to the video without choosing an option.

Content validity is concerned with content as representative of theory upon which the instrument is based (Grusendorf, 2016). In this research of informal learning behaviors in seeking a relationship with the study results of teen responses in a 2016–2017 study, the data collection and instruments aligned with the principles of social learning theory, experiential learning theory, and Christian developmentalism, as presented in Chapter 2. Each question underwent categorization as a subvariable of both the independent variable and the dependent variable to represent the parent’s perception measured. The researcher assigned each question as a positive or negative parent perception (not necessarily indicating right or wrong) related to biblical principles. The theory-based collection of assessment data and the survey instrument, in
addition to the evidence-based theological support for each scenario, improved content validity (Bandura, 1977; Barna Group & Impact 360 Institute, 2018; Parsons, 1998; see Appendix M).

Construct validity pertains to the credibility of the assessment in measuring what cannot be observed, such as a behavior (e.g., motivation as a construct; Leedy & Ormrod, 2019). The careful description of each question to reflect the parent’s specific behavior for valid measurement also supports the theory that “behavior is an interacting determinant” (Bandura, 1977, p. 9), not only an outcome, that happens in a personal/situation interaction. This researcher utilized a created and validated assessment tool, a measurement by scenario survey instrument specific to the RQs of this research, to measure parents’ perceptions of family situations concerning their child or children, thus minimizing the possibility that the instrument would not measure what it should (Grusendorf, 2016). Using a structured, validated instrument to study spiritually affirming behaviors with the parent/child interaction reduced the social desirability effect.

Reliability in research refers to consistency across all areas of research and researchers (Leedy & Ormrod, 2019). In this study, the reliability of the assessment strategies was important in examining the social characteristics of the spiritually affirming behaviors. This researcher performed test-retest and internal consistency reliability on the survey instrument, pilot testing the survey to increase the trustworthiness of QUAL component. Obtaining valid data from the measurement by scenario scale was necessary to generate the focus group questions and guidance plan for the structured QUAL theory-in-use instrument. A pilot study using the survey instrument added value to the QUAN phase by increasing the content and construct validity, with measurement of the characteristics as intended (Creswell, 2014; Leedy & Ormrod, 2019). The pilot study receives further discussion in the next section. Although there was no interrater
agreement in the coding process, the reliability of the assessment strategies emerged by researcher/statistician evaluation of data upon their entry into Microsoft Excel (Leedy & Ormrod, 2019). Mathematical reliability by the assumption of normality with the Kolmogorov-Smirnov test made it possible to disclose the small study sample and caution in the interpretation of results.

**Credibility, Transferability, Dependability, and Confirmability (Trustworthiness)**

In QUAL research, the concept of measurement is different than QUAN approaches in the concern for validity and reliability. QUAL measurement is not numerical (Leedy & Ormrod, 2019). The rigor of QUAL data concerns credibility and transferability, whether the data are plausible specific to how the study participants perceived the assessment. Also, the QUAL researcher is concerned with the application of the findings to other settings (transferability). In this study, the QUAL component was crucial for clarifying and giving meaning to the QUAN results. Dependability in QUAL research aligns with reliability in QUAN studies; the difference is that the QUAL researcher is striving to control the changing contexts of the setting by ensuring clear, detailed descriptions of data collection procedures.

The credibility of the findings of this research study occurred through triangulation with the use of a mixed methods approach (Leedy & Ormrod, 2019). The researcher collected QUAN data and QUAL data, addressing the single research problem using the explanatory sequential design. The QUAL data clarified and gave meaning to the QUAN data, with both data sets used to draw conclusions.

Along with the dependability efforts by the researcher, confirmability is the process of ensuring detailed description of data collection and data analyses to enhance generalizability (Leedy & Ormrod, 2019). In the QUAL phase, this researcher planned the interview setting and
transcribed verbatim responses of the study participants. The researcher carried out this planned intervention by creating an IRB-approved interview guide. Achieving QUAL dependability was by conducting a pilot of the focus group interview using the same setting and software as the QUAN survey pilot. Data analysis began with a professional QUAL expert reviewing transcripts from the semistructured and structured interviews, with the data subsequently imported into the NVivo software program for organization and analysis. The framework of the adapted theory-in-use instrument had received qualitative testing by its authors (Argyris, 1974; see Appendix K). In the QUAL phase of this research study, there existed an element of reliability via researcher/statistician evaluation of data providing consistent agreement on the organization of data (Creswell & Plano Clark, 2018).

**Research Procedures**

This section brings together the descriptions of design and methodology and data collection and proposed instrumentation to discuss the research procedures step by step. It should be noted that the QUAN phase in this explanatory sequential study was the dominant phase. In other words, the QUAL phase, through semistructured interview and structured theory-in-use interview, developed from the QUAN phase to guide the interview questions and reflections of the QUAL phase. The dominant QUAN phase to the QUAL phase process concerned the sampling, development of the focus group interview, and analyses of data (Argyris & Schön, 1974; Creswell & Plano Clark, 2018).

The IRB provided approval in early research study review to begin obtaining pastor permissions from churches. The IRB reviewed and retained on file the pastors’ permissions. The researcher contacted a church in each of the five Bible Belt states in the U.S. Southeast (Mississippi, North Carolina, Tennessee, Texas, and Virginia) by telephone or e-mail, and then
e-mailed a permission request letter addressed to senior pastors and one children’s pastor (see Appendix D). The researcher was familiar with the locations of these churches, accessing them through foreign mission work with pastors in various Southeast states. Upon IRB approval, this researcher conducted a pilot ($N = 7$) of the measurement by scenario survey using the same Qualtrics software as in the study. The pilot allowed the researcher to clarify areas in the survey, with changes made to a demographic question, the response format, and the educational video link. After the pilot and edits to the survey, participant recruitment began (see Appendix B).

Upon receiving a church’s consent to participate, the researcher e-mailed a participant recruitment flyer to the church (see Appendix H). The pastor or staff of churches in four states then e-mailed the recruitment flyer to parents through the children’s ministries. Another pastor reported having a small congregation with no young children, instead distributing the flyer in the local community. The researcher used community contacts to e-mail recruitment flyers in two of the states. As set forth in the data collection methods and instruments section, eligibility screening occurred as interested participants contacted the researcher. Participants chosen by nonrandom or nonprobability sampling, known as purposive sampling, then received the participant recruitment letter via e-mail or text message. The participant letter supplied the computer links for the educational video and Qualtrics survey consisting of the consent form, the survey, and the option of the QUAL phase focus group interview (see Appendices E, F, G, I, J, and K).

The target population from the five U.S. Southeast states was 75 parents. Responses came from 60 parents who received participant letters. After 4 weeks of data collection through four church congregations, the number of surveys completed was low. This researcher realized a need for additional recruiting through the community and sought IRB approval for this process
change. Upon procuring such approval, the researcher sought recruitment contacts from friends who had knowledge of possible participants located in the five specified states. The researcher continued with screening, as 60 additional interested individuals responded. Upon the closing date of the survey, Qualtrics recorded 22 submitted and completed surveys. Thus, the study sample was 22 out of a target population of 75. (The exact population of parents in each church and community who received recruitment materials and a participant letter was unknown due to contacts by pastors and individuals within the church and community.)

Taking into consideration the low QUAN study sample ($N = 22$), the researcher conducted research procedures based on the Teddlie and Yu (2007) mixed methods sampling method, whereby a compromise took place “between the requirement of the QUAN and QUAL samples” called the “representativeness/saturation trade-off” (pp. 86-87). What this trade-off entailed was placing less emphasis on the representativeness of the QUAN sample and more emphasis on the saturation of the QUAL sample. Saturation occurred when the focus group participants’ responses to interview questions did not produce new information. In this study’s focus group interview, instead of multiple sessions, saturation was possible through carefully constructed semistructured interview questions and structured discussion, with a topic addressed in more than one way through question wording. For example, the participants were to talk about a personal situation and interaction with their child similar to the survey scenario featured in the interview question. Next, a follow-up question pertaining to the same scenario directed parents to talk about an emotion they identified in themselves that directly influenced their child (see Appendix J). Parents again had opportunity to address these interactions and personal emotions in the structured interview instrument. Each participant followed through on the theory-in-use
chart with reflection and evaluation. This process brought the parent discussion to a saturation point of exhaustive information on the particular question and its discussion.

The QUAN phase was a survey of participants using a measurement by scenario scale, with questions in brief story form used to measure the variables of informal learning behaviors (see Appendix I). A pilot of the QUAN research instrument took place, with revisions made as previously described (see Appendices C and I). Part 1 of the survey instrument collected demographic information (see Appendix I; see Table 2). Part 2, the scenarios on the survey instrument, reflected the principles and theories discussed in the theological, theoretical, and related literature perspectives set forth in Chapter 2. These principles and theories, in turn, reflected the major focus of the measurement by scenario scale comprising Christian developmentalism containing eight beliefs and seven tasks (Parsons, 1998; see Appendix I). More discussion on these theories and principles and their foundational support of the study and findings appears in Chapter 5. The survey included two added questions related to the explanatory sequential mixed methods design, as follows: (a) Will you participate in a follow-up interview, which will only be one meeting with the researcher? and (b) What is your contact information?

Analysis of data from the QUAN phase followed. From the significant results yielded relating to the variables by the QUAN phase, the researcher explored the perceptions of the sample participants in the QUAL phase (Creswell, 2014; Hancock et al., 1999). This researcher conducted a pilot of the QUAL focus group interview process, holding to the exact Zoom setting and focus group instruments. The pilot served in determining the accuracy of timing, software, and interview questions. For the QUAL phase, the sample population was seven, chosen by nonprobability sampling for the purpose of retaining the study subjects from the QUAN phase.
Purposive sampling allowed for participant characteristics representative of the QUAN participant population and diverse perspectives of the QUAN findings (Leedy & Ormrod, 2019). In addition to clarifying findings in the QUAN phase, the selection of study participants from the QUAN phase functioned to maintain dependability of the study. In the QUAL phase, the purposive sample of seven participants received e-mailed instructions concerning the Zoom conference invitation, with two Zoom reminders e-mailed a week prior; some participants also requested text reminders. A final Zoom invitation sent on the day of the focus group interview included two Word documents as attachments: the debriefing statement (see Appendix L) and the theory-in-use chart (see Appendix K).

Four participants joined the interview by Zoom software at the scheduled time ($N = 4$). One participant notified the researcher shortly thereafter of personal illness, and two individuals who had confirmed their participation had unknown absences. Four study participants took place in video interviews via Zoom, connecting from a location comfortable and convenient to them. The term “observation” remained in RQ3; however, with the necessity to use Zoom instead of in-person meetings, the participants gave permission for audio recording. Observation would have been through videoconferencing, which was not a study procedure. The semistructured and structured interviews were to explain the QUAN phase findings (see Appendices J and K). The researcher as moderator put forth a topic, followed by discussion from the parents. The researcher audio recorded the discussion through Zoom and an Android 7 smartphone application. In addition, the researcher took handwritten notes from the interview conversation. Each interview participant received a theory-in-use chart, and the researcher led the step-by-step process of action strategy to reflection and double-loop learning using two scenario questions from the survey (Argyris & Schön, 1974; see Appendices I and K).
These research procedures taken through the QUAN and QUAL phases followed the explanatory sequential design. Appendix A shows mixed methods study designs, providing a visual representation to more fully capture the essence of this study using an explanatory sequential mixed methods design.

**Data Analyses and Statistical Procedures**

According to Creswell and Plano Clark (2018), it is most common for QUAN data collection to be more dominant than QUAL data collection. In other words, the QUAN data is favored in a strong connection between the QUAN and QUAL data, with each building upon the other. With these principles in mind, the QUAN phase was dominant in this study through sampling and the use of QUAN findings in the semistructured and structured interview questions posed to subjects in the QUAL phase.

**RQ1**

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

Answering RQ1 required both QUAN and QUAL data. Part 1 of the survey instrument for demographic information included age, gender, race, education level, parental status, spiritual status, and denomination. In Part 2, participants read 10 scenarios, giving their responses regarding the behavior assigned to that scenario (see Appendix I). In QUAN data analysis, this researcher used exploratory data analysis to examine the trends in the demographics and 10 scenarios. The data from the survey instrument pertaining to the independent and dependent variables underwent organization according to the subvariables of the study, with the yielded data recorded on Microsoft Excel spreadsheets and converted to numerical values. This data entry was in preparation for statistical analyses of the questionnaire responses regarding informal
learning exhibited by spiritually affirming behaviors and in relation to the categorized responses in the findings of Barna Group and Impact 360 Institute (2018).

Data analysis entailed reviewing survey instrument responses (Fowler, 2014). Preparing the data for analysis was by assigning values to answers, coding into standard categories, data entry, and data cleaning. In this study, all surveys were complete, with two demographic errors corrected through contact with the researcher. Exploratory data analysis included examining frequencies and percentages for the demographics and 10 scenarios. In addition, means and standard deviations were ways to summarize the trends for the spiritually affirming behaviors and biblical worldview variables.

In following the explanatory sequential mixed methods design, QUAL semistructured and structured interview data clarified QUAN data. Concerning RQ1, the researcher sought perceptions and expressions of behaviors in parents. From the collected data of the focus group interview transcription, the data analysis proceeded with NVivo Version 12. Expressions of behaviors came from Zoom meeting audio recordings and through written answers on the theory-in-use chart (see Appendices J and K), with the interview data then categorized into groups of themes.

RQ1 in the QUAN phase was computed through Statistical Package for the Social Sciences (SPSS) Version 26.0 software. To examine RQ1 and answer the question of knowledge and behaviors of parents through the subvariables of spiritually affirming behaviors, the statistics employed for the sample population were descriptive: mean, standard deviation, and mean difference. Descriptive statistics allow for further examination of the parameters of the population or to generally acquire the nature of the collected data (Leedy & Ormrod, 2019). A frequency table provided a look at demographic variables and their trends as to each scenario’s
endorsement of biblical principles. The descriptive statistics analysis of central tendency helped understand the data in the clustering of the scores. Means and standard deviations showed the variances of the parents’ knowledge and behaviors as to spiritually affirming behaviors and the assigned categories of biblical worldview formation.

The QUAL analysis was an exploration of the knowledge and behaviors of informal learning by parents through the subvariables of spiritually affirming behaviors for a sample population \((N = 4)\). Knowledge and behaviors of informal learning emerged in the semistructured and structured participant discussion. In NVivo, this knowledge and behavior went through a series of categorization and coding. NVivo enables the organization of data from the interview process through the transcription of participant responses (Creswell, 2014; Leedy & Ormrod, 2019).

**RQ2**

What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

RQ2 examined a relationship and was answered by QUAN data. Whereas descriptive statistics, as described in the RQ1 discussion, pertained to the general nature of the collected data, inferential statistics applied to differences observed through the collected data. Inferential statistics helped the researcher decide on the intervention employed in the independent variable as a true measurement of difference and not a coincidence (Leedy & Ormrod, 2019). In other words, in the research procedures, through the informal learning subvariables of the spiritually affirming behaviors as the independent variable, was a valid relationship measured concerning the dependent variable subvariables in categories assigned? The survey yielded data recorded on Microsoft Excel spreadsheets and then converted to numerical values. The spiritually affirming
behaviors received an assigned numerical value through the responses of “I have responded in this way,” with the participant’s yes or no answer on the survey question or scenario perceived as a positive or negative to biblical principles. The four categories of responses from the teen study, which represented the dependent variable, also received assigned numerical values, and Pearson and Spearman correlations showed the degree of association among these subvariables (Barna Group & Impact 360 Institute, 2018; Fowler, 2014; Leedy & Ormrod, 2019; Warne, 2018).

There was a computation made to create a score for the dependent variable from the Barna Group and Impact 360 Institute study of 12 selected survey questions with three questions for each of the four categories (see subvariables in RQ2; e.g., morality related to sexuality). Setting a criterion of positive or negative for each question entailed summing and averages the percentages of the findings to find a total percentage, then determining a positive or negative to biblical principles label for each survey question. If the 2016–2017 percentage for a survey question fell below this average percentage, it received the label of negative to biblical principles; if the percentage finding was equal to the average or above, it was positive. The positive and negative yield from this study’s measurement by scenario survey questions were equally represented for each spiritually affirming behavior. Next, the positive and negative yield from each category representing the dependent variable with each subvariable equally represented (except Bible truth) received a numerical value for a correlation score. Table 1 shows this computation.
Table 1

Criteria for Determining Positive or Negative Status for Dependent Variable Categories

(Biblical Worldview)

<table>
<thead>
<tr>
<th>Variable</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morality related to right and wrong</td>
<td></td>
</tr>
<tr>
<td>1. What is morally right and wrong changes over time based on society. ((N = 1,490))</td>
<td>24</td>
</tr>
<tr>
<td>2. What is morally right and wrong depends on what an individual believes. ((N = 1,490))</td>
<td>21</td>
</tr>
<tr>
<td>3. Lying is morally wrong. ((N = 1,490))</td>
<td>34</td>
</tr>
<tr>
<td>Church connection</td>
<td></td>
</tr>
<tr>
<td>1. The church is a place to find answers to live a meaningful life. ((N = 200))</td>
<td>82</td>
</tr>
<tr>
<td>2. Church is not relevant to me personally. ((N = 219))</td>
<td>59</td>
</tr>
<tr>
<td>3. The rituals of church are empty. ((N = 219))</td>
<td>12</td>
</tr>
<tr>
<td>Morality related to sexuality</td>
<td></td>
</tr>
<tr>
<td>1. My gender/sexuality is very important to my sense of self. ((N = 1,490))</td>
<td>37</td>
</tr>
<tr>
<td>2. Gender is primarily based on what a person feels like. ((N = 485))</td>
<td>33</td>
</tr>
<tr>
<td>3. Gender is primarily based on the sex a person was born as. ((N = 485))</td>
<td>48</td>
</tr>
<tr>
<td>Bible truth</td>
<td></td>
</tr>
<tr>
<td>1. Science and the Bible are complementary. Each can be used to help support the other. ((N = 1,490))</td>
<td>28</td>
</tr>
<tr>
<td>2. The best definition of the Bible. The inspired word of God and has no errors. ((N = 1,056))</td>
<td>34</td>
</tr>
<tr>
<td>3. I consider myself to be on the side of the Bible. ((N = 1,490))</td>
<td>17</td>
</tr>
</tbody>
</table>

Note. Overall percentage was 36%. Scenarios that were below 36% indicated negative perceptions of biblical worldview. Scenarios that were equal to or above 36% indicated positive perceptions of biblical worldview. Questions and percentages from Gen Z: The Culture, Beliefs, and Motivations Shaping the Next Generation, by Barna Group and Impact 360 Institute, 2018.

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The data entry was in preparation for statistical computation by inferential analysis to examine RQ questionnaire responses. Pearson correlations (parametric statistics) and Spearman’s correlations (nonparametric statistics) are both appropriate when assessing the strength of the relationship between two continuous-level variables (Pallant, 2013). With the Kolmogorov-Smirnov assumptions test statistically significant \( (p < .001) \) and the data significantly deviating from normality due to a relatively low sample size for the use of inferential statistics, a nonparametric statistical analysis of the Spearman correlations was necessary. The nonparametric statistical analysis is less stringent from an assumptions standpoint as in normality (Leedy & Ormrod, 2019). An assignment of positive or negative to biblical principles was important to RQ2 and the statistics of correlation (see Table 5; see Appendix M). The Barna Group and Impact 360 Institute (2018) study findings served as a data source, and the percentage of responses to 12 survey questions equally representing the categories and subvariables of the dependent variable composed the information for this analysis in preparation for Pearson’s \( r \) and Spearman’s \( \rho \) correlation (see Tables 6 and 7). Statistical significance was denoted at the generally accepted level, \( \alpha = .05 \).

Measures of association, the Pearson’s \( r \) correlation and the Spearman’s \( \rho \) yielded data to show the direction and magnitude of association between the informal learning behaviors and the findings of the study of teen responses in 2016–2017 as set forth in RQ2 and computed through SPSS software. Through the descriptive statistics for independent and dependent variables available, it was possible to calculate the correlation coefficient (Pearson’s \( r \) and Spearman’s \( \rho \)) to measure the strength of the relationship between informal learning and biblical worldview formation of youth as stated in RQ2. (Tables 6 and 7 in Chapter 4 display the results of the correlation coefficients with a discussion of findings.)
RQ3

How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children, ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

The Zoom software program enabled audio recording of the interviews, with backup recording via an Android 7 smartphone application. Data from the transcripts entered into NVivo Version 12 underwent categorization and coding through a series of steps, as described in Chapter 4. Starcher et al. (2018) suggested that in preparation of data from interviews, the piece of data becomes transcriptions put into a phrase, sentence, or a paragraph. The coding entailed giving the data “a meaningful label” (Starcher et al., 2018, p. 59), which was grouped with the labels that were identical or similar. Patterns and relationships sought among the data that developed the initial codes led to further classification into themes. The participant (parent) focus group interview responses clarified and gave meaning to data gathered from the QUAN phase through the survey instrument concerning informal learning knowledge and behaviors of parents. A full reporting of results is in Chapter 4.

Chapter Summary

Chapter 3 presented the design and methods performed to arrive at results and determine findings. The procedures were in line with the research purpose that had inspired the three RQs. The RQs guided the study through data collection and analyses concerning informal learning through spiritually affirming behaviors by parents and biblical worldview formation in children and adolescents. The explanatory sequential mixed methods design began with a dominant QUAN phase followed by a QUAL phase. In the QUAN phase, the participants completed a written survey instrument, giving demographic information and assessment of study variables to
be measured. Data collection and analyses from the QUAN phase guided the study process of the QUAL phase in semistructured and structured interviews, thus clarifying and giving meaning to the findings of the QUAN data. A final step of the analysis was reporting and interpreting the results through visual means (tables and figures), as presented in Chapter 4.

The explanatory sequential mixed methods design gave a complete view of the participants’ responses, both written and verbal, and thereby facilitated a more complete report of the study results as presented in Chapters 4 and 5. The researcher foresaw and noted through involvement in this study that further QUAL study is needed to gather evidence from parents and/or guardians of teens ages 13 to 18 years to explore a relationship between this study’s findings and perspectives of parenting teens, biblical worldview, and culture. Future mixed methods studies will allow a researcher to examine and explore similar RQs through other influential youth leaders, such as school teachers and church leaders.

As the study progressed, the researcher kept in mind the purpose of (a) discovering informal learning behaviors in parents of children ages 2 to 12 years, (b) seeking a relationship between informal learning of parents and biblical worldview formation of children and youth ages 2 to 18 years, and (c) providing information for parents to lead the present and future young generations away from the philosophy of post-Christian thought to biblical beliefs and values experienced in a lifelong spiritual formation to become strong and solid leaders and educators for the future.
CHAPTER FOUR: FINDINGS

Overview

The purpose of this explanatory sequential mixed methods study was to examine and explore the knowledge and behaviors of informal learning of the study participants (parents and/or legal guardians) in five U.S. Southeast states to determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents. The previous chapter included a description of the research problem and RQs that guided the study, along with ethical issues and limitations to generalization. Also presented were the methodology and design of the research and the progression to the findings. This chapter presents the analysis of data and subsequent findings in line with the three guiding RQs.

Research Questions

RQ1. What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

RQ2. What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

RQ3. How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

Compilation Protocol and Measures

The purpose and RQs guided the study. Using a mixed methods explanatory sequential approach, the researcher surveyed individuals ($N = 22$) in the QUAN phase. From 220 survey questions completed, data underwent recording and organizing in Microsoft Excel spreadsheets.
Subsequently, the organized data became data files to analyze in SPSS software, yielding the findings to answer RQ1 and RQ2. Following data analysis and findings from the QUAN phase, the QUAL sample \( (N = 4) \) took part in a focus group, answering semistructured and structured interview questions. After transcribing the QUAL phase audio-recorded discussion, the researcher imported data into NVivo Version 12, to obtain findings to answer RQ1 and RQ3. Coding led to assigning meaningful labels to the parents’ interview responses and discussion. Categorization and coding showed patterns and relationships among the data, yielding final themes and subthemes.

**Demographic and Sample Data**

The criteria for inclusion in this study were that each participant must be 18 years of age or older and have at least one child aged 2 through 12 years. The sample for the QUAN phase consisted of 22 participants who completed and submitted the survey questionnaire; four participants took part in focus group interviews for the QUAL phase. The demographic characteristics of interest in this research study were gender, race, parental status, education level, spiritual status, and denomination.

**Data Analysis and Findings**

**Quantitative Phase**

*RQ1*

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

Frequencies and percentages were the statistics used to examine the trends of the variables of interest. Gender representation was 16 women (72.7%) and six men (27.3%). The racial breakdown of participants was 19 White (86.4%), two Hispanic (9.1%), and one Asian (4.5%). A majority of the participants were mothers \( (n = 12; 54.5\%) \), with the remaining women
being grandmothers or legal guardians. Most of the participants had some college experience \( (n = 11; \ 50\%) \) or were college graduates \( (n = 8; \ 36.4\%) \). A majority were Christian \( (n = 20; \ 90.9\%) \), with widely distributed denominations. Table 2 presents the frequencies and percentages of the nominal-level variables.

**Table 2**

*Frequency Table for Nominal Level Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>( n )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>16</td>
<td>72.7</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>27.3</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>19</td>
<td>86.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Parental status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>12</td>
<td>54.5</td>
</tr>
<tr>
<td>Father</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>Grandmother</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Grandfather</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Legal guardian as mother</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>Legal guardian as grandmother</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>GED</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Some college (undergraduate)</td>
<td>11</td>
<td>50.0</td>
</tr>
<tr>
<td>College graduate</td>
<td>8</td>
<td>36.4</td>
</tr>
<tr>
<td>Spiritual status</td>
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<td></td>
</tr>
<tr>
<td>Christian</td>
<td>20</td>
<td>90.9</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Atheist</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Denomination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assembly of God</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Baptist</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>Catholic</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>First United Methodist</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Methodist</td>
<td>4</td>
<td>18.2</td>
</tr>
</tbody>
</table>
Table 2 continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nazarene</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Non-Denominational</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Pentecostal</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Reformed</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>SBC</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>UMC</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>United Methodist</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>9.1</td>
</tr>
</tbody>
</table>

*Note.* $N = 22$. Due to rounding error, all percentages may not sum to 100%.

It was unexpected to have a wide representation of demographics among a small sample. Also not anticipated was the narrow distribution of race. It was unexpected that three grandparents entered the demographics screened as legal guardians. The widely distributed denominational representation in a sample of $N = 22$ was another surprise, as was the low percentage of men.

Frequencies and percentages enabled an examination of response trends for each of the scenarios. Table 3 presents the frequencies and percentages for each scenario.
Table 3

Frequency Table by Scenario (Spiritually Affirming Behaviors and Biblical Worldview Formation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1: Accountability/morality related to sexuality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>59.1</td>
</tr>
<tr>
<td>Scenario 2: Consistent discipline/morality related to right and wrong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>18.2</td>
</tr>
<tr>
<td>No*</td>
<td>18</td>
<td>81.8</td>
</tr>
<tr>
<td>Scenario 3: One-on-one presence/Bible truth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>36.4</td>
</tr>
<tr>
<td>Scenario 4: Accountability/church connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>No*</td>
<td>17</td>
<td>77.3</td>
</tr>
<tr>
<td>Scenario 5: Tone of voice/Bible truth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>No*</td>
<td>13</td>
<td>59.1</td>
</tr>
<tr>
<td>Scenario 6: Patience/Bible truth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No*</td>
<td>22</td>
<td>100.0</td>
</tr>
<tr>
<td>Scenario 7: Tone of voice/morality related to right and wrong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>86.4</td>
</tr>
<tr>
<td>Scenario 8: One-on-one presence/morality related to sexuality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>No*</td>
<td>20</td>
<td>90.9</td>
</tr>
<tr>
<td>Scenario 9: Consistent discipline/Bible truth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>4</td>
<td>18.2</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>81.8</td>
</tr>
<tr>
<td>Scenario 10: Patience/church connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes*</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>77.3</td>
</tr>
</tbody>
</table>

Note. N = 22. * denotes that spiritually affirming behaviors and biblical worldview formation were positively endorsed. Due to rounding error, all percentages may not sum to 100%.
There were two scenarios for each of the five spiritually affirming behaviors: accountability, consistent discipline, tone of voice, one-on-one presence, and patience. A scenario in each spiritually affirming behavior response was positive and negative according to the alignment of biblical and literature study. However, the parent response resulting in a positive and negative would be from the participants’ viewpoint related to their worldview, thus justifying a response of yes or no to the scenario question. (Appendix I presents the scenarios.) Related to measurement for scores and analysis was positive and negative assignment, with Appendix M providing biblical and literature support. Unexpected findings in the trends were the low percentages on four of the scenarios in parent responses toward decisions less supportive of biblical principles. However, one scenario showed a 100% response toward a decision supportive of biblical principles.

Developing composite scores for spiritually affirming behaviors and biblical worldview formation was through a sum of the individual items comprising each of the scales (see Table 4). The sums were based on participants’ responses to the survey scenario resulting from the assignment of a positive or negative to biblical principles for a particular scenario (see Table 5). All scales consisted of a composite of two scenarios with the exception of Bible truth, which contained four scenarios.

Specific to the minimum and maximum, 0 indicates none of the scenarios endorsed for a particular scale, whereas a 1 shows one scenario endorsed and 2 indicates both scenarios endorsed (4 for Bible truth). Based on the means, participants endorsed between one and two scenarios for accountability ($M = 1.18$), consistent discipline ($M = 1.00$), one-on-one presence ($M = 1.55$), patience ($M = 1.23$), and church connection ($M = 1.00$). Based on the means, participants endorsed between zero and one for tone of voice ($M = 0.91$), morality related to
sexuality \((M = 0.55)\), and morality related to right and wrong \((M = 0.95)\). Regarding Bible truth \((M = 2.59)\), participants endorsed between two and three of the scenarios in this scale. Table 4 presents the descriptive statistics for each of the scales for spiritually affirming behaviors and biblical worldview formation; Table 4 shows the composite scores.

**Table 4**

*Descriptive Statistics for Spiritually Affirming Behaviors and Biblical Worldview Formation*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of scenarios comprising scale</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritually affirming behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>2</td>
<td>0.00</td>
<td>2.00</td>
<td>1.18</td>
<td>0.59</td>
</tr>
<tr>
<td>Consistent discipline</td>
<td>2</td>
<td>0.00</td>
<td>2.00</td>
<td>1.00</td>
<td>0.53</td>
</tr>
<tr>
<td>One-one-presence</td>
<td>2</td>
<td>1.00</td>
<td>2.00</td>
<td>1.55</td>
<td>0.51</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>2</td>
<td>0.00</td>
<td>2.00</td>
<td>0.91</td>
<td>0.53</td>
</tr>
<tr>
<td>Patience</td>
<td>2</td>
<td>1.00</td>
<td>2.00</td>
<td>1.23</td>
<td>0.43</td>
</tr>
<tr>
<td>Biblical worldview formation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morality related to sexuality</td>
<td>2</td>
<td>0.00</td>
<td>2.00</td>
<td>0.55</td>
<td>0.60</td>
</tr>
<tr>
<td>Morality related to right and wrong</td>
<td></td>
<td>0.00</td>
<td>2.00</td>
<td>0.95</td>
<td>0.49</td>
</tr>
<tr>
<td>Bible truth</td>
<td>4</td>
<td>1.00</td>
<td>4.00</td>
<td>2.59</td>
<td>0.77</td>
</tr>
<tr>
<td>Church connection</td>
<td>2</td>
<td>0.00</td>
<td>2.00</td>
<td>1.00</td>
<td>0.62</td>
</tr>
</tbody>
</table>
### Table 5

**Biblical Principles Breakdown**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive or negative in relation to biblical principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1: Accountability/morality related to sexuality</td>
<td>Positive</td>
</tr>
<tr>
<td>Scenario 2: Consistent discipline/morality related to right and wrong</td>
<td>Negative</td>
</tr>
<tr>
<td>Scenario 3: One-on-one presence/Bible truth</td>
<td>Positive</td>
</tr>
<tr>
<td>Scenario 4: Accountability/church connection</td>
<td>Negative</td>
</tr>
<tr>
<td>Scenario 5: Tone of voice/Bible truth</td>
<td>Negative</td>
</tr>
<tr>
<td>Scenario 6: Patience/Bible truth</td>
<td>Negative</td>
</tr>
<tr>
<td>Scenario 7: Tone of voice/morality related to right and wrong</td>
<td>Positive</td>
</tr>
<tr>
<td>Scenario 8: One-on-one presence/morality related to sexuality</td>
<td>Negative</td>
</tr>
<tr>
<td>Scenario 9: Consistent discipline/Bible truth</td>
<td>Positive</td>
</tr>
<tr>
<td>Scenario 10: Patience/church connection</td>
<td>Positive</td>
</tr>
</tbody>
</table>

**RQ2**

What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

A series of Pearson’s r correlations were the statistics used to examine the association between spiritually affirming behaviors and biblical worldview formation. Prior to analysis, the researcher verified the assumption of normality through Kolmogorov-Smirnov tests. The findings of the Kolmogorov-Smirnov tests were statistically significant ($p < .001$), indicating that the data significantly deviate from normality. In addition, the sample size was relatively low for the use of inferential statistics. Therefore, interpreting the findings of the Pearson correlations required a level of caution.

**Pearson Correlations.** The findings of the Pearson correlations underwent examination first. Accountability was significantly, positively related to morality related to sexuality ($r = .52$,
and church connection \((r = .52, p = .012)\). Consistent discipline was significantly, positively related to morality related to right and wrong \((r = .55, p = .008)\), Bible truth \((r = .56, p = .007)\), and church connection \((r = .43, p = .044)\). One-on-one presence was significantly, positively related to Bible truth \((r = .58, p = .005)\). Tone of voice was significantly, positively related to morality related to right and wrong \((r = .54, p = .009)\), Bible truth \((r = .70, p > .001)\), and church connection \((r = .44, p = .041)\). Patience was significantly, positively related to church connection \((r = .72, p > .001)\). The recurring trend in the significant Pearson correlations was that there was a positive association between the spiritually affirming behavior and biblical worldview formation. This indicated that, as scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase. Table 6 presents the findings of the Pearson’s \(r\) correlations.

**Table 6**

*Pearson Correlations Between Spiritually Affirming Behaviors and Biblical Worldview Formation*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Biblical worldview formation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morality related to sexuality</td>
</tr>
<tr>
<td></td>
<td>(r)</td>
</tr>
<tr>
<td>Spiritually affirming behaviors</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>.52*</td>
</tr>
<tr>
<td>Consistent discipline</td>
<td>.00</td>
</tr>
<tr>
<td>One-on-one presence</td>
<td>-.09</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>.17</td>
</tr>
<tr>
<td>Patience</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note. \(*p < .05, **p < .01*
It was unexpected to find significantly, positively related findings on all spiritually affirming behaviors. However, the findings, together with the interpretation of the composite scores, indicate areas of spiritually affirming behaviors related to the categories of teen responses that presented lower scores. The unexpected findings of the correlation were, therefore, important to the conclusions discussed in Chapter 5.

**Spearman Correlations.** An examination of the Spearman correlations showed support for the significant associations from the Pearson correlations. Table 7 presents the findings of the Spearman correlations.

**Table 7**

*Spearman Correlations Between Spiritually Affirming Behaviors and Biblical Worldview Formation*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Biblical worldview formation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morality related to sexuality</td>
<td>Morality related to right and wrong</td>
<td>Bible truth</td>
<td>Church connection</td>
</tr>
<tr>
<td></td>
<td>r</td>
<td>r</td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>Spiritually affirming behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>.58**</td>
<td>.00</td>
<td>.32</td>
<td>.50*</td>
</tr>
<tr>
<td>Consistent discipline</td>
<td>.08</td>
<td>.55**</td>
<td>.53*</td>
<td>.43*</td>
</tr>
<tr>
<td>One-on-one presence</td>
<td>-.13</td>
<td>.30</td>
<td>.58**</td>
<td>.00</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>.16</td>
<td>.51*</td>
<td>.68**</td>
<td>.46*</td>
</tr>
<tr>
<td>Patience</td>
<td>.08</td>
<td>.06</td>
<td>.07</td>
<td>.72**</td>
</tr>
</tbody>
</table>

*Note. *p* < .05, **p* < .01*

**Qualitative Phase**

**RQ1**

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?
Qualitative data collection was through a focus group conducted online via Zoom. Four participants contributed to the focus group: a father from a father/mother family, a mother from a father/mother family, and a father and mother from a father/mother dyad family. Analysis of QUAL data was in accordance with the results of the QUAN analysis, as the researcher had developed the focus group interview questions from the results of the QUAN analysis. After transcribing the recording of the focus group, the researcher uploaded the transcripts into NVivo, a qualitative computer-assisted data analysis program. The QUAL data analysis began by coding participants’ statements related to the RQs. These statements produced the initial themes of exhibiting empathy, patience, allowing opportunities for discussion, personal growth in parenting, parenting different children differently, and misunderstanding children. This coding of participants’ statements included the spiritually affirming behaviors as subvariables of the independent variable and double-loop learning as an essential component of the theory-in-use QUAL measurement instrument.

Coding occurred by first highlighting statements for selection in NVivo. Then, to create a code, the process was to select Code from the Create tab of the toolbar. When prompted for the name of the code, the researcher entered a brief title describing the statement or excerpt topic. Doing this created a new code for the excerpt, later stored at a node in the program with the newly created title or code. As the coding process continued, the possibility remained open for emerging codes and possible themes. At the end of this process, a list of codes resulted, as presented in Table 8.
Table 8

List of Codes

<table>
<thead>
<tr>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battle for control with child</td>
</tr>
<tr>
<td>Child has found creative ways of expressing herself to parents</td>
</tr>
<tr>
<td>Child has hard time opening up</td>
</tr>
<tr>
<td>Misunderstanding what child was going through</td>
</tr>
<tr>
<td>Guessing about what caused self-consciousness</td>
</tr>
<tr>
<td>Projecting own concerns onto children</td>
</tr>
<tr>
<td>Writing scenarios of what child experienced</td>
</tr>
<tr>
<td>Punishment did not match child’s actions</td>
</tr>
<tr>
<td>Acknowledging self-growth</td>
</tr>
<tr>
<td>Different treatment of children leads to acting out</td>
</tr>
<tr>
<td>Emotions toward struggling children</td>
</tr>
<tr>
<td>Different needs require different attention</td>
</tr>
<tr>
<td>Desire to fix child’s problems</td>
</tr>
<tr>
<td>Celebrating all children</td>
</tr>
<tr>
<td>Encouraging investigation of Biblical truth</td>
</tr>
<tr>
<td>Learning to parent from parents</td>
</tr>
<tr>
<td>Opportunities for discussion</td>
</tr>
<tr>
<td>Disillusionment provides opportunity to walk with God</td>
</tr>
<tr>
<td>Disillusionment with church can facilitate discussion</td>
</tr>
<tr>
<td>Openness with children to encourage them to speak</td>
</tr>
<tr>
<td>Patience with child</td>
</tr>
<tr>
<td>Sympathizing with child</td>
</tr>
</tbody>
</table>

The next step was to compile these codes into larger categories based on similarity. The NVivo software program allowed, by dragging and dropping the codes and associated excerpts, compilation of the codes into larger categories. The researcher moved similar codes into a larger category and gave the larger categories a descriptive title, resulting in a hierarchical set of codes and categories. This process yielded the larger categories of allowing opportunities for one-on-one discussion, exhibiting patience and understanding, struggling children require different parenting techniques, acting out, feelings about children’s struggles, and personal growth and reflection in parenting. These categories underwent further examination for similarities and relationships. The results showed that the categories acting out and feelings about children’s struggles were facets of the category struggling children require different parenting techniques. These two smaller categories, acting out and feelings about children’s struggles, became subthemes. Moved into NVivo, the subtheme categories nested under the category struggling children require different parenting techniques, which became the theme.
Four themes emerged in the QUAL data from the focus group interview. Themes 1 through 3 pertained to the knowledge and behaviors parents exhibit that influence their children. Theme 4 also related to the knowledge and behaviors, showing how participants enact double-loop learning as they parent their school-aged children. Further, Theme 4 presented the meaning given to QUAN findings through parent expressions of interactions with children and what concerns were in need of address. Theme 4 provided clarification of QUAN findings as to which spiritually affirming behaviors were foremost in parents’ expressions of interactions with children. The clarification of QUAN findings identified those spiritually affirming behaviors which needed further discussion and education. Table 9 presents the thematic structure of the findings.
## Table 9

**Thematic Structure of Findings**

<table>
<thead>
<tr>
<th>Codes</th>
<th>Subthemes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities for discussion</td>
<td>No discernible subthemes</td>
<td>Theme 1: Allowing opportunities for one-on-one discussion</td>
</tr>
<tr>
<td>Disillusionment provides opportunity to walk with God</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disillusionment with church can facilitate discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness with children to encourage them to speak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging investigation of Biblical truth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child has found creative ways of expressing herself to parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child has hard time opening up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patience with child</td>
<td>No discernible subthemes</td>
<td>Theme 2: Exhibiting patience and understanding</td>
</tr>
<tr>
<td>Sympathizing with child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battle for control with child</td>
<td>Subtheme 3a: Acting out</td>
<td>Theme 3: Struggling children require different parenting techniques</td>
</tr>
<tr>
<td>Different needs require different attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celebrating all children</td>
<td>Subtheme 3b: Feelings about children’s struggles</td>
<td></td>
</tr>
<tr>
<td>Emotions toward struggling children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misunderstanding what child was going through</td>
<td>No discernible subthemes</td>
<td>Theme 4: Personal growth and reflection in parenting</td>
</tr>
<tr>
<td>Guessing about what caused self-consciousness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projecting own concerns onto children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing scenarios of what child experienced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punishment did not match child’s actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acknowledging self-growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire to fix child’s problems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 14 provides another visual of the four final themes and subthemes that emerged from the focus group interview.
Teddlie and Yu (2007) suggested that in mixed methods research, a compromise exists between QUAN and QUAL samples. In the present study, the emphasis was less on the representativeness of the QUAN sample and more on the saturation of the QUAL sample. It was possible that if more than four participants had attended the focus group, new ideas might have arisen, which would indicate that data saturation did not occur in this sample. However, there are indications of reaching saturation. Within the QUAL sample of four participants, there was convergence around four themes, and at least three participants made statements contributing to each of the four themes. In addition, careful analysis revealed no disconfirming, or negative, cases, meaning that no one participant across any theme had experiences markedly different from other participants.
RQ3

How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

Theme 1: Allowing Opportunities for One-on-One Discussion. When children became self-conscious or depressed, parents struggled to know what to do to help their children (see Appendices J and K). Participants described how, in these situations, their children stopped opening up to them and avoided one-on-one interaction, despite the parents’ attempts to engage their children. Participant 1 expressed that his daughter suddenly became withdrawn and would not talk to them about her problems, which suggested to him that she was depressed. The daughter of Participants 2 and 3, a married couple, displayed outward aggression and began acting out but became introverted and would not talk to them about what she was going through. These three participants attributed their daughters’ respective withdrawal to issues of identity and self-consciousness. Participant 1 explained that his daughter became withdrawn after she did not make her preferred dance team, saying, “[My wife and I] thought there might be some body image issues related to that. And she’s a mixed-race child, and that there might have been some things happening with the [dance] studio related to that.” Participant 2 thought her daughter’s body issues “could be she’s a little bit hung up on weight sometimes, so there would be body image issues with that.”

Participant 1 recognized that he and his wife were writing their own stories about what their daughter was going through and projecting their ideas onto her instead of listening when their daughter did try to communicate with them. Through listening, Participant 1 and his wife
learned that their daughter was upset that she and her friends were on different dance teams, and as a result, she would not get to see her friends as often.

Participant 2 tried to handle her daughter, who was “acting out really horribly,” by grounding her. Participant 2 quickly realized this approach would not work, stating, “You can’t get a kid to talk by grounding them.” Participant 2 described how her own growth experience provided a basis for demonstrating behavior that positively impacted her daughter. Participant 2 invited her daughter to talk about her feelings, which required a change in “the way that we were parenting her.” Participant 3, who is married to Participant 2, elaborated on this and said that they have made some strides in communicating with their daughter. Although their daughter is still hesitant to open up, he said, “She’s found ways to talk to us, at least to express herself to us.” This openness was a behavior both parents tried to model for their children. Participant 3 said that he and his wife tried to be open and communicative with each other and their children. When reflecting on his upbringing, Participant 3 realized openness was not something he often saw in his parents and wanted to do differently with his children. Of the encouraging discussions with his children, Participant 3 said, “I think, or I hope, that has helped, particularly all three [children], but I do think it’s helped the oldest because the oldest is at least going to one of us and communicating and keeping that open.”

Participants also encouraged one-on-one discussion when their children appeared disillusioned with being a part of the church family. Participant 3, who is a pastor, admitted that he is someone who questions things in his life. Because of this, he was able to have an open, one-on-one discussion with his children about disillusionment with the church. Participant 3 said:
I will admit that that scenario [of a child becoming disillusioned with the church] was, in many ways, a very positive scenario for me because I thought, what an opportunity to have an open dialogue and to walk alongside your child.

Participant 3 stated that neither he nor his wife had faced this situation with any of their children. However, he relayed that his approach would be open communication and to “walk beside and just talk and try to help understand.”

Participant 4 also had not encountered a child who began questioning her faith and became disillusioned with the church. However, she considered this hypothetical situation and believed she would use it as an opportunity for discussion. Participant 4 recalled an instance several years ago when her teenage niece came to her for counsel. Her niece was experiencing questions and doubt about “Christianity in general.” When this happened, Participant 4 used it as an “opportunity for discussion,” an approach she would adopt if her children expressed similar feelings. Participant 4 encouraged her niece to investigate different belief systems and religious texts, including Christianity and the Bible, and to “see how God spoke to her through the Bible.”

**Theme 2: Exhibiting Patience and Understanding.** Participants recognized that they needed to exhibit the spiritually affirming behavior of patience as their children grew and learned (see Appendices J and K). This was especially true as children worked through their spiritual beliefs and beliefs about church. Participant 2, who grew up going to church and whose father was a minister, remembered experiencing some disillusionment with the church when growing up, which allowed her to understand what her children might be feeling. Even so, Participant 2 acknowledged that seeing her middle daughter struggle “with belief in God” was “hurtful.” In addition to providing her daughter a space to talk about her feelings and beliefs, Participant 2 has tried to remain calm. The Participant said, “It takes a lot of patience to try to help her work
through that.” For Participant 2, being patient with her daughter included encouraging “consistent church presence,” telling her that if problems come up regarding church, her parents are there to “work through that and help her to understand why things are the way they are.” For Participant 2, being patient involved both understanding her daughter’s perspective and helping her daughter understand the decisions her parents make related to church.

Participants also expressed the importance of empathy and understanding when their children struggled in other areas. Participant 1 said that the deepest emotion he felt watching his children struggle was empathy. Participant 1 and his wife have a 7-year-old who does not share the same learning difficulties that the older siblings do. As a result, the older siblings struggle as they see their younger brother “pick up things so easily.”

**Theme 3: Struggling Children Require Different Parenting Techniques.** Children and their struggles are unique, and participants recognized that they sometimes needed to parent their children based on these differences (see Appendices J and K). Participants 2 and 3 have three children, including two with dyslexia. Participant 2 shared the difficulty of parenting two children with learning disorders, given the “varied needs for education.” Participants 2 and 3 homeschool their children, finding that providing more guidance for one child can sometimes lead the others to think they are not getting enough attention. Participant 2 said,

The main thing that I think about that is with homeschooling and having three ages spaced pretty far apart and two with dyslexia, it makes it difficult because they have varied needs for education. And one of them may need a little more one on one, whereas the oldest one may be able to work more independently. And then, of course, the young one being four years old, she is going to run around and wreak havoc anyway. And so I don’t believe in treating them all equally in that way because they have varying needs,
and I have to attend to each of their needs. And then, they’re getting the same amount of love and attention and all of that, so I have to address the other areas in different ways.

Participant 4 has only one child but said, “I think the fact is that all kids have different needs at different times, and it has to be a delicate balancing act to make sure you meet everybody’s needs without giving a perception of preferential treatment.” Participant 1 also described the need to parent children differently, particularly given that he and his wife have three children with different learning needs. To address these variances, Participant 1 and his wife have found it useful to emphasize to their children that everyone learns differently and at their own pace. In practical terms, this means Participant 1 celebrates “every report card that’s brought home, even if there’s a grade that has room for improvement.” Rather than focusing on the children’s differences in negative terms, Participant 1 and his wife celebrate the differences.

**Subtheme 3a: Acting Out.** Participants overwhelmingly agreed that their children’s struggles were unique; thus, each required different parenting techniques. The respondents also acknowledged that parenting children differently occasionally had negative consequences. According to Participant 2, her middle daughter “believes her siblings are getting a little more attention, or maybe she’s not getting enough attention.” Participant 2 thought this led her daughter to act out to get “a little more one-on-one time.”

Participant 4 sought to understand how the perception of a sibling receiving more attention might feel for a child by using her own experience growing up with sibling rivalry. “From a child’s standpoint, I think there always is that feeling that a sibling might be receiving more,” Participant 4 related. Growing up, Participant 4 often felt that her sister received preferential treatment, and her sister felt the same about her.
Subtheme 3b: Feelings About Children’s Struggles. Participants expressed empathy and understanding toward their children but also often felt overwhelmed, frustrated, and exhausted when their children were struggling. In addition to empathizing with his children, Participant 1 said that the other emotion he felt was exhaustion, noting, “We’re always aware of [our children struggling].” Participant 1 also admitted to feeling exhausted when his son, who is always ready to have conversations seemingly above his age level, wants to talk about history or theology. He reported, “Sometimes our 7-year-old just gets it and is ready to have a conversation about it. But my wife and I oftentimes catch ourselves looking at one another and just taking a big breath because we’re sometimes just a little exhausted by it.”

Participant 2 also described feeling overwhelmed:

I would say that it’s overwhelmed. Where it used to be just a great sense of overwhelm on how to divide time and give each child the attention that they need while also dealing with learning disabilities and any behavioral issues and a lot of feelings and guiding them in how they can navigate life. But now, instead of being completely overwhelmed, I tend to approach it with more compassion and trying to understand how they’re feeling and how they navigate their feelings with one another. Because when they can break it down and put a feeling to it, they can understand what it is. They can maybe turn it around and maybe find a better solution for any problems that they have.

For Participant 2, learning to reframe the overwhelm and instead feel compassion has been helpful. Participant 3 still struggles when his children do and admitted that his dominant emotion was frustration. Participant 3 recognized that in addition to experiencing frustration, he likely projected this onto his children, too. He explained,
Frustration, I think, was the biggie for me. I have noticed that the 4-year-old is picking up things a lot quicker. She walked a lot quicker; she talked a lot quicker. And I don’t think the older ones look back on her and think, “Well, gah,” because they don’t remember doing half the stuff she’s doing quicker than them. But I do know that it’s frustration for me, and I think at times I see frustration for them, and maybe it is because I am putting that on them somehow. But frustration is probably a biggie for me because I want them to get it because I want them to succeed.

**Theme 4: Personal Growth and Reflection in Parenting.** Participants were reflective about their parenting practices and the growth they recognized in themselves as they raised their children. This reflection and growth, including when participants misunderstood their children and learned from these misunderstandings or mistakes, informed their evolving parenting practices, which is a critical component of double-loop learning (see Appendices J and K). Participant 2 reflected on her growth when her daughter started acting out and stopped talking to them, saying, “I did a lot of growing myself.” This growth meant the participants had to, according to Participant 2, “change the way that we were parenting [our daughter] to encourage her to talk to us more.” One such change was in Participant 2’s desire to fix things for her children. She explained,

I’ve learned to not [try to fix everything], so it’s been very helpful. But I wanted to know right then what was going on because I wanted to fix it. And I had to realize that I can’t always fix things, and she needs to learn how to fix things, as well, and also allow me to help her. She has to trust me to be able to do that. But for me, it was really [about] control.
Participant 2 recognized in herself the tendency to want to fix her daughter’s problems. She also realized, however, that her daughter needed to learn how to fix problems herself, something she would not learn if her mother continued to solve her problems. As a result, Participant 2 changed her approach to parenting that allowed greater growth in herself and her daughter.

Participant 1 also reflected on what he and his wife learned when their daughter became self-conscious after failing to make the dance team. As their daughter continued to reject her father’s desire for one-on-one interaction and to open up to her parents, Participant 1 and his wife realized they had entirely misunderstood what their daughter was going through. Participant 1 initially thought that his daughter was experiencing body image issues but later learned she was upset because she was not on the same dance team as her friends. Before their daughter opened up to them, though, Participant 1 and his wife “wrote all kinds of scenarios in our minds about how she may be interpreting certain things going on.” Reflecting on this situation, the participant elaborated,

I think that we went to issues that we both dealt with; we projected those right on to her and kind of assumed that she’s dealing with those or perceived things that we see. We began to write our own narrative about what might be going on. We were way more worked up than she was. So much that I don’t know if she had spoken to us, if we would really have even heard her.

This understanding was a growth opportunity for Participant 1 and his wife. They learned to recognize they were projecting their feelings on to their daughter and took steps to stop this projection. Participant 1 and his wife also recognized they had a hard time truly listening to and hearing their daughter when she did talk to them, which was something else from which they were able to learn and apply to their parenting practices going forward.
Evaluation of the Research Design

This researcher chose the mixed methods explanatory sequential design for this study due to its strength of examination in QUAN measurement and subsequent exploration of findings in QUAL measurement. To make possible the measurement of the variables and subvariables as set forth in this study, the researcher created a measurement by scenario scale. In this way, the instrument was able to capture responses that would fulfill the purpose of examining and exploring knowledge and behaviors and determining the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents. In the QUAN phase, this study could have benefited from separate surveys for the independent and dependent variables. However, the strengths of the survey as designed were the equally assigned chances of positive and negative responses by the subject in addition to the strong theological and theoretical support of each question. A strength in the survey method and measurement was the composite scores which reflected both independent and dependent subvariables. Further, the purpose of the research in determining the relationship was to discover the association with prior responses of teens and identify possibilities for future education of informal learning for parents and other influential teachers and leaders of children and adolescents.

The sample size was a limitation to the QUAN phase. The strength of the sample size was the demographic representation among the sample—that is, age, race, education level, spiritual status, and parental status, as presented in Table 2. Subsequently, the small sample and the researcher’s decision to use nonprobability sampling for the QUAN phase served as a further limitation to the research design. A major strength of the research design was the mixed methods approach, incorporating data from triangulation and the theological and theoretical literature support as presented in Chapter 2. Even taking these limitations into account, the mixed methods
design with triangulation drew from both QUAN and QUAL perspectives for a more solid understanding of the problem concerning informal learning behaviors of parents in relation to the outcomes of biblical worldview formation in children and youth ages 2 to 18 years, enabling a thorough examination and exploration of the RQs.
CHAPTER FIVE: CONCLUSIONS

Overview

Chapter 4 presented the findings of this study based on the purpose of the research and the three guiding RQs. The findings overall and ultimately encompassed the expressions of two Christian scholarly authors in the following assertions. Parents are the primary educators for children, and informal learning influence by parents began and should be according to biblical principles (Estep, 2008a; Pazmiño, 2008). In this chapter, the researcher expands on those assertions by discussing the results of the study intertwined with the literature and theological and theoretical foundations. There is a summary of the research purpose and a restatement of the RQs. Conclusions of the research study are in this chapter, as are implications and applications crucial to scholarship, the present time, everyday living, and the future. Chapter 5 presents the study limitations along with possibilities for further research. Finally, a brief summary ties together all conclusions.

Research Purpose

The purpose of this explanatory sequential mixed methods study was to examine and explore the knowledge and behaviors of informal learning of the study participants (parents and/or legal guardians) in five U.S. Southeast states to determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents. The research approach of explanatory sequential mixed methods enabled a thorough investigation of measuring informal learning behaviors. This entailed taking the QUAN data and analysis and following up with QUAL purposive sampling and data collection by focus group interview for clarification and meaning of those QUAN findings. Following is a discussion of each RQ in line
with the study results and a comparison and contrast of literature and other studies, which provides a valid and meaningful interpretation to meet the purpose of the research study.

**Research Questions**

**RQ1.** What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

**RQ2.** What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

**RQ3.** How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

**Quantitative Phase**

**RQ1**

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

The independent variable of informal learning, as carried out by study participants (parents), concerned their knowledge and behaviors as displayed through informal learning intervention in the interaction with their children ages 2 through 12 years. This display of a particular spiritually affirming behavior collected from the survey instrument next underwent examination through descriptive statistics with the dependent variable of teen responses in four categories of morality related to right and wrong, Bible truth, church connection, and morality related to sexuality from a 2016–2017 study by Barna Group and Impact 360 Institute (2018).

Investigation by survey research included an instrument containing 10 family scenarios representing five behaviors parents considered to be spiritually affirming to have a possible
influence on the child or children toward biblical worldview formation. The survey was a means to determine what knowledge and behaviors by parents were present as reflected by the parent response to each scenario. Each scenario also reflected a particular category of biblical worldview of teen responses addressed by Barna Group and Impact 360 Institute (2018). The biblical worldview representation of the scenario question through the teen responses functioned to connect a particular family situation to the purpose of this research. However, the examination of an informal learning behavior exhibited through a spiritually affirming behavior was the focus. The study results of parents’ responses endorsing biblical principles in the interaction with their children in the family situation presented in a scenario showed informal learning through a spiritually affirming behavior, which would allow the spiritual formation and biblical worldview development to occur.

Trends of responses for each scenario showed four spiritually affirming behaviors (accountability, 40.9%; tone-of-voice, 13.6%; consistent discipline, 18.2%; and patience, 22.7%), with lower percentages reflecting a parent response that did not endorse biblical principles as labeled in the research (see Tables 3 and 5; see Appendix M). Scenario 6, reflecting the spiritually affirming behavior of patience with Bible truth as the teen response focus, had a 100% response of endorsing biblical principles. Results of composite scores developed and based on means showed higher mean scores (parents endorsed at least one scenario with a spiritually affirming behavior toward biblical worldview formation) for accountability (1.18), consistent discipline (1.00), one-on-one presence (1.55), and patience (1.23). Higher mean scores for biblical worldview formation were Bible truth (2.59; noting, however, four scenarios including this focus as opposed to two for other scenarios but still with a score to indicate positive endorsement), and church connection (1.00). If the parents’ responses endorsed a
spiritually affirming behavior and biblical worldview formation category, it follows that responses by parents to a family home setting scenario would influence the child by biblical principles. The composite score result for tone-of-voice was .91; however, the trend results in Table 3 showed that Scenario 5 revealed a positively endorsed family home setting parental response toward biblical principles for tone of voice at 51.9%, slightly over half.

When addressing the knowledge and behaviors of parents as stated in RQ1, this researcher did not anticipate that most parents would be aware of the concept of informal learning as an educational format or even have a vague idea of what informal learning entails. For that reason, the researcher provided an educational tool in the form of a 10-minute video as part of the participant information (see Appendices E and G). Education and awareness, therefore, became key factors in how the parent perceived the particular situation and interaction of parent and child in the scenario and the parents’ answer to the question as to the particular scenario. This topic of education and awareness receives further discussion highlighting Boehlke’s (1962) Christian education and learning theory, as presented in the literature review.

**Boehlke’s Christian Education and Learning Theory.** The seminal studies of Boehlke (1962) discussed in the literature review integrate into and theologically and theoretically support informal learning theory as one of the foundational, evidence-based frameworks. Among the trends of the 10 survey scenarios, the spiritually affirming behavior of one-on-one presence yielded the highest response of parents in endorsing biblical principles toward biblical worldview formation in their children (see Table 3). In addition, QUAL interview responses indicated an emphasis on one-on-one presence. Therefore, one-on-one presence as a spiritually affirming behavior through informal learning by the parent is a crucial avenue of Christian nurture and learning as studied by Boehlke. Boehlke’s concept of learning through Christian nurturing is a
dynamic process that brings an individual to change in relation to the perception of a situation.

One of the scenarios representing the spiritually affirming behavior of patience on the survey revealed the only 100% response by the sample ($N = 22$) that endorsed biblical principles (see Table 3). Patience also showed a higher mean on the composite scores. In addition, QUAL interview responses indicated an emphasis on patience. Therefore, patience as a spiritually affirming behavior is crucial through informal learning intervention in parents’ responses to children toward biblical worldview formation. The Christian-nurturing characteristics in Boehlke’s learning theory—knowledge, understanding, attitudes, values, skill habits, motives, and changes in the self—seemingly pertain to and advocate these two spiritually affirming behaviors, as highly reflected on the survey and parent discussions. With significant relevance to informal learning, Boehlke’s theory of learning is closely related to the theological framework of Parson’s (1998) Christian developmentalism as one of the foundational, evidence-based frameworks, as discussed in the RQ2 section of this chapter.

**The Holy Bible.** This study pertained to informal learning through parents’ spiritually affirming behaviors and the outcome of biblical worldview. As stated in Chapter 2, the Holy Bible constituted the major framework of this research. The themes that arose through the overarching framework of the Holy Bible toward biblical worldview formation through informal learning by parents were a personal relationship with God passed on from parents to children, the foundational basis of Mosaic Law, child and adolescent spiritual formation, and individual spiritual transformation. Measuring parents’ perceptions of a particular family scenario and their response to the questions showed higher mean scores for accountability, consistent discipline, patience, and church connection. This response by parents resulted from knowledge of informal learning and informal learning behaviors. Lower mean scores for the behavior of tone of voice
and those scenarios focusing on teen responses and morality related to right and wrong and morality related to sexuality indicate areas of parental informal learning behaviors for which parents can intentionally strive to enhance. In the introduction to this dissertation, the researcher stated the intention of emerging informal learning theory in evangelical Christianity. Further research related to concepts and findings of this study has the potential for explaining phenomena that will guide the development of informal learning theory and educational and leadership studies, both faith-based and nonfaith-based. This research development of informal learning theory to guide educational and leadership studies can influence lifelong spiritual formation and advance Christian-life development of the present and future generations of children and adolescents. The following discussion of supporting theory not only reiterates the foundational evidence of this study but functions as producing how the QUAN study results of parents’ responses are integrated into Christian-life development for parents, children, and adolescents in the family environment.

**Cognitive and Learning Theories of Bandura, Lewin, Dewey, Piaget, and Kolb.**

Based on the results of RQ1, parents can identify informal learning behaviors to respond in a family situation and interact with their children by exhibiting spiritually affirming behavior in accordance with biblical principles. As depicted in Figure 5, person, behavior, and environment work in triadic reciprocality through five capabilities: symbolizing, forethought, vicarious, self-regulatory, and self-reflective (Bandura, 1986). These capabilities are crucial in the formative years of development. This study presented informal learning through spiritually affirming behaviors of parents as leaders, educators, and spiritual nurturers to bring about the biblical worldview formation process through the theory of triadic reciprocity. As to experiential learning theories foundational to this research study and informal learning behaviors by parents to bring
about biblical worldview formation in their children, the four learning theories of Lewin, Dewey, Piaget, and Kolb presented that (a) learning is a process and not focused on outcomes; (b) the continuous learning process is grounded in experience; (c) all learning models show that the nature of learning is a tension-filled process; as such, conflicts occur among the modes of learning, albeit not detrimentally, (d) learning is holistic in its adaptation to the environment; (e) although it seems unnecessary to state that learning involves the individual’s transaction with the environment, this concept is apparent when learning focuses on a person-centered view; and (f) learning is a process whereby knowledge is created (see Figures 6, 7, 8, and 9; Kolb, 1983).

Common across these four learning theories is that objective and subjective experiences result in knowledge through a process of learning, as transactions occur between experiences and there is a dialectic process in constant action. Parents in this study gained knowledge of informal learning and experienced hypothetical family scenarios in which their perceptions reflected the particular interaction with their children. The RQ1 results facilitate the development of further education for parents, educators, and leaders through curriculums and workshops on informal learning and biblical worldview formation related to children, adolescents, and family life.

**Informal Learning Theories.** The findings of this study presented informal learning and supporting theories as the crucial avenue by which the parents display and practice spiritually affirming behaviors. The works discussed in the literature review give meaning to the results of this study. Participants received education about informal learning before completing the survey, next evaluating family scenarios representing spiritually affirming behaviors. The parents’ answers reflected their informal learning behaviors from experience interacting with their children, creating the data obtained and analyzed. The pioneering works of Knowles (1950) and Marsick et al. (1999) showed the value and importance of informal learning in education and
Informal learning is unplanned, inherent, and occurs generally in socialization (English, 1999; Knowles, 1950; Marsick & Volpe, 1999; Marsick & Watkins, 2001).

The first acknowledgment of family and the community in the educational process of informal learning is the Bible, as supported by Scripture, through God’s creation of the family and Mosaic Law. Of informal learning theory, which began from a work-related and business-oriented viewpoint, authors have agreed on various principles. For example, Noe et al. (2013) defined informal learning as “learner initiated, occurs on as-needed basis, is motivated by intent to develop, involves action and reflection, and does not occur in a formal classroom setting” (p. 327). In a workplace study, Doornbos et al. (2008) found that spontaneous learning occurred through inner workings and social interactions taking place in the work environment, which closely related to the influence of a parent in a child interaction through informal learning behaviors. Sevdalis and Skoumios (2014) adopted a science-oriented perspective to describe informal learning as “the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from both daily experiences and exposure to the environment” (p. 14). What is occurring in the formative years, as discussed in RQ2, appeared in the studies of Siegel (2012) and Siegel and Bryson (2018), with this study’s focus on parent-child interactions in the survey scenarios. The informal learning lifelong process starts in the formative years and was the significant focus of this study. The results from RQ1 as to knowledge and behaviors of informal learning that influence children ages 2 through 12 years yielded crucial information on the trends of the spiritually affirming behaviors and the basis upon which the intervention of informal learning by parents can enter into further education and leadership discussion and research and development.
The knowledge and behaviors of informal learning by parents that influence the children in RQ1 emerged in the trend results, as shown in Tables 3 and 4. Four scenarios representing spiritually affirming behaviors did not receive support from parent responses to survey scenario questions for accountability, tone of voice, consistent discipline, and patience. However, positively endorsed responses according to parent perceptions in a particular family situation and the interaction with the child on mean composite scores supported the behaviors of accountability, consistent discipline, one-on-one presence, patience, and church connection. Literature shows the positively endorsed responses in spiritually affirming behaviors by parents toward biblical worldview formation through informal learning. The following discussion on RQ2 looking at the relationship between informal learning and biblical worldview formation presents biologically oriented studies about parental influence through nurture, informal learning theories and studies, God-centered education, worldview meaning, biblical worldview formation, and Christian developmentalism.

**RQ2**

What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

Answering RQ2 entailed considering the foundation of God’s Holy Word, social cognitive theory, the learning theories, and the informal learning theories discussed in this chapter for RQ1. Further discussion for RQ2 will focus on theories and supportive research studies concerning parents as spiritual nurturers and educators, the biological basis of brain studies concerning child development and nurture, Christian developmentalism, God-centered education, and worldview meaning and biblical worldview formation. All of these topics appeared in the Chapter 2 literature review.
For RQ2, the five spiritually affirming behaviors represented in the independent variable of informal learning were positively statistically significant to dependent subvariables of the teen response categories. A positive association was apparent in a recurring trend in the significant Pearson correlations indicating that as scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase (see Table 6). A Spearman correlation verified each of the significant associations (see Table 7). The following discussion presents theory and research in support of the results of this study and looks at a theory in major contrast to the results of the study. The first topic of discussion will show the importance of seeking the relationship, as stated in RQ2 through parent-child interaction.

**The Holy Bible.** As described in the Chapter 2 theoretical framework discussion, although the Holy Bible is not a scientific theory book, the foundation of the Word of God guides all educational processes, beginning with the means for humankind to have a relationship with God, the Creator (Moloney, 2016; Ward, 1998). There is special meaning here for the term *relationship* and the relationship between informal learning/spiritually affirming behaviors and biblical worldview formation. The informal learning intervention by parents is effective through the parent having a personal relationship with God and passing this relationship to their children, as instituted by God.

**Parental Involvement in Spiritual Nurturing and Education.** The positive association shown by a recurring trend indicates that as scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase as supported by early childhood intervention in nurturing (see Tables 6 and 7). Specific to parental nurturing, the review of literature showed 15 publications from 1998 to 2017 that presented parents as spiritual nurturers and educators (Anthony, 2008; Anthony & Benson, 2003; Barna, 2003; Barna Group, 2017;
Chester & Timmis, 2008; Dettoni & Wilhoit, 1998; Estep, 2008a; Evans, 2014; Kinnaman, 2011; Knight, 2006; Moloney, 2016; Porter, 2013; Tripp, 2016; Tripp & Tripp, 2008; Ward, 1998). In studies conducted from 2001 to 2003, Barna (2003) asked 13-year-olds to reflect on what they had absorbed in childhood and leading into adolescent years. The findings showed a significant emphasis on spiritual and moral issues for the holistic and healthy development of children and adolescents by parental spiritual nurturing. In light of the correlation results of this study, it bears repeating: “If people do not embrace Jesus Christ as their Savior before they reach their teenage years, the chance of their doing so at all is slim” (Barna, 2003, p. 35). An additional early study by Voas and Crockett (2005) that indicated the importance of the correlation results of this study yielded a statistic of the likelihood of youth having a solid “believing and belonging relationship with God at a 0.3% chance when there is no parental influence directly with the young person” (p. 21).

The results of this study showed a positive association between informal learning and biblical worldview formation by parents. This positive association involved the parent influencing the child through spiritually affirming behaviors, which the supportive theoretical and theological literature show to be crucial in the child’s developmental years through studies of attachment theory (Eliot, 1999), brain plasticity (Siegel, 2012), and nurture (Siegel & Bryson, 2018). Eliot (1999), Siegel (2012), and Siegel and Bryson (2018) all related the study of the brain to the concept of nurture in the early developmental years. In line with the positive association found between informal learning through spiritually affirming behaviors and biblical worldview formation as reflected by parents’ perceptions, there is biological proof through neurological study that the parental influence of spiritual nurturing is crucial in the parent/child interaction in early childhood development.
Supporting theory and theological foundations for parental influence in nurturing in the early developmental years framed the results from the recurring trend in the correlations indicating that as scores for spiritually affirming behaviors (informal learning) increased, the scores for biblical worldview also tended to increase. In contrast, Harris (1995, 2009) did not view the parent as mattering in the child’s development or lifetime influence. As discussed in Chapter 2, Harris (2009) encouraged parents to love their children, enjoy them, and educate them as well as possible, but stated, “How they turn out is not a reflection on the care you have given them” (p. 329).

A major theoretical and theological framework for this study and its purpose and research questions was Christian developmentalism. The literature review presented developmentalism as a meta-theory and showed how the Bible connects with developmental psychology. The positive association yielded in the correlation results between spiritually affirming behaviors and biblical worldview formation stemmed from the parental behaviors influencing the child toward a spiritual formation journey through a biblical worldview established early in the developmental years. Biblical worldview develops as the child moves into the teen years, providing a solid foundation in biblical principles for continued spiritual formation.

In applying developmentalism to Christian nurture, this study showed eight beliefs and seven tasks for Christian education integrated into the biblical principle supporting literature for the survey (measurement by scenario scale; see Appendix M). Christian developmentalism leads into the following discussion on God-centered education as part of the purpose of this study and RQ2 examination, results, and supporting literature.

**God-Centered Education.** Parents were key factors in the findings of a positive correlation between informal learning and biblical worldview formation. Specific to RQ2, the
parents’ perception of a family situation regarding a spiritually affirming behavior and teen response category represented the intervention in the parent/child interaction. The authors presented in the literature review discussed spiritual nurturing and education as a single entity. A positive association between spiritually affirming behaviors and biblical worldview formation indicated that as spiritually affirming behaviors increased, biblical worldview formation increased. Thus, the means of executing the behaviors through an intervention by parent nurturer and educator are crucial. God’s Word did not view spiritual nurturing and education of children as separate entities (Barna, 2003; Dettoni & Wilhoit, 1998; Pazmiño, 2008; Wilhoit, 1991; Deut 6:7; 11:19; Ps 11:10; Prov 1:7; 9:10; 22:6; 30:5; Matt 4:4; 21:16; Mark 12:24; Rom 15:3-4; 1 Cor 1:30; Col 2:3; 2 Tim 3:15 [foundation]; Gen 18:19; Exo 27:21; 30:30; Josh 24:15; Ps 78:4-8; Prov 1:2-4; 4:5-8; 22:6; 2 Tim 3:17 [purpose]). Discussion around and the display of Figures 1, 2, 3, and 4 presented how God-centered education with the focus of informal learning in this study is a life event throughout the child’s developmental years (Anthony, 2008; Anthony & Benson, 2003; Barna, 2003; Chester & Timmis, 2008; Dettoni & Wilhoit, 1998; Estep, 2008a; Kinnaman, 2011; Knight, 2006; Lingenfelter, 2008; Pazmiño, 2008; Richards, 1976; Sampson, 2011). The biblical worldview formation is a continuing event to shape biblical principles into the worldview as the teen years approach and continue.

This researcher viewed the parent as a spiritual nurturer and educator who takes the combined role of parent/servant leader/spiritual nurturer/educator/mentor. As God-centered educators, parents exert their influence over all situations as a model for the child or adolescent. The QUAN findings indicated a positive association between informal learning through spiritually affirming behaviors of parents and biblical worldview formation in children and adolescents. Therefore, from a God-centered education and Christian developmentalism focus,
parental mentorship as modeled through biblical principles is effective influence. Drovdahl (1998) viewed Jesus as the model/mentor of parental influence through informal learning to the child and adolescent. This is reflected in Scripture, “And Jesus grew in wisdom and stature, and in favor with God and man” (Luke 2:52).

As to the impact of the educational setting of family in informal learning early in life and the parent as the spiritual nurturer and educator, Shields (2008) stressed the importance of early training in family life. In this assertion, Shields also reflected on and supported the findings of the correlation. The author identified a critical issue concerning youth ministry that speaks heavily to the educational setting of informal learning: “Youth ministry is not God’s primary mechanism for reaching and discipling young people—God issued that directive to the family (Deut 6:6-9) and the church (Eph 4:11-13)” (p. 14). Erdvig (2016) discussed life with children, asserting that the family household can become “a biblical worldview academy” (p. 87).

RQ2 results indicated that as scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase. In Erdvig’s (2016) study, 100% of participants noted “that their family had a major influence on their worldview” (p. 121). One of the participants stated, “My parents have shaped most of my beliefs today,” with another adult participant saying, “Christian family was one of the biggest influences on my worldview” (Erdvig, 2016, p. 122). The influence of parents through informal learning behaviors appears through nurturing and education to bring about biblical worldview formation (the dependent variable of this study) in the child and rising adolescent.

**Worldview.** Considering the positive association between the spiritually affirming behaviors and biblical worldview formation in the findings of RQ2, knowing the roots of a notion as important as worldview is crucial. Perhaps more valuable is knowing and
understanding where worldview resides within the person. Hiebert’s (2008) six culturally and socially related functions of worldview apply to every meaning crucial to parental influence on children in the early years and into adolescence. The worldview diagram in Figure 12 shows the extent of the deep-seated concept of worldview within the individual, including what shapes the person’s core beliefs and, subsequently, the culture development and patterns of behavior.

Hiebert (2008) asserted the importance of viewing and understanding the concept of transformation in conjunction with worldview. Spiritual transformation is a process that should begin early in life (Anderson et al., 2017; Barna, 2003; Barna Group, 2017; Barna Group & Impact 360 Institute, 2018; Evans, 2014; Kinnaman, 2011). Hiebert stated, “A biblical view of transformation…is both a point and a process” (p. 310). The RQ2 findings in this study showed a positive association between the spiritually affirming behaviors and biblical worldview formation, including that as scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase. These findings would support that biblical worldview formation early in childhood can develop a life of obedience, discipleship, and spiritual accountability in every area throughout the lifespan.

Hiebert (2008) is a strong supporter of worldview in conjunction with spiritual transformation; thus, assertions of culturally and socially related functions of worldview address every meaning crucial to parental influence on children in early years and into adolescence. The greatest contrast is group socialization theory (Harris, 1995, 2009), which can provide the parent with insight into children’s learning behaviors and beliefs. Harris (2009) urged parents to love, enjoy, and educate their children as much as possible. However, group socialization theory does not positively acknowledge the care and nurture given by parents toward their children’s growth.
and development; rather, Harris stated, “How they turn out is not a reflection on the care you have given them” (p. 329).

Another contrasting study, Project Spectrum, is relevant to the RQ2 findings regarding informal learning behaviors by parents and biblical worldview formation of children and adolescents. A key component of the study was a “nourishing environment” (Gardner, 2006, p. 92). Gardner (2006) asserted that cognition develops and is nurtured within and through social domains, a valued discipline for individuals. Parents receive mention in the tutoring of children in academic education; however, neither family life nor direct, one-on-one presence is a component in the social domain or the nourishing environment.

Qualitative Phase

RQ1

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

Answering RQ1 occurred in both phases of this mixed methods explanatory sequential study (see Appendix A). The independent variable of informal learning, as carried out by study participants (parents), concerned their knowledge and behaviors displayed through informal learning intervention in the interaction with their children ages 2 through 12 years. This display of knowledge and a particular spiritually affirming behavior related to each question emerged through a focus group interview following the findings of the QUAN analysis of survey data. Purposeful selection from the survey participants produced the focus group.

The participants received initial teaching and learning concerning informal learning and worldview in the educational video included in the e-mail invitation to the study. Therefore, the participants had a basic knowledge of the informal learning to which RQ1 referred. The knowledge participants did not have in Phase 1 were the subvariables of the independent
variable, informal learning—that is, the spiritually affirming behaviors. This deception was a way to avoid the social desirability effect (Leedy & Ormrod, 2019). In the QUAL phase of this study, however, the participants learned of this deception through a debriefing statement sent via e-mail before the focus group interview. In the semistructured interview, the moderator (the researcher) presented two questions to the participants ($N = 4$). After announcing each question’s spiritually affirming behavior and teen response category of focus, the researcher quickly followed with another related question. The initial questions focused on the parent/child interaction; the follow-up questions allowed the participants to reflect on a behavior and emotion they experienced as parents that influenced the child and situation (scenario). In the structured interview, participants wrote their thoughts and reflections and subsequently shared them with the group. Through the theory-in-use instrument, the participants received an introduction to the theory of double-loop learning. The focus group interview process ended with a group debrief, allowing further comments and questions regarding any topic covered in the interview.

**The Holy Bible.** Scripture supports parents’ readiness in nurturing and educating their children. Parents’ attributes as set forth in Scripture include affirmers, encouragers, guiders, correctors, protectors, informers, structurers, and launchers who possess integrity, truthfulness, and reliability (Barna, 2003; Ward, 2012; Gen 27; Num 18:11; Deut 1:31; 6:4-9; 11:18-21; 15:20; 16:11; 1 Sam 1:10-16; 2 Sam 6:20; 12:16; 1 Chron 16:43; Prov 3:11-12; 13:1, 24; 19:18; 23:12-14; 29:15-17, 21; Prov 22:6; Isa 7:15; Lam 2:19; Matt 10:37; 12:48-50; Acts 26:4; Col 3:20; 1 Tim 4:7; 2 Tim 3:15-17). Scripture speaks directly to the subject of one who is “trained” and the “teacher” (Luke 6:39-40). Parents as leaders and teachers who inspire a biblical worldview formation of children begin with their own preparation in spiritual formation and
education to be role models and mentors. Parents are leaders and teachers who train and disciple their children (Luke 6:40).

Four final themes emerged from the QUAL data analysis (categorization and coding) as saturation occurred to answer RQ1. These were: (a) allowing opportunities for one-on-one discussion, (b) exhibiting patience and understanding, (c) struggling children require different parenting techniques, and (d) personal growth and reflection in parenting. In response to an interview question representing one of the spiritually affirming behaviors and a specific teen response category, parents expressed behaviors that they recognized in themselves as influencing their child. Participants discussed viewing the subsequent behavior from the child, leading the parent to reflect on the outcome and why it was occurring.

For example, the focus group discussion and reflection of the interview question related to Scenario 3 of the survey represented one-on-one presence and Bible truth. Participant 2 shared her feelings and insights regarding an interaction with her daughter. She imposed immediate discipline for her child’s bad behavior and later perceived the action of discipline as a negative outcome. The parent then exhibited the informal learning behavior of one-on-one presence, a behavior confirmed by Participant 3 (the father of this family) as having positive outcomes. One-on-one presence, which Participant 2 exhibited in allowing the child time to open up and communicate, led both parents to evaluate “the way we were parenting her.” In addition, Participants 1 and 2 provided their child with “ways to talk to us—at least to express herself to us.” Participant 1 shared an interaction with his child in which he discovered that listening is a key component of one-on-one presence. He realized that he and his wife had projected their ideas onto their daughter instead of closely listening to her.
**Informal Learning.** Informal learning starts from birth, as parents take the lead within the family environment for spiritual nurturing and education. Figure 2 showed that the majority of education comes from life experiences (Anthony, 2008; Anthony & Benson, 2003; Chester & Timmis, 2008; Knight, 2006; Lingenfelter, 2008; Pazmiño, 2008; Sampson, 2011). The knowledge and behaviors of parents as answered in RQ1 and exhibited by spiritually affirming behaviors through the four themes were evidence of “teaching along the road” (Chester & Timmis, 2008, p. 117), as reflected in Deuteronomy 6. As shown in the neurobiology studies presented in the literature review of this study and faith-based studies of authors and researchers such as Barna (2003) and Kinnaman (2011), children can form spiritually based principles and moral emotions early in life. The spiritually affirming behaviors that parents expressed in the interview reflected the integration of theological and theoretical principles as their knowledge and behaviors of informal learning emerged in the interactions with their children.

**The Basic Tenets of Social Cognitive Theory and Experiential Learning Theory.** The knowledge and behaviors of informal learning discovered through measuring RQ1 that resulted from the discussion and reflection of parents, converged into the four themes of spiritually affirming behavior origin. The actions and understanding voiced by parents were foundational to the basic tenets of social cognitive theory in the triadic reciprocity concept of person, behavior, and environment as depicted in Figure 5 (Bandura, 1977, 1986). Social cognitive theory applies to familial influence and parental involvement through the principles of person, behavior, and environment. As discovered in RQ1, these principles, integrated with the learning models of Lewin, Dewey, Piaget, and Kolb, were apparent within the parent responses that emerged through spiritually affirming behaviors into the final four themes (Kolb, 1983). Clarification and meaning of QUAN data results occurred, as expanded upon in the further discussion of this
chapter. RQ3 expanded on the QUAN results of RQ1 and RQ2 in clarification and meaning-making, supporting the theological and theoretical foundations presented in the literature review.

**RQ3**

How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

RQ3 was answered in the QUAL phase of this mixed methods explanatory sequential design study (see Appendix A). The independent variable of informal learning, as carried out by study participants (parents), concerned their knowledge and behaviors of informal learning; data collected through the focus group interview process clarified and gave meaning to the results of the QUAN data. Each participant in the focus group interview was there because of purposeful selection after completing the survey instrument. As presented in the opening discussion of RQ1, an important teaching and learning process for the participants occurred for both the survey instrument and the qualitative focus group interview through the researcher-provided educational video. The focus group interviewees ($N = 4$), therefore, had basic knowledge and understanding of informal learning and worldview upon entering and participating in the QUAL phase of this study.

Two areas of interest emerged from the process of clarification and meaning-making in RQ3. First, through the participant responses to both the semistructured and structured interview questions, the results of RQ1 and RQ2 became clearer. Second, parent responses gave meaning to the results of the QUAN Phase 2 in descriptions of experiences and interactions with children in the family environment. As to clarifying and giving meaning to the QUAN results in the correlation analysis, the participants expressed interactions with their children through informal
learning behaviors. These interactions led to positive outcomes or negative outcomes. Two examples in the RQ3 results clarified the QUAN findings of descriptive statistics and the correlation analysis. First, in the semistructured interview, participants gave responses about one-on-one presence, which became one of the final themes. The findings in the QUAN phase in the frequency table percentages and the descriptive statistics from composite scores showed higher scores for this behavior and biblical worldview formation. The second example concerned the behavior of tone of voice. Although one of the semistructured questions represented this spiritually affirming behavior, it did not surface in either the semistructured or structured interview responses or the final themes. Tone of voice had one significantly higher frequency score, one lower frequency score, and a lower composite score.

The second area of interest in RQ3 is the meaning-making of data and results in the QUAN phase. In the interview, parents expressed feelings about the scenario situations, insights, personal behaviors, particular experiences, emotions, parenting action strategies and consequences, and reflection (double-loop learning). An example of meaning given to the results of QUAN data was through parents’ expressions concerning the spiritually affirming behavior of patience, which was an initial theme at the beginning of the QUAL analysis. In this research, the dominant QUAN phase guided the QUAL sampling and interview process. Upon the noted scores, the researcher chose patience as a focus behavior for the interview process. Two scenarios represented patience, each related to the teen responses of Bible truth and church connection. In the frequency percentages, patience yielded one significantly high score and one significantly low score. In the composite score analysis, results showed a higher mean, which indicated an endorsement for biblical worldview formation in that particular scale. The coding and categorization of data yielded Theme 2 as the phrase exhibiting patience and understanding.
Growing up, Participant 2 had experienced disillusionment with church, even with her father as a minister and church a part of her life. Her experience helped her understand what her children might be going through when struggling with spiritual beliefs and beliefs about church. However, Participant 2 expressed the difficulty of experiencing her middle daughter’s struggle with belief in God; ultimately, she was patient and gave her daughter space to talk. Participant 2 identified her patience as twofold: first, making sure her daughter understood her mother was listening and understanding her perspectives, and second, making sure her daughter understood the decisions by her mother and father related to church.

All scores reflected a spiritually affirming behavior and a teen response in the dependent variable in the endorsement of biblical principles. Further discussion of parents’ knowledge and behaviors in informal learning in the home environment and clarification and meaning-making as to Phase 1 results follow in the conclusions, implications, and applications section. Crucial to the clarification and meaning-making by the focus group discussion are the theological and theoretical foundations from which this research developed and occurred.

The Holy Bible. The informal learning behaviors of the parents, as influenced upon and learned by the child and adolescent, lead to social transformation, as the youth grow and mature spiritually to disciple others (Moloney, 2016). The mandate from God to the Hebrew people, as presented in Deuteronomy 6:6-9, directs parents to influence their children through educational formats—for this study, informal learning. Moloney (2016) presented this influence as individual transformation and social transformation, “a holistic, all-of-life approach to education” (p. 3). The parents’ expressions and reflections on the interactions with their children in the interview brought clarification and meaning to the QUAN results. Behaviors had some higher and lower percentages and means, and there was a positive association in the trends of the correlations
between spiritually affirming behaviors and biblical worldview. When parents exhibited spiritually affirming behaviors and expressed and reflected upon them in the focus group interview, they saw evidence of positive outcomes in their children’s actions.

Contrasting literature to the parental influence in the family environment received earlier discussion. Although Gardner (2006) did not mention parents in family life in the nurturing and education of children, evidenced-based studies reveal that nurturing in early life is important (Knight, 2006; Moloney, 2016; Tripp & Tripp, 2008). After the QUAL findings clarified and gave meaning to the QUAN findings, the “nourishing environment” that Gardner presented appeared as a meaning-making area parents could develop for informal learning and biblical worldview formation of children and adolescents.

**Seminal Studies of Informal Learning.** As participants responded to questions in both the semistructured and structured interviews, the family situations and interactions described with their children both clarified and gave meaning to descriptive statistics and correlational analysis results. This clarification and meaning-making occurred through informal learning behaviors, eliciting behavioral outcomes with the child that were undergirded with biblical principles to encourage biblical worldview formation.

The Holy Bible supports the findings of the QUAL phase as the major seminal informal learning source. God gives His declaration for the household to become the entity by which children will be directed (Gen 18:18-19). Based on the Hebrew way of life concerning family and education, informal learning is a product of daily living (Anthony & Benson, 2003). The assertions of Moloney (2016), Anderson et al. (2017), and Sire (2009) concerning informal education and its connection to biblical worldview formation indicate the root issue of this study, the research purpose, and the RQs. The root issue is that parents can empower children early in
life to begin realizing through God’s Word the transformation that can occur by the “renewing of the mind” through spiritual transformation and biblical worldview formation (Rom 12:2).

Participant 1 shared family experiences and interactions with his children, expressing empathy when seeing them struggle with life issues. In a later discussion in which participants reflected on their actions and what they might have done differently, Participant 1 and his wife had learned to listen to their children. Spiritually affirming behaviors of patience, one-on-one presence, and accountability were common topics as participants shared their experiences. Participants discussed their personal growth and growth in parenting practices as the structured interview process focused on double-loop learning. These participant discussions and expressions exhibiting informal learning behaviors clarified the higher or lower frequency percentages, the composite scores endorsing biblical worldview formation, and the positive association in the correlations as detailed in this RQ3 discussion. The participant conversations and expressions gave meaning to data gathered in the QUAN phase, and the results yielded regarding informal learning behaviors and biblical worldview formation. Participants expressed their family experiences and interactions, parenting interventions, intentions behind parenting practices, outcomes, and personal learning and growing.

This study’s theoretical foundation stemmed from studies of adult education informal learning by Knowles (1950), which developed out of Dewey’s studies as presented by Boydston (2008b), Lewin (1951), and Bandura (1986). Later, Marsick and Volpe (1999), Marsick et al. (1999), and Marsick and Watkins (2001) conceptualized informal learning principles, out of which this research study’s problem, purpose, and RQs developed. The seminal studies are important to parents’ understanding of informal learning and children and youth as recipients of the informal learning behaviors. The informal and incidental learning model adapted by Cseh
was especially relevant to the clarification and meaning-making of the findings of the QUAN
data analysis. Cseh found most learning stimulation occurred around the context of the life
experience (Marsick & Watkins, 2001; see Figure 10). The adapted informal and incidental
learning model has strong implications for parental behaviors and the home environment. The
ambiguity in the context of life referred to by Cseh stimulates learning by the informal learning
process (Marsick & Watkins, 2001). The context of a life experience in the parent/child
interaction and the informal learning behaviors of parents was critical to the relationship between
informal learning and biblical worldview formation in children and adolescents. As participants
responded to interview questions, expressing insights, child interactions, and reflection, it
became evident that context was a key factor.

**Worldview and Biblical Worldview.** Along with education about informal learning, the
educational video presented the meaning and concepts of worldview. Through the interviews,
parents learned of the four categories of teen responses that pertained to one spiritually affirming
behavior and one teen response category representing biblical worldview formation (see Table
1). Education of worldview and the study’s focus on children and adolescents and biblical
worldview formation was crucial to the parent perceptions of the survey family environment
scenarios and, in particular, the discussion of RQ3.

This research study focused on the anthropological component of worldview that
provided structure for the creation of a specialized measurement instrument for both the QUAN
and QUAL phases. The literature review presented Hiebert’s (2008) six culturally and socially
related functions of worldview and how worldview exists within a person (see Figure 12). These
concepts, and the ideas of parents as nurturers and educators/leaders, contribute to the meaning
of informal learning by parents and the biblical worldview formation of children and adolescents.
Literature reviewed for this study showed the need for nurturing and spiritual nurturing to begin early in life (Anthony, 2008; Anthony & Benson, 2003; Barna, 2003; Chester & Timmis, 2008; Knight, 2006; Lingenfelter, 2008; Pazmiño, 2008; Sampson, 2011). Researchers have biologically and psychologically supported the brain as capable of learning from birth and the effects of nurture along with nature (Eliot, 1999; Siegel, 2012). Studies involving visual development and social experience affect neural processes, clearly showing that environment in the early years of life directly influences brain structure and function. The clarification and meaning-making uncovered in the RQ3 findings are a significant starting point for disproving Gardner (2006) and Harris (1995, 2009). These researchers did not find family life as influential in the social domain in a child’s early life and parental influence by one-on-one presence in the home environment.

In the parent reflections, emphasis was often on one-on-one presence and finding a balance in parenting techniques for children needing more or less time, especially in homeschooling situations. Participant 1 and his wife discovered that communicating with their three children about each having different learning paces proved to be effective. This father and mother influenced their children first by open communication, followed by celebration for each child’s efforts. Later, in parent reflections through the structured theory-in-use process, Participants 1, 2, and 3 expressed their own learning and growth through interactions with their children, discovering how “truly listening and hearing” brought better communication and one-on-one presence opportunities. These participants’ responses to the interview questions clarified and gave meaning to the higher scores, in both frequency percentages and mean composite scores, that endorsed biblical principles and biblical worldview formation. Accountability with a higher mean composite score and one lower frequency score was also evident in the parents’
expressions. Participants 1, 2, and 3 acknowledged their accountability in evaluating their ineffective parenting techniques and allowed personal growth and change. As a result, they could guide their children toward personal growth and biblical worldview formation, as RQ3 findings revealed. Further discussion concerning conclusions, implications, and applications of the QUAL phase follows.

**Research Conclusions, Implications, and Applications**

**Overview**

This explanatory sequential mixed methods study entailed quantitative survey research and qualitative focus group interviews. The impetus for researching this topic was evident in the research problem and research purpose. After reviewing the literature and implementing the study, the researcher declared the following key determinations. First, the research problem fell under the study of Christian leadership and Christian education, indicating a crucial need for informal learning by parents and/or guardians on the topic of informal learning related to outcomes of biblical worldview formation for children and adolescents according to and through biblical principles (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute study published in 2018). Second, the literature showed a gap regarding informal learning in evangelical Christianity for leadership and education. Third, the educational format of informal learning as an avenue for nurture and education was evident in ancient times through the Hebrew people as presented in the Holy Bible. Informal learning found further support in 21st-century theoretical literature. Fourth, parental involvement and influence and parents as spiritual nurturers and educators can both internalize and externalize God’s love and biblical principles to make it possible, through informal learning behaviors, for children and adolescents to find meaning and fulfillment in life through biblical worldview formation. Finally, the findings of this
study indicated that informal learning behaviors by parents endorsed biblical principles. There was a positive association between spiritually affirming behaviors (informal learning) and biblical worldview formation through parents’ perceptions of survey scenarios presenting parent/child interactions. Further, the findings yielded emerging themes from parent discussion and reflection related to one-on-one discussion, patience and understanding, the need for different parenting techniques, and parental personal growth and reflection.

The conclusions, implications, and applications show how this study diverges from or extends the literature and research presented. Discussed will be how this study contributes to the field of study regarding informal learning and parent/child interactions as to spiritual nurturing and education early in life and into teen years. Finally, the conclusions show how this study and its findings can extend the extant literature and studies on informal learning by parents, contributing to new theory-building for Christian-life development of the young generations.

**Quantitative Phase**

*RQ1*

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

**Conclusions.** Parents received education before taking the survey (see Appendices E, G, and I), with their responses showing informal learning through a behavior. The parents read the family scenario, which represented an assigned spiritually affirming behavior that related to an assigned teen response category. The parents’ perception of the family situation and particular parent/child interaction depended on knowledge of informal learning and portrayed behavior through informal learning to give a positive or negative endorsement of biblical principles and the formation of biblical worldview (see Tables 3, 4, and 5; see Appendix M).
Parental involvement and parental spiritual nurturing and education through informal learning knowledge and behaviors were apparent in the five spiritually affirming behaviors with certain percentages of endorsement of biblical principles. Further concluded, however, was that accountability concerning morality related to sexuality, tone-of-voice concerning morality related to right and wrong, consistent discipline related to Bible truth, and patience related to church connection, not endorsing biblical principles per the frequency percentage report does not mean wrong responses by parents. These lower percentages in the particular response and areas of informal learning knowledge and behaviors indicate areas of spiritually affirming behaviors for which parents should be intentionally vigilant. Parents responded to a family scenario through knowledge and behaviors in an informal learning environment, with 100% endorsing biblical principles through the spiritually affirming behavior of patience with the teen response category of Bible truth. Composite scores (see Table 4) showed lower endorsement of biblical principles through the spiritually affirming behavior tone of voice and the teen response categories of morality related to sexuality and morality related to right and wrong. Parents responded by higher scores for endorsement of biblical principles for accountability, consistent discipline, one-on-one presence, and patience and the teen response category of church connection. Bible truth as a category of teen response by trends had higher biblical principles percentages in the responses of parents. In the frequency percentage scores of taking each scenario separately into account, parents responded with a higher number toward positive for biblical principles as to tone of voice, morality related to sexuality, and morality related to right and wrong.

The findings showed that parents need education about informal learning as an educational process by which parental influence can occur. A conclusion was that parent
informal learning behavior was crucial to every parent/child interaction based on the specific situation or context as presented in the discussion around informal learning Figures 10 and 11. According to this study, there are spiritually affirming behaviors and teen response categories that require intentional focus in the parent/child interaction in daily life.

Parents’ perceptions of the survey scenarios regarding assigned positive and negative biblical truth and principles endorsed biblical worldview formation. Concerning biblical worldview formation of children and adolescents through informal learning by parents, the determinations, results, and conclusions of this research study emerged from a solid foundation of theological and theoretical literature, including the Holy Bible, Christian education, cognitive and learning theories, and informal learning theories (Boehlke, 1962; Doornbos et al., 2008; English, 1999; Knowles, 1950; Kolb, 1983; Marsick & Volpe, 1999; Marsick & Watkins, 2001; Sevdalis & Skoumios, 2014; Siegel, 2012; Siegel & Bryson, 2018). The determinations, results, and conclusions of this research study have critical implications for parental knowledge and behaviors of informal learning and parental influence on children and adolescents that can make possible the lifelong process of biblical worldview formation and Christian-life development.

**Implications.** Barna Group (2017) used the term posttruth society in the sense that, in current times, “It’s hard for many people to tell the difference between facts and ‘alternative facts’ or between truth and ‘my truth’” (p. 7). In reporting the trends of Gen Z studies, Barna Group identified Gen Z (teenagers born after 1998) “as the first age cohort not to consider family as central to their sense of identity” (p. 7). These assertions, together with the findings of this study, make a significant contribution to the fields of leadership and education.

Research conducted after the inception of this study continues to show the critical need for parental influence through spiritual nurturing and education. Published in 2019 by Barna
Group in partnership with Lutheran Hour Ministries, the Households of Faith studies showed parents as having the greatest influence on faith (Barna Group, 2019b). The spiritual affirming behaviors endorsing biblical principles in the RQ1 findings aligned with the Households of Faith findings, in that teens reported parent involvement—greater for the mother—in one-on-one interaction concerning faith topics and God; seeking encouragement and advice; and questions about God, problems, the Bible, and faith. The Households of Faith studies were a way to help parents and families create the “spiritually vibrant households” (Barna Group, 2019b, p. 117) that bring love, joy, playfulness, and nurturing to the home atmosphere.

The determinations, results, and conclusions of this study contribute to ongoing and future research concerning parent/child interactions and family life. Further, this study’s findings add to the fields of leadership and education. The findings provide direction to parents through the avenue of informal learning to spiritually nurture and educate their children and make possible the biblical worldview formation that will lead to lifelong Christian-life development.

**Applications.** From the time of God’s commandment to the Hebrew people circa seventh century B.C.E. to the 21st century, applying the principles of parental influence in the family setting toward biblical worldview formation of children and adolescents has been of utmost importance. The findings of RQ1 applied to the knowledge and behaviors of parents and informal learning in the home setting that influences their young children. This knowledge and these behaviors can influence the transition to and passage through the teen years.

The determinations, results, and conclusions of this research extended the theories that informed the study. The Holy Bible, cognitive and learning theories, brain studies and attachment studies, informal learning theories, Christian education, and Christian developmentalism upon which this research study was based make crucial the application to
further education and theory development. Education and theory, through the intent to return to root issues concerning the spiritual nurturing and education of children and adolescents, must advance through the processes of parent education, parent/child interactions, and biblical worldview formation of children and adolescents (Bandura, 1977; Boehlke, 1962; Dettoni & Wilhoit, 1998; Doornbos et al., 2008; English, 1999; Knight, 2006; Knowles, 1950; Kolb, 1983; Lebar, 1995; Marsick & Volpe, 1999; Marsick & Watkins, 2001; Sevdalis & Skoumios, 2014; Siegel, 2012; Siegel & Bryson, 2018; Wilhoit, 1991).

The researcher argued that informal learning by parents is an avenue by which children and youth ages 2 to 18 years can shape society and the foundations of spirituality for Christian values, beliefs, and behaviors. This study adds to the existing literature on informal learning, which is lacking in the area of evangelical Christianity in leadership and education. Informal learning in evangelical Christianity will create the potential for informal learning theory in Christian leadership and education, invoking lifelong Christian transformation and enabling further Christian-life development of children and adolescents.

The findings of RQ1 showed positive trends in percentages showing that parents exhibited spiritually affirming behaviors by informal learning. The application of these findings is possible through education and theory development. Parents received education on informal learning prior to survey administration by viewing a 10-minute, researcher-produced educational video to prepare the measurement by scenario survey. Concerning the findings of RQ1, further education to parents can proceed by a process that will combine the teaching of spiritually affirming behaviors, the foundational theological and theoretical literature of this study, and a theory-in-use conceptualization and instrument (Argyris, 1974; Argyris & Schön, 1974; see Appendix K).
**RQ2**

What is the relationship between the informal learning behaviors considered spiritually affirming behaviors of selected parents in the home setting and biblical worldview formation of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables of morality related to right and wrong, Bible truth, incorporation into a church family, and morality related to sexuality?

**Conclusions.** The importance of seeking a relationship between informal learning behaviors by parents in the family setting and biblical worldview formation in teenagers can be realized through the studies of one of the scholars referenced in the literature review. Having studied education and authored studies of Christian education, Pazmiño (2008) presented the biblical, theological, philosophical, historical, sociological, psychological, and curricular foundations of Christian education. Pazmiño’s in-depth study of education and theory began with foundations in Deuteronomy, with the author acknowledging, “Despite the multiplicity of educational influences today, parents are still the primary educators who actively or passively determine what influences their children” (p. 23). The review of literature by authors, researchers, and scholars, such as Voas and Crockett (2005), Nash (2009), Barna Group (2019a, 2019b), Durbin (2001), Evans (2014), and Moloney (2016), indicated solid support of parents and the home environment as the primary influence toward biblical worldview formation. These researchers presented evidence through studies on parental influence on children and youth early in life and the influence occurring in the home environment. Therefore, a conclusion is that showing findings of a correlation is important to advance the argument and provide a foundation for further research, theory-building, and educational offerings.

The study participants (parents) watched the educational video to understand the concepts of informal learning and worldview and to receive a more secure environment when taking the survey. Parents needed to understand these concepts, with the measurement by scenario instrument specifically created to assess parents’ perceptions of family situations involving
parent/child interactions. The literature review presented spiritual nurturing and education, leadership, and servant leadership, as well as the importance of these leader qualities in parental influence. It was critical that the survey scenario responses capture the essence of education and leadership qualities and principles through informal learning by parents, which would influence their children ages 2 through 12 years in biblical worldview formation to make possible the spiritual formation and transformation into teen years and beyond.

The findings of RQ2 showed a recurring trend in the significant Pearson correlations, indicating a positive association between the spiritually affirming behavior and biblical worldview formation. As scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase (see Table 6). The Spearman correlation analysis confirmed the significant associations from the Pearson correlations (see Table 7). Thus, education and leadership qualities and principles practiced by parents by informal learning through theological and theoretical foundations have a significant potential to influence biblical worldview formation in children and adolescents. The education and leadership role of parents exhibited through accountability, consistent discipline, patience, one-on-one presence, and tone of voice occur based upon a solid foundation of theoretical and theological principles from the Holy Bible, cognitive and learning theories, brain studies and attachment studies, informal learning theories, Christian education, and Christian developmentalism (Bandura, 1977; Boehlke, 1962; Dettoni & Wilhoit, 1998; Doornbos et al., 2008; English, 1999; Knight, 2006; Knowles, 1950; Kolb, 1983; Lebar, 1995; Marsick & Volpe, 1999; Marsick & Watkins, 2001; Sevdalis & Skoumios, 2014; Siegel, 2012; Siegel & Bryson, 2018; Wilhoit, 1991).

**Implications.** The intent of this research study was to return to root issues concerning the spiritual nurturing and education of children and adolescents. The process of spiritual nurturing
and education would need to advance from parent awareness of informal learning exhibited through spiritually affirming behaviors in parent/child interactions, leading to biblical worldview formation of children and adolescents. Informal learning starts from birth, and the family environment and parents lead for the process of informal learning education, in this case, through spiritually affirming behaviors (Anthony, 2008; Anthony & Benson, 2003; Chester & Timmis, 2008; Knight, 2006; Lingenfelter, 2008; Pazmiño, 2008; Sampson, 2011). Figure 2 showed formal schooling as a small segment of life experiences as to training, education, and learning (Knight, 2006). Bridges and Bridges (2009) asserted that a leader must model the desired leadership behavior when endeavoring to develop it in followers, or it is unlikely that change will occur. This statement applied to the present study in seeking the relationship between informal learning behaviors and biblical worldview formation of youth. In this study, leadership and education occurred together.

The implications of the RQ2 findings are far-reaching for the biblical worldview formation of an individual. The significant Pearson and Spearman correlations yielded a recurring trend that showed a positive association between the spiritually affirming behavior and biblical worldview formation: As scores for spiritually affirming behaviors increased, the scores for biblical worldview also tended to increase (see Tables 6 and 7). An example of far-reaching implications of the correlation findings is apparent in church connection as one of the categories of teen responses representing the dependent variable of this research study (Barna Group & Impact 360 Institute, 2018). Taken together with the responses by youth ages 18 to 22 years in Lifeway Research (2017), parental influence through spiritually affirming behaviors in the parent/child interaction has the potential to allow the youth to spiritually connect with a church family as an avenue for biblical worldview and spiritual transformation.
Lifeway Research (2017) studied the church connection of youth, finding that regular attendance (defined as twice per month for 3 months) dropped to less than half (69% to 33%) at age 22 years and remained nearly the same (34%) at age 30. The example of church connection and youth and the implications of the RQ2 findings can be substantiated by the top seven reasons individuals aged 18 to 22 years stay in church: (a) church was a vital part of my relationship with God (56%); (b) I wanted the church to help guide my decisions in everyday life (54%); (c) I wanted to follow a parent/family member’s example (43%); (d) church activities were a big part of my life (e.g., youth group, church choir, etc.; 39%); (e) I felt that church was helping me become a better person (39%); (f) I was committed to the purpose and work of the church (37%); and (g) church was helping me through a difficult time in my life (26%; Lifeway Research, 2017, p. 25). These findings strongly suggest that other teen response categories in this study’s dependent variable would be affected by parental influence through informal learning in the early years.

Another critical implication applied to the primary theoretical opponent, group socialization theory, which negates the theological foundation of biblical worldview formation in children and adolescents through informal learning by parents (Harris, 1995, 2009). Group socialization theory suggests that parental influence has “little or no power to shape their children’s personalities,” that children are shaped by “experiences they have outside the home” (Harris, 2009, p. 357), and any behaviors learned in being with parents and siblings are not taken into new contexts. The findings of RQ2 showing a significant positive association between spiritually affirming behaviors and biblical worldview formation are a starting point for studying the further effects of informal learning by parents and the broad implications for children and adolescent biblical worldview formation. Implications of RQ2 segue into applying the findings
of the correlation between spiritually affirming behaviors by parents and the biblical worldview of children and adolescents for Christian-life development and lifelong spiritual formation of the young generations, both present and future.

**Applications.** The determinations, results, and conclusions of this research are that applying the principles of parental influence in the family setting toward biblical worldview formation of children and adolescents remains crucial. The critical need for application of the results of finding a positive association between spiritually affirming behaviors by parents and biblical worldview formation is apparent in the length of time between Barna’s (2003) teen studies and the Barna Group and Impact 360 Institute (2018) study representing the dependent variable in this research.

The RQ2 results in finding a positive association between spiritually affirming behaviors by parents and biblical worldview formation extends the theological and theoretical principles, as discussed above. This foundational literature extensively discussed in Chapter 2 and again in Chapter 5 included the Holy Bible, Christian education, cognitive and learning theories, and informal learning theories (Boehlke, 1962; Doornbos et al., 2008; English, 1999; Knowles, 1950; Kolb, 1983; Marsick & Volpe, 1999; Marsick & Watkins, 2001; Sevdalis & Skoumios, 2014; Siegel, 2012; Siegel & Bryson, 2018). With these supportive theological and theoretical principles, it is possible to develop and implement educational programs, curriculums, and theory-based studies for parents and other educators and leaders who have the potential to influence children and youth.

Barna (2003) and Barna Group and Impact 360 Institute (2018) are examples of the critical need to apply the RQ2 results. These two studies appear in this dissertation in tandem to highlight the amount of time that elapsed between the first and the second, and the lack of
progress made in biblical worldview formation of children and youth from 2001 to 2017. Further, these studies show an area of application of the RQ2 findings that needs further development in parent and other leadership studies and education. One area parents were able to discuss and reflect on in the focus group interview was church connection, as detailed in the QUAL section following. For now, it suffices to state that the findings from Barna’s 2001–2003 studies of 13-year-old youth were essentially unchanged in Barna Group and Impact 360 Institute’s study of teens ages 13 to 18 years. The 2003 study concerned involvement in church, religious beliefs, and a personal relationship with God as Lord and Savior; 15 years later, the 2018 research focused on the areas of low biblical worldview in the categories of church connection, morality, and Bible truth.

Similar to the RQ2 findings of a positive association between spiritually affirming behaviors and biblical worldview formation, Crouch (2017) presented a necessary area of application. In partnership with Barna Group, Crouch studied parents in the United States with children 4 to 17 years of age, finding “monitoring technology and social media use” (p. 31) as an area challenging for parents. Because parents in this study’s QUAL focus group interview discussed other challenges, comments from The Tech-Wise Family supplemented a discussion of the results. Technology and social media are challenging parenting areas in the home environment; their influence on children and teens can be key to the anticipated integration of Christian developmentalism into program and curriculum development. Because parents’ discussions and reflections in the focus group interview are critical to applying RQ2 findings, the educational development discussion, which integrates principles and theories—in particular, Christian developmentalism—receives detailed discussion in the QUAL phase section.
**Qualitative Phase**

**RQ1 and RQ3**

What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?

How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children ages 2 to 12 years and the responses of youth ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group and Impact 360 Institute research study), which include the subvariables set out in the study?

**Conclusions.** The spiritually affirming behaviors (informal learning) referred to in RQ1 related to teen response categories in the dependent variable as reflected in the QUAN survey and the clarity and meaning given to QUAN results referred to in RQ3 connected through the participants’ (parents’) discussions in the focus group interview process. Based on the key determinations in this discussion of conclusions, implications, and applications, the hope is that parents know and understand the critical importance of informal learning in the family environment and interactions with their children and that there be evidence of a positive association between informal learning behaviors and biblical worldview formation. Based on the literature regarding child developmental principles, social cognitive theories, educational and learning theories, and faith-based studies of nurture, education, and worldview, a desired positive association would make possible opportunities upon which to build Christian-life development for young generations (Barna, 3003; Bandura, 1986; Boehlke, 1962; Doornbos et al., 2008; English, 1999; Knowles, 1950; Kolb, 1983; Marsick & Volpe, 1999; Marsick & Watkins, 2001; Sevdalis & Skoumios, 2014; Siegel, 2012; Siegel & Bryson, 2018).

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1 RQ1 and RQ3 are integrated based upon QUAL analysis, which yielded initial themes to final themes describing the components of both RQs and based on Creswell and Plano Clark’s (2018) principles of “integration in the explanatory sequential design” (p. 80).
Four themes emerged from the data analysis of the focus group interview: (a) allowing opportunities for one-on-one discussion, (b) exhibiting patience and understanding, (c) struggling children require different parenting techniques, and (d) personal growth and reflection in parenting (see Table 9). Focus group participants expressed perceptions, insights, and outcomes of child behaviors, with two examples showing clarification and meaning-making of the QUAN findings: one, the spiritually affirming behaviors of one-on-one presence and accountability, and two, patience. Subtheme 3b pertained to feelings about children’s struggles (see Table 9).

Participant 1 (father from a father/mother family) and Participants 2 and 3 (father and mother from the same father/mother family) expressed frustration and exhaustion struggling with children over homeschool work and relationships. These parents showed accountability and patience in placing themselves in various situations and being empathetic and compassionate. They also exhibited the spiritually affirming behavior of allowing one-on-one presence. Referring to a child struggling with spiritual beliefs and church connection, Participant 2 mentioned exercising “a lot of patience” to help her child work through the experience. Parents expressed insights and outcomes with respect to one-on-one presence and differential treatment. At times, children acted out over a sibling receiving more parent time. Upon reflection, however, the parents realized personal growth in their parenting and the ability to reevaluate through double-loop learning theory—as Participant 2 stated, “to change the way that we were parenting” (see Table 9; see Appendix K). Participant 1 expressed learning and growth for himself and his wife in responding to their child’s evident self-consciousness. They learned to recognize ineffective parenting and reevaluate. They then found that intentional listening to their daughter was effective parenting, as they avoided projecting their personal experiences onto their child. Participant 4 (mother from a father/mother family) shared a parenting technique that involved
exhibiting one-on-one presence. She provided an opportunity for communication and, thus, an avenue of growth for her child and herself in being aware of open discussion opportunities.

Findings showed that parents had knowledge and understanding and exhibited informal learning behaviors (spiritually affirming behaviors) in the home environment in interactions with their children. A further conclusion was that parent perceptions, insights, and outcomes of experiences in interactions with their children in the family environment, as revealed through the QUAL interview process and analysis, clarified and gave meaning to the QUAN findings. Specifically, the spiritually affirming behaviors reflected in the QUAL findings showed that the QUAN results of higher mean composite scores for accountability, one-on-one presence, and patience hold significance for parents.

The conclusion from the QUAL phase of this study in its clarification and meaning-making of the QUAN phase findings were supported by the review of literature presented in Chapter 2. The overarching foundational support was the Holy Bible in its seminal presentation of informal learning as God instituted with the Hebrew people in Deuteronomy 6. Seminal studies and conceptualization supported informal learning in focusing on context (Marsick & Watkins, 2001; see Figure 11). Authors, scholars, and researchers supported God-centered education and nurturing (Boehlke, 1962; Dettoni & Wilhoit, 1998; Knight, 2006 [see Figure 4]; Lebar, 1995; Pazmiño, 2008; Richards, 1976; Wilhoit, 1991). Further, culture and worldview studies supported this study’s conclusion. Sire (2004), Porter (2013), Hiebert (2008), Naugle (2002), and Anderson et al. (2017) advanced worldview in its focus of biblical worldview formation, as used in this study of children and adolescents, in its foundation for forming belief systems and producing meaning in life (see Figures 12 and 13).
Siegel and Bryson’s (2018) findings also supported the conclusion for the QUAL phase in support of the QUAN phase results of this study. From a neurobiological focus on the crucial aspect of education and nurturing through informal learning by parents, Siegel and Bryson shared a conceptualization based upon interpersonal neurobiology (“multidisciplinary research from around the world”) that focuses on the “no brain” and the “yes brain” factor (pp. 3-9, 13). The spiritually affirming behaviors, as expressed by parents in the focus group interview and according to the Siegel and Bryson theory and conceptualization, functioned in “the four fundamentals of the yes brain” (pp. 3-9, 13) cultivated into the child. The fundamentals cultivating the yes brain are:

(a) balance: a skill to be learned that creates emotional stability and regulation of the body and brain; (b) resilience: a state of resourcefulness that lets us move through challenges with strength and clarity; (c) insight: the ability to look within and understand ourselves, then use what we learn to make good decisions and be more in control of our lives; (d) empathy: the perspective that allows us to keep in mind that each of us is not only a “me,” but part of an interconnected “we,” as well. (Siegel & Bryson, 2018, pp. 186-187)

It was realized from the four participants in the focus group interview that these fundamentals surfaced through the spiritually affirming behaviors exhibited and subsequently clarifying and giving meaning to the findings of the QUAN phase through frequency percentages, mean composite scores, and a positive association between spiritually affirming behaviors and biblical worldview formation. The implications discussion presents further support of RQ1 and RQ3 and the importance of Phase 2 in the explanatory sequential design and the contribution of this research as a whole.
Implications. This study focused on the nurture, education, and leadership of the younger generations and parental influence by informal learning in the home environment. The major contribution of this research study lay in discovering a gap in the literature for informal learning for education and leadership in evangelical Christianity. This gap indicated a fracture in knowledge and practice of informal learning in the family environment in the spiritual nurturing of children and adolescents. Minimizing the gap required evidence of parent knowledge and behaviors in informal learning and parental influence in the family environment toward biblical worldview formation of children and adolescents. This research provided information through answering the RQs and added to the field of education and leadership in evangelical Christianity. Further, the findings of this study showed what knowledge and behaviors require more intentional parental involvement and action.

The integration of the mixed methods approach resulted in four concepts that contribute to theory building and education in informal learning behaviors by parents and the formation of a biblical worldview in children and adolescents. The four concepts are: (a) God’s Word gives the mandate for family life and parents as the primary spiritual nurturers and educators of children and adolescents; (b) social learning theory, experiential learning theory, and Christian developmentalism referenced and presented in the literature of this study provided the framework for parents’ informal learning behaviors to influence children early in life; (c) the spiritually affirming behaviors of accountability, one-on-one presence, patience, discipline consistency, and tone of voice through the informal educational format leads to the process of individual transformation (formation of biblical worldview) in the child or adolescent; and (d) the informal learning behaviors of the parents as influenced upon and learned by the child and
adolescent lead to lifelong spiritual growth and maturity to joyfully and skillfully serve God and disciple others.

In looking at the critical contribution of this study, recent literature published since the inception of this study merits attention. Among teens aged 13 to 19 years \( (N = 1,450) \) on the subject of moral issues, 45% responded that they considered a parent “to be a trusted source on moral issues” (Barna Group, 2017, p. 175). Measuring the concept of connectivity was by four categories: globally connected, relationally connected, forward-looking, and outward-oriented. For individuals aged 18 to 35 years \( (N = 15,369) \) from 2018 to 2019, parents responded at 25%, the Christian religious culture at 27%, and practicing Christians at 32% for connectivity (Barna Group, 2019c). The conclusions of Barna Group’s 2018–2019 studies showed there to be significant challenges regarding the “stability, well-being, and beliefs” of young generations from their teens to thirties. However, the recent studies showed nurturing had occurred to the point of influencing some strong connectivity in faith, community, and vocation. The implication of this continued research on younger generations is the need for biblical and spiritual nurture in education and leadership that would begin in early life for greater connectivity through a strong connection of biblical principles and solid spiritual formation. For this study, which focused on parents in the home environment for children in early growing and developing years, the integrated results of the QUAN phase and QUAL phase contributes to ongoing education and leadership opportunities for parents to bring about the Christian-life development of children and adolescents. The following discussion regarding applications includes the practicality of this study and findings.

Applications. Informal learning plays a crucial role in the training of children and youth in Christianity, instilling lifelong biblical principles that will lead to the formation of a biblical
worldview early in life. Informal learning of parents through spiritually affirming behaviors was the intervention in this study by which variables underwent examination to measure the relationship between informal learning and biblical worldview formation in children and youth, as evidenced by recent empirical study. The measurement of informal learning behaviors, as presented in the findings of this study through the QUAN phase and clarified and given meaning through the QUAL phase, was critical to future generations in turning the present post-Christian culture back to Godly principles and strong biblical beliefs.

The next important step is the application of this study and its findings. The findings concerning parental spiritually affirming behaviors of parents and the association between these behaviors and biblical worldview formation in children and adolescents contribute to the need for advancement of Christian scholarship and for informal learning theory and education to parents as nurturers, educators, and servant leaders. Clarification of parents’ responses on the spiritually affirming behaviors of patience, one-on-one presence, differentiation of parent techniques for struggling children, and reflections of personal parenting growth and changes showed the need to expand on these topics. Further, the lack of discussion and expression on accountability, tone of voice, and consistent discipline revealed a need for emphasis and added education.

The findings of this study both extended and illuminated the theories informing this research. Theory creation and education should proceed from the three major theories of social cognitive theory, experiential learning theory, and Christian developmentalism (Bandura, 1986; Dettoni & Wilhoit, 1998; Kolb, 1983; Parsons, 1998). Above all other frameworks, the Holy Bible guided the research and, therefore, the application process. Theory-in-use, as presented in Chapter 3, functioned in both the QUAN (survey instrument) and QUAL (interview process)
phases and should be a foundation in educating parents and other teachers and leaders about informal learning (Argyris, 1974; Argyris & Schön, 1974; see Appendix K).

The overall goal of this study was to enable, through evidence-based study and education to parents and society, the crucial ability to instill a biblical worldview into the young generations for lifelong biblical worldview formation and Christian life development. In the direction of theory and education based on this study’s consideration of theoretical frameworks, curriculum development is necessary for which “developmental perspective on learning, developmental assumptions, basic elements of Christian developmentalism, and the fundamental beliefs about Christian education” (Parsons, 1998, pp. 31-36, 204-209) would guide the teaching and learning (Dettoni & Wilhoit, 1998; see Appendix M). According to Crouch (2017), technology challenges in nurturing and educating young generations in the home setting would be a critical component to provide parents and other leaders an avenue for balance in its use and important contribution.

Research Limitations

There were limitations to this study in areas over which the researcher had no control. These limitations negatively affected the results and, therefore, generalizability (Roberts, 2010). It must be noted, however, that the methodology and data analysis had expert attentiveness and discernment through QUAN and QUAL consulting.

Affecting internal and external validity, the first limitation was the small sample, which caused deviation from normality and, therefore, required caution in interpreting and transferring the findings. It is recommended that the study be repeated with a larger parent sample, perhaps adding other leaders who have direct influence on children, such as school teachers and church leaders. A second limitation concerned the research design. A correlational design, which would
entail two surveys for the independent and dependent variables, is a recommended approach for repeating this study (Fowler, 2014; Leedy & Ormrod, 2019). This study used composite scores from teen participants’ responses in a previous study regarding biblical worldview (the operationalized dependent variable); future studies could include a survey of parents (and other leaders of influence to children) and a survey of teens as to biblical worldview responses, which would add to the internal validity of the study. A third limitation was the QUAN and QUAL instruments of the measurement by scenario survey and the QUAL adapted theory-in-use instrument, which, although both piloted with study participants that completed the survey, would need further testing for validity and reliability. Achieving validity and reliability for the research instruments could be through theory building and repeated studies using this QUAN phase instrument design and the QUAL structured instrument, as adapted in this study.

Further Research

This study provides a foundation upon which to build further research. As this study progressed, more current literature emerged regarding teenagers’ responses on their spiritual status and church connection, parents’ responses on raising children, and family and home environments. These reports yielded results that indicated the need for parental support and the home environment in Christian-life development (Barna Group, 2019a, 2019b, 2019c; Barna Group and World Vision, 2019; Crouch, 2017; Lifeway Research, 2017). Despite the limitations discussed in Chapters 3, 4, and 5, further research is warranted that would build on the strengths of this research, as discussed in Chapter 3. Through the study of informal learning and, in particular, this educational format as an avenue for the nurture and education of young generations, these findings provide a foundation for further research opportunities. To add to the
knowledge in the Christian education and leadership field of study, the researcher offers the following recommendations:

1. Theory development could proceed from this study to educate parents and other leaders who directly influence young generations. Theory development should serve as the foundation for education development. This theory creation received discussion in Chapter 5, in the QUAN and QUAL applications subsections that focused on the theory-in-use, with behavioral core emphasis integrating with the major theories of this study and the instruments used in data collection.

2. At a time when churches and family life have greater stability than during an ongoing pandemic, a study conducted with probability sampling and a larger sample would be appropriate with a QUAN research approach. An example would be to administer a survey in the Bible Belt to obtain parents’ and teens’ responses concerning the subvariables of the independent variable in this study. This research with teens and parents would enable further clarification of the 2016–2017 Barna Group and Impact 360 Institute study findings.

3. A further correlation of informal learning behaviors (spiritually affirming behaviors) of parents and other leaders and educators that directly influence children and adolescents could occur with data collection from two surveys. Parents, leaders, and/or educators will respond to a scenario by measurement survey set up to assess with both descriptive and inferential statistics. Teens will respond to the same type of online panel survey used in the 2016–2017 Barna Group and Impact 360 Institute (2018) study, perhaps in research partnership with Barna Group. The survey would measure trends in the same response categories used in this study. This further
research would look at the present time and reveal findings indicating the status of parents, leaders, and/or educators for informal learning knowledge and behaviors and teen responses to determine the association between the variables. A mixed methods approach is recommended.

4. Based on the overall goal and purpose of this study and the crucial need for parent, leader, and/or educator influence by informal learning behavior for children and adolescents, the next step would be to continue theory and education development. A scholar could conduct correlational research seeking further associations between the independent variable of informal learning behaviors and the dependent variable of teen responses.

Further research and theory and education development have the potential for explaining phenomena that will continue to guide the development of informal learning as an educational format. Informal learning theory can underscore educational and leadership studies, both faith-based and nonfaith-based, which can influence lifelong Christian transformation and make it possible for further Christian-life development of the present and future generations of children and adolescents (Leedy & Ormrod, 2019; Ward, 1998).

Summary

The findings of the QUAN phase and the QUAL phase findings that clarified and gave meaning to QUAN findings support the argument that developed into the research problem of this study. The findings showed that for biblical worldview formation to occur at a young age, learning must start where the individual grows holistically and learns the applications of biblical principles for biblical worldview formation. The overarching foundation in literature support was the Holy Bible. Scripture intertwined with supporting seminal and contemporary works. To
realize the value of this study in social science scholarship as well as its practical use in everyday family life, education and leadership development received explanation based upon the findings.

Two significant takeaways from the evidence-based findings of this explanatory sequential mixed methods study were (a) the crucial aspect of parental influence and the home environment on children and adolescents in their growing years, and (b) the importance of theory and education development regarding the educational format of informal learning based upon biblical principles for parents, leaders, and educators. This study’s findings were sufficient to achieve the overall goal and purpose. This research provided a foundation for evidence-based study and education to parents and society through informal learning concerning the crucial concepts of instilling a biblical worldview into young generations for lifelong biblical worldview formation and Christian-life development. Drawing upon these conclusions, parents can lead their children away from the philosophy of post-Christian thought to solid biblical beliefs and values in lifelong spiritual formation to become future strong leaders and educators.
REFERENCES


Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). The Guilford Press.


APPENDIX A

Mixed Methods: Three Core Designs

Figure A1

Mixed Methods: Three Core Designs

(a) The Convergent Design

(b) The Explanatory Sequential Design

(c) The Exploratory Sequential Design

Dear Joan Ellen Appleton,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

   (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Please retain this letter for your records. Also, if you are conducting research as part of the requirements for a master’s thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.
Your IRB-approved, stamped consent form is also attached. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please e-mail us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office
Greetings,

My name is Joan Appleton, a Doctoral Candidate in John W. Rawlings School of Divinity, Liberty University. I am conducting an important research study concerning the home environment and an educational format known as informal learning and biblical worldview formation of children and adolescents.

The survey pilot needs a mother and father from one family and two single parents from two other families.

If you are eighteen (18) years of age or older, are a parent and/or guardian of a child or children ages two (2) through twelve (12) years, I need you to help me determine if the survey I have created especially for this study is clear and user-friendly for those completing it. You will watch a 10-minute video first and then take the survey.

This survey will be taken and submitted online through a secure link provided below. I ask you to take the survey now or in the next six days. Each person should complete the survey individually. You will not need to read the consent form. Just scroll down to “Survey, Part One,” and begin with the demographic information. It is very important that you give me some further comments about taking the survey either by phone or e-mail after you complete it, so make some notes while taking the survey so you can give me your thoughts and ideas about the survey instructions, questions, and overall experience of taking the survey. After answering question 10, you will not have to be concerned with the focus group, but I do ask you to provide your information in the blanks so I can communicate with you further through e-mail or by phone. You will then scroll down and click on submit. Feel free to go ahead and call or e-mail me your comments. Your responses are completely confidential as well as your e-mail and phone number.

Video link (youtube link) Survey link (liberty/qualtrics link)

https://www.youtube.com/watch?v=1NomM3yWKYQ
https://liberty.co1.qualtrics.com/jfe/form/SV_2ujFpniPpZZYHtz

You may contact me, Joan Appleton, by e-mail or phone. I will be glad to answer any other questions you may have about the study and the survey. You may reach me at jeappleton@liberty.edu and 731-225-4145.

I appreciate your considering this request and would appreciate your help with this study survey.

Blessings to you and your family,
Joan Appleton
APPENDIX D

Permission Request to Churches

_______, 2020
_______, Senior Pastor
_______, Church
_______, City and State

Dear Pastor _______,

As a graduate student in the John W. Rawlings School of Divinity at Liberty University, I am conducting research as part of the requirements for a Doctor of Education in Christian Leadership degree. The title of my research study is: A Mixed Methods Study Concerning Biblical Worldview Formation in Children and Adolescents Through Informal Learning by Parents and/or Guardians. The purpose of my research is to examine and explore the knowledge and behaviors of informal learning of parents and/or legal guardians and determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents.

I am writing to request your permission to recruit study participants for my research from your church. The eligible families are those with children, ages two through twelve years. I will provide the church with a flyer for advertisement. Parents and guardians may take the flyer home and contact me if they are interested in participating in the study. I will personally screen and send a recruitment letter to those who will be participating in the research study. The letter will contain two computer links in a secure site for watching a video by me and completing a consent form, completing a survey, and taking an option of a group interview. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request for permission. If you choose to grant permission, respond by e-mail to jeappleton@liberty.edu. I am available to answer any questions or discuss any concerns you have about the research study either by e-mail or phone, jeappleton@liberty.edu or 731-225-4145.

Sincerely,

Joan Appleton
Doctoral Candidate
Liberty University, John W. Rawlings School of Divinity
Lynchburg, VA
APPENDIX E

Participant Recruitment

______, 2020
Study Participant
Church or Community
City and State

Dear ________,

As a graduate student in the John W. Rawlings School of Divinity at Liberty University, I am conducting research as part of the requirements for a Doctor of Education in Christian Leadership degree. The purpose of my research is to examine and explore the knowledge and behaviors of informal learning of parents and/or legal guardians and determine the relationship between informal learning and outcomes of biblical worldview formation in children and adolescents. You have indicated your interest to participate in this research study by responding to information in the advertisement flyer and have been chosen as a study participant. Below are important details for your participation.

1. As a study participant, you are asked to do the following: (a) watch a ten-minute video by me introducing you to the study, (b) complete a survey that should take approximately twenty (20) minutes, (c) indicate on the survey if you are willing to participate in a focus group interview with the researcher and other study participants which should take about three (3) hours, and (d) attend a debriefing session after the focus group interview which will take about thirty (30) minutes.

2. Your participation in the survey will be completely anonymous. If you choose to participate in the focus group interview, your name and other identifying information will be collected as part of your participation, but this information will be kept confidential.

3. The following are online survey instructions: first take this online link to watch the video:

https://www.youtube.com/watch?v=1NomM3yWKYQ

Click on this online link to follow detailed instructions and complete the consent and survey. This consent document contains additional information about my research.

https://liberty.co1.qualtrics.com/jfe/form/SV_2ujFpniPpZZYHz

If you have any questions or concerns at this point, please to not hesitate to call or e-mail me at 731-225-4145 or jeappleton@liberty.edu.

Thank you and blessings to you and your family.

Sincerely,

Joan Appleton
Doctoral Candidate
Liberty University, John W. Rawlings School of Divinity, Lynchburg, VA
APPENDIX F

Consent Form

The Liberty University Institutional Review Board has approved this document for use from 4/6/2020 to -- Protocol # 4192.040620

CONSENT FORM

A Mixed Methods Study Concerning Biblical Worldview Formation in Children and Adolescents through Informal Learning by Parents and/or Guardians

Joan Ellen Appleton
Liberty University
John W. Rawlings School of Divinity

You are invited to be in a research study concerning informal learning of parents and/or legal guardians and biblical worldview formation in children and adolescents. This research concerns the nurturing and teaching of children and adolescents in the present generation and future generations according to biblical principles with the outcome of formations of biblical worldviews. You were selected as a possible participant because you are eighteen years of age or older and part of a mother-and-father family, a single-parent family, or a legal guardian of children ages two to twelve years. Please read this form and ask any questions you may have before agreeing to be in the study. Joan Ellen Appleton, a Doctoral Candidate in John W. Rawlings School of Divinity at Liberty University, is conducting this study.

Background Information: The purpose of this study is to seek out information concerning behaviors in the home environment of parents and children that will show the relationship between these behaviors and the association with answers given by teenagers in a research study that took place in 2016–2017 by Barna Group and Impact 360 Institute published in 2018.

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

1. Take the online link in the participant letter and complete a survey, which will likely take about twenty (20) minutes.

2. Respond to an option at the end of the survey asking if you are willing to be a part of a face-to-face focus group interview with the researcher and other study participants for a few hours on a scheduled day at a later time after the first part of the study has been completed.

3. If you choose to, participate in a face-to-face focus group interview with the researcher and other study participants for a few hours.

4. Attend a debriefing after the focus group interview, which will take about thirty (30) minutes.
**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. However, this researcher informs participants of a potential risk called mandatory reporting that is required by the U.S. government. “The Federal Child Abuse Prevention and Treatment Act (CAPTA) requires each State to have provisions or procedures for requiring certain individuals to report known or suspected instances of child abuse and neglect” (U.S. Department of Health and Human Services, 2019). In the five states included in this research study, all persons are either required or permitted to report child abuse or neglect.

**Benefits:** Participants should not expect to receive a direct benefit. Compensation: Participants will be compensated for participating in the study and completing and submitting the survey by receiving a $5.00 gift card in addition to another $5.00 gift card for participating in the focus group interview.

**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 data. I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data. The following are ways I will protect the privacy of the participants:

1. The researcher will assign a numerical value to the participants’ answers and category of the parent from the surveys to allow for confidentiality. (Note to IRB: the numerical values will be assigned as a mother and father dyad, a single mother or father, and a guardian as mother or father which protects privacy through confidentiality of names.)

2. The group interview will be held in a private place where voices cannot be easily overheard with confidentiality by the researcher of names of participants, and participant perspectives are transcribed, grouped, and coded without names.

3. Data will be stored both in a locked filing cabinet and a locked, password-protected computer; three (3) years after the completion of the study, the data will be destroyed. The protected data may be used in presentations by the researcher in the future.

4. The transcription of the recorded interview will be maintained in a locked, password protected computer for three (3) years and then erased. The researcher is the only person to have access to these recordings.

5. The researcher cannot assure participants that other members of the group interview will not share what was discussed with persons outside of the group.
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 or the church to which you are a member. 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 do the following:

• Questionnaire only participants: Simply do not complete and submit the questionnaire.

• Questionnaire and group interview participants: Contact the researcher at the e-mail address included in the next paragraph. Should you choose to withdraw, questionnaire data collected from you 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 Joan Ellen Appleton. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at 731-225-4145 or jeappleton@liberty.edu. You may also contact the researcher’s faculty chair, [email protected], at [email protected] or [email protected].

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 Review Board, Green Hall Ste, 2845, Lynchburg, VA 24515, or e-mail 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 should I choose to be part of the focus group.
APPENDIX G

Educational Material Presented in the Teaching Video for Study Participants

Video Link

https://www.youtube.com/watch?v=1NomM3yWKYQ

Presentation

Hello. My name is Joan Appleton. I welcome you as participants in this research study which looks at the relationship between informal learning and biblical worldview formation in children and adolescents. As a student in a Doctor of Education program in John W. Rawlings School of Divinity at Liberty University in Lynchburg, Virginia, I have been studying and developing this topic for two years and have put in written form the research questions and description of the study. This written information also includes the scholarly sources and a great deal of information concerning informal learning and worldview.

Also included in the written content of the research study is information about the detailed way the study will be carried out. I have been thinking on this particular topic concerning parents, school teachers, and church leaders for the last ten years or so. In 2016, in my seminary studies, I discovered the key concept that would unlock the door for this research study, that is, informal learning.

The purpose of this video is to briefly give you a clear understanding of informal learning and worldview so that you can begin to realize the importance of these two concepts for children and youth. Also, having this knowledge and understanding will allow you to be more at ease about completing the survey questionnaire.
The informal learning about which this study is concerned began in Bible times with God’s chosen people called the Hebrew people. God chose the Hebrew people specifically so they could carry out His commandments and work. There are quite a few definitions of informal learning, but in essence the informal learning concept began in the 1950s in study of adult education. Later the corporate or business world began to realize the value of informal learning with employee and administrative training. Theories of informal learning began to be developed at that time. Informal learning as recognized by faith-based and nonfaith-based authors is generally viewed among the types of educational learning which is formal, nonformal, and informal. Basically, formal education is viewed as classroom or structured teaching. Nonformal learning can still be in a classroom or specific location but is not structured educational material. Basically, informal learning is viewed as education received by socialization, role-modeling, and learning by living and working beside another.

Worldview in its basic description is explained as the fundamental mental, emotional, and evaluative presuppositions or way of thinking about the nature of things in the world. The worldview lies deep within the person, not spoken, and then emerges as what the person believes, which is spoken. Then these patterns of behavior from cultural foundations continue to be what the person senses in his or her life.

A foundational principle of this research study in seeking the relationship between informal learning behaviors and biblical worldview formation in children and adolescents is God’s command from the Bible in addition to neuroscience and psychology studies showing that informal learning can have a major influence in the early developmental years.

On the questionnaire you will complete, there are no right or wrong answers. Answer honestly to the best of your ability and remember your identity is not discussed with the public or
revealed in the publication of the research study. In the interviews at the end of the study if you so desire to participate, there will be opportunity for discussion on study results or the findings of the first phase of the study. We will all learn what God opens up to us on this important topic. Thank you, and I look forward to working alongside you as the study participant. I am praying for this study and you that God directs all that is concerned with this research study. Blessings to you and your family, Joan Appleton
APPENDIX H

Participant Advertisement Flyer

You Are Needed in an Important Research Study

The title of the study is

A MIXED METHODS STUDY CONCERNING BIBLICAL WORLDVIEW FORMATION IN CHILDREN AND ADOLESCENTS THROUGH INFORMAL LEARNING BY PARENTS AND/OR GUARDIANS

- Are you 18 years of age or older?
- Do you have a child or children ages 2-12 years?

If you answered yes to the above two questions, you may be eligible to participate in a research study that will teach you some interesting facts on learning formats and the true meaning of worldview. In addition, possible benefits from the study to society are positive outcomes in the spiritual stability and Christian-life development of the present young generation and future generations. A $5.00 gift card in compensation is offered for participation in the study and completing and submitting the survey questionnaire in addition to another $5.00 gift card for participation in an optional focus group interview.

The purpose of this research study is to realize the relationship between informal teaching/learning of parents and/or guardians and biblical worldview formation in children and adolescents. Participants will watch a ten-minute video and complete a survey with ten questions in the form of stories. Participants will have the option to take part in a focus group discussion after the results of the survey are examined.

The study is being conducted by e-mail and one meeting at a private, public location. It is important to notify the researcher as soon as possible as the study is ready to begin. As soon as you decide to participate and notify the researcher, you will receive detailed information. Joan Appleton, a doctoral candidate in the John W. Rawlings School of Divinity at Liberty University, is conducting this study. Please contact Joan Appleton at 731-225-4145 or jeappleton@liberty.edu to participate.
APPENDIX I
Survey Instrument
Quantitative Phase
Measurement by Scenario Scale

Part One
Please complete the following information by typing in your information in the space provided.

Age

Gender

Race

American Indian or Alaska Native

Black or African American

White

Asian

Native Hawaiian

Other Pacific Islander

Other race

Parental status: Type it as stated but not what is in parentheses.

Father (meaning there is a father and mother in this family)

Mother (meaning there is a father and mother in this family)

Single Mother

Single Father

Legal guardian as a father (meaning there is both a legal guardian father and mother in this family)

Legal guardian as a mother (meaning there is both a legal guardian father and mother in this family)

Legal guardian, single father

Legal guardian, single mother
Education level

High School
GED
College (undergraduate)
College (graduate)

Spiritual Status

Christian
Non-Christian
Religion (optional)
Denomination

Part Two

Parents,

There is a total of ten scenarios in this survey. To the best of your ability, find a private, quiet place to complete this survey and give yourself time, not feeling rushed. Answer honestly. Remember, there are no right or wrong answers.

Specific guidelines about answering on the scenarios:

1. Provide an answer to each scenario by clicking on the yes or no provided below the story.
2. Provide an answer to every scenario whether or not it is a story about a child the age of your child or children. If the child mentioned in the story is not your child’s age, answer what you would do or how you would respond to the situation.
3. The story about the parent and child/children might be a similar situation for you or, in other words, might not have happened exactly as a situation you have had with your child. Please answer yes or no anyway because this gives your perception of the situation as a parent.
4. Do not feel bad about answering only yes or no without further explanation of your answer. Your yes or no answer indicates your perception of the situation as a parent, and this is what the study will measure.
Scenario One

Chad, twelve years old (12), is questioning in his mind, but not talking about it to anyone, all about same-sex marriage. He has heard the phrase on the national news network on television that his father turns on in the evening. Two of his friends brought up the subject of same-sex marriage one time lately at a youth group forum, but it seemed to him that everyone, including the youth leader, did not want to discuss the subject. Chad finally got up the nerve to ask his dad about the topic and what he thought. Chad’s father responded to his son’s question by listening first and then telling Chad they would both look for information and guidance from the Bible and other reliable sources. His father said, “Let’s take some time everyday together or as much as possible to study and talk about same-sex marriage. In the meantime, don’t form an opinion on your own or worry about it. We will work on this together.”

I have responded in this way to my child in the past concerning questions about human sexuality.

Yes or No

Scenario Two

Ginny, three years old (3), started preschool two months ago where she began to hit classmates and teachers with her hand when dissatisfied with things. Ginny’s mother talked with the teachers at the preschool to inform them that Ginny was having this same behavior at home. Ginny’s mother told the teachers that she was disciplining her by catching her in the act and sitting down to talk with Ginny about this action being wrong and that it hurt other people where she hit them in addition to hurting their feelings. Ginny was then sent to a time out area. After a couple of weeks, Ginny’s mother and father realized Ginny’s behavior was not improving. Ginny’s mother said, “We are just making our child miserable by repeatedly correcting her and punishing her; I think she’ll grow out of this.” Ginny’s mother then started to apologize to the offended person for Ginny’s actions and tried to distract Ginny to another activity when this behavior occurred.

I have responded in this way to my child in the past concerning discipline situations.

Yes or No

Scenario Three

Zoe, ten years old (10), is beginning to be concerned about her appearance. Zoe’s guardian (“Mom”) who has raised her since birth, detects that something is bothering Zoe but knows that it is not likely that she will talk with her mom. Zoe’s mom notices that she does not want to be involved in any school events lately. Mom suggests to Zoe after school one day that they go to have dinner and then shopping for a while in hopes that Zoe will talk with her about her problems and worries. Mom notices that Zoe does not want to look at clothes and shows no
interest in items that she needs. Mom decides on the way home not to ask questions. Zoe’s mom fears that she will make the situation worse, but over the next couple of days, after getting support from some reliable and wise friends, talks with her daughter. Zoe remains silent after her mom talks with her but has begun to slowly express feelings and seems to be improving emotionally.

I have responded in this way to my child in the past concerning my child not talking to me.

Yes or No

Scenario Four

John, eleven years old (11), started struggling emotionally when he turned age eleven. Of course, John did not understand about hormonal changes in puberty so felt like he was just not happy most of the time. John could not explain the way he was feeling to anyone. John lives with his father, a widower. John’s mother died several years prior from breast cancer. John does not feel that close to his father right now, and he thinks his “dad” is sad most of the time, too. John’s dad, however, has a strong connection with a supportive church family and thinks John is happy in the youth group. He has noticed some changes in John and intends to do the right thing to show he loves him and wants John to confide in him about things that are bothering him. John’s dad is a parent that, despite still bearing much grief over the death of his wife and John’s mother, lives by biblical principles and practices these principles as consistently as possible, especially with his son. John’s dad at this time in his life just cannot seem to find the emotional strength to talk with his son about his son’s problems.

I have responded in this way to my child in the past concerning my child seeming to be sad.

Yes or No

Scenario Five

Cameron, eight years old (8), is an outgoing and friendly young man who is also an excellent student in school. He holds many uneasy and sad feelings inside, however, about his home and family life. Cameron’s mom is a single parent and separated from his father. He has an older brother and sister in high school. His family is busy with many activities, including school, church, and social events. His mom is involved in leadership in the church by teaching fifth grade girls Sunday School and leading a ladies Bible study. But it seems to Cameron that his mom’s communication with him and his brother and sister is different than it is when they are in church or with other people. His mom most of the time does not talk to them in what he thinks is a loving way, yet at times she will say, “Love you!” She yells at times and seems to almost always talk harshly to them. Cameron wonders if he will be like this too if he ever has children of his own or if he will talk to others like this because he is unhappy.

I have responded with this kind of behavior in the past to my child.
Scenario Six

Penelope, two years old (2), is a quiet and reserved child that speaks few words and clings to her mother. From a medical developmental standpoint, Penelope shows no abnormal growth problems. Penelope was adopted as a baby (5 months old) when she was abandoned by her biological parents and taken into State custody. As a single, divorced parent, the mother has an impeccable background in all areas of life. Her work in the medical field allows her to have a flexible schedule to provide her child with a healthy environment, thanks to many friends and her church family. The major problem is the separation anxiety which Penelope’s mother ignores, she feels, in a manner that will help the child get through “a stage” of being a 2-year-old. Therefore, Penelope cries constantly when her mother is not holding her. The mother will not give in to the crying and pick her up as she feels it will reinforce the behavior. The mother and the child are miserable most of the time.

I have responded in this way to my child in the past concerning these kinds of behavior.

Yes or No

Scenario Seven

Richard, seven years old (7), has grown up in a large family, three older siblings and three younger siblings. His mother and father try to have family activities as much as possible by going on outings and generally gathering around the dinner table nearly every day. Richard’s mom does not have to work outside the home on a routine job and is able to keep things going as well as possible with schoolwork and any school activities. Richard’s father is overworked with his business and a lot of travel away from home. All children except the 1-year-old are in a reputable and academically highly accredited public school. Richard’s mom views him as the one child that seems to lag behind in properly dressing himself and getting schoolwork and chores accomplished. His mom for years has instructed him over and over again without raising her voice and does not react to him any differently than the rest of the children, ages 1 to 15 years. The older children complain that Richard is getting worse and generally are irritable with him most of the time.

I have responded in this way to my child in the past concerning this kind of behavior.

Yes or No

Scenario Eight

Ellie, eleven years old (11), is considered by most people that have been around her to have a vibrant personality. She is a high achiever in school work and activities. Her mother
considers her mood swings to be related to hormones. Ellie’s mother has not taken seriously that in addition to alterations in mood, she suffers from times of appearing to be depressed and that Ellie looks for things to do that will cover up the depression. Ellie’s mother hesitates to try to talk with her at any length about how Ellie generally feels and if there are problems on her mind, (corrected) thinking it might make things worse at her age. Ellie’s mother is a single parent, divorced, but her biological father has worked with his ex-wife to keep the family atmosphere positive with no contention. Ellie’s mother hears some shocking news from Ellie’s closest friend’s mother (also her supportive friend of many years) that Ellie has shared with her friend that she feels she is “gay.” Ellie’s mother cannot face the situation and refuses to address the issue, hoping it is another pre-teen crisis that will pass.

I have responded in this way to my child in the past concerning situations about human sexuality.

Yes or No

Scenario Nine

Carlos, five years old (5), is an identical twin and an extremely active child, both mentally and physically. At 5 years old, and having started kindergarten, Carlos has shown a gifted ability with technology and requires to be provided challenging activities most of the time. His twin brother appears to be a total opposite in personality, energy level, and activity level, preferring to find any time he can to sit and read books, sometimes digitally. Nevertheless, the brothers have a positive relationship with not many quarrels. The family problem that Carlos’ mother and father face is finding a balance for Carlos, which is best for himself and other siblings. They decide to start now at his age with a structured schedule for all his activities including the many technology-related ones. They realize the structured schedule must be kept as it is with no grace periods wherever the family is at a particular time. The structured schedule affects the other children in the family and causes contention among the family, but Carlos’ mother and father stand firm.

I have responded with this kind of behavior in the past to my child.

Yes or No

Scenario Ten

Ling, twelve years old (12), lives with her father, a single parent and widower. Ling and her father have a close bond as father and daughter. Ling was adopted at two years of age, and her mother died shortly afterward. Ling and her father have attended an evangelical Christian church all her life. Ling now has lost interest not only in being with a youth group but tells her father she does not believe that church helps young people be better people. She tells her father that church is all about doing programs, and the people do not live their lives by what is taught. She wants to stay home and read her Bible and try to figure out things for herself. Ling’s father
listens to her and tells her he does not agree. He asks her who is influencing her to believe in this way. Ling will not admit to anyone influencing her but says it is the way she feels. She tells her father she will not be defiant and will go to church if he insists. Ling’s father suggests to her that they both stay home the next Sunday and talk, read the Bible, and pray. He says they will do this to remain together but not grow away from their spiritual beliefs and the Holy Bible teachings.

I have responded in this way to my child in the past concerning my child seeming to have problems concerning church.

Yes or No

Additional questions:

1. Focus group interview question
2. Contact information (This information will be kept confidential.)

Will you participate in a follow-up activity which will be a focus group interview for the next phase of this study? The focus group interview will only be one meeting with the researcher and other study participants. The meeting will take place at your church.

Yes or No

If you answered yes to participate in the focus group interview, please complete the contact information below.

Contact information:

Name

E-mail address

Physical address (house or apartment number, street or post office box, city, state, zip code)

Phone number (both cell and alternate)
## APPENDIX J

### Table A1

**Focus Group Discussion Guide**

<table>
<thead>
<tr>
<th>Research question</th>
<th>Scenario</th>
<th>Interview question</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1. What knowledge and behaviors exist in selected parents in the home setting concerning the informal learning environment that influence children from ages 2 through 12 years?</td>
<td>3 One-on-one presence and Bible truth</td>
<td>1. When facing the response of I <strong>have</strong> responded in this way to my child in the past concerning my child not talking to me, you had to make a decision based on an experience similar to the story which was about Zoe, age 10, showing behaviors of self-consciousness, not talking to you about it, and possibly becoming depressed. You do not have to be concerned with remembering how you answered the question. Share briefly an experience you remember similar to this story and your interaction with your child. Express your feelings and insights. *(As a follow-up question to the answer on question 1, the moderator will ask each participant an additional question) Thinking back on the experience you just shared, what is a behavior you identify in yourself that influenced your child in this experience? *(As participants listen to each other, potentially it will stimulate thoughts and produce various behaviors and a greater chance for themes to be identified in data analysis).</td>
</tr>
<tr>
<td>RQ3. How do the observation, open-ended interviews, and structured interviews with selected parents further clarify and give meaning to the data gathered concerning the behaviors of informal learning in relation to biblical worldview formation directed toward children, ages two to twelve years and the responses of youth, ages 13 to 18 years (as evidenced by the 2016–2017 Barna Group &amp; Impact 360 Institute research study), which include the subvariables set out in the study?</td>
<td>7 Tone of voice and morality related to right and wrong (A lower percentage to biblical principles)</td>
<td>*(As a follow-up question to the answer on question 1, the moderator will ask each participant an additional question) Thinking back on the experience you just shared, what is a behavior you identify in yourself that influenced your child in this experience? *(As participants listen to each other, potentially it will stimulate thoughts and produce various behaviors and a greater chance for themes to be identified in data analysis).</td>
</tr>
</tbody>
</table>
### Table A1 continued

<table>
<thead>
<tr>
<th>Research question</th>
<th>Scenario</th>
<th>Interview question</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. When facing the response of I have responded in this way to my child in the past concerning this kind of behavior, you had to make a decision based on an experience similar to the story which was about Richard, age 7, having behaviors of what appears to be a special needs child. The parent basically treats this child as all the other children with no extra attention, and his siblings are irritable with Richard most of the time for his constantly lagging behind. The other children it seems are frustrated over Richard’s behaviors and the disruption of their family life. Share briefly an experience you remember similar to this story and your interaction with your child. If you have one child and cannot relate to the sibling part of the story, give your perspectives. Express your feelings and insights. <em>(As a follow-up question to the answer on question 2, the moderator will ask each participant an additional question)</em></td>
<td><em>Thinking back on the experience you just shared, what is your primary or main emotional feeling as you were experiencing the situation with your child?</em></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX K

Focus Group Interview

Theory-in-Use Instrument

Informal Learning

Family Organizational Life

<table>
<thead>
<tr>
<th>Spiritually-affirming Behaviors</th>
<th>Action Strategies (Reflect)</th>
<th>Consequences/Effectiveness (Evaluate)</th>
<th>Action Strategies (Double-loop learning)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One-on-One Presence</td>
<td></td>
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<tr>
<td>Consistent Discipline</td>
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<td>Tone of Voice</td>
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<tr>
<td>Patience</td>
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</table>

Model adapted by this author from Argyris & Schön, 1974, p. 87; other references: Marsick & Watkins, 2001; Morgan, 2006; spiritually-affirming behaviors, original by this author. Concepts from Theory in Practice: Increasing Professional Effectiveness, by Chris Argyris and Donald A. Schön, 1974, p. 87, Table 2. Copyright by Jossey-Bass, a Wiley Company. Reprinted with permission.

In the structured part of this interview, you will be briefly writing down a couple of experiences on the theory-in-use chart that I e-mailed to you. I will guide you through each area.
on the chart, that is, action strategies (reflection), consequences/effectiveness (evaluation), and action strategies (double-loop learning). Double-loop learning is a theory that means you take a “double look” at a situation by questioning and evaluating yourself and the experience and are willing to make a change to other action strategies if you realize action strategies used did not have the outcome you hoped for and intended. The two scenarios that you will discuss both feature the spiritually affirming behavior of patience, one reflecting Bible truth and one reflecting church connection. In scenario 6, Penelope, age 2, experiences separation anxiety with her mother, and in scenario 10, Ling, age 12, is experiencing disillusion with being a part of the family’s church and her youth group. After you have written down your experience on each step of the theory-in-use chart, each of you will share what you have written and share further insights on both experiences for scenarios 6 and 10.
APPENDIX L

Debriefing Statement

Title of the Project: A Mixed Methods Study Concerning Biblical Worldview Formation in Children and Adolescents Through Informal Learning by Parents and/or Guardians

Principal Investigator: Joan Ellen Appleton, MSN, RN, MTS; Nurse Educator; Faith Community Nurse; Certified Lay Minister-UMC, Parish Nurse Specialization; Spiritual Care Generalist; Doctoral Candidate, John W. Rawlings School of Divinity, Liberty University, Lynchburg, VA

Thank you for being a part of a research study.

You recently participated in a research study in which you answered questions on a survey and took part in a focus group interview. You were selected as a participant because you met the requirements for the study: eighteen (18) years of age or older and have a child or children ages two (2) through twelve (12) years. Your participation in this research project was voluntary.

Please take time to read this entire form and ask any questions you may have.

What was the study about and why was it being done?

The purpose of this research study is to realize the relationship between a format of education known as informal learning and biblical worldview formation in children and adolescents. The study will look at this relationship through the perspectives of parents and guardians by answering some questions and by allowing them to have a discussion with the researcher and other parents in the study. It is hoped that the findings of this research will advance the argument that informal learning by parents can have significant influence on children and adolescents as to biblical worldview formation and in spiritual formation and Christian-life development.

Why am I receiving a debriefing statement?

The purpose of this debriefing statement is to inform you that an aspect of the study was not previously disclosed to you.

The research study has two main topics which are informal learning and the worldview perspectives of teens, ages thirteen (13) through eighteen (18) years in a previous study by Barna Group and Impact 360 Institute (faith-based research, resource, and teaching/learning organizations) in 2016–2017. You have been briefly told about these two topics in the flyer and letter you received.

You were originally told incomplete information. You were not told about what the researcher has described as spiritually-affirming behaviors of the informal learning and about the variables which go along with the teenagers’ responses. The spiritually-affirming behavior variables are accountability, consistent discipline, one-on-one presence, patience, and tone of voice. The
variables that go along with the teenagers’ responses are Bible truth, morality related to right and wrong, Church connection, and morality related to sexuality. Each question that you answered on the survey reflects one of these spiritually-affirming behaviors and one variable of worldview perspective of the teenagers that were interviewed in the 2016–2017 study.

In addition, you were not told that some questions on the survey reflect a more positive response as to biblical principles. The researcher detailed the positive or negative reflection on two detailed researcher’s notes that shows evidence through certain authors and through Bible verses. You were originally told that there were no right or wrong answers before you completed the survey. The negative reflection given a particular question by the researcher does not indicate wrong but a weaker response as to biblical principles.

**Why was deception necessary?**

Deception was necessary because there is a phenomenon that research describes as *social desirability*. The reason the spiritually-affirming behaviors and variables of the teens’ worldview responses was not told to you about each question you answered on the survey was to prevent the possibility that you might intentionally or unintentionally respond as to what you felt was more socially or culturally acceptable. The deception in this case gives the research a higher chance of reporting accurate research findings and making the research more meaningful to people as to the purpose of the research study.

**How will personal information be protected?**

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

To protect your privacy and the confidentiality of the data collected from you both on the survey and in the focus group interview, your responses will be kept confidential through converting your survey answers into numbers and your focus group responses into categories and codes. The focus group interview is held in a private place where voices are not easily overheard.

Only the researcher will have access to the names regarding the assigning of numerical values. The researcher and a faculty dissertation supervisor will have access to the data files which have been converted into numbers.

Computer files of data will be deleted permanently and any hard copies shredded after a three-year retention period. This means that data will be destroyed three (3) years after the completion of the study.

The interviews will be recorded in audio only. Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.
What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the e-mail address or phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from the focus group interview responses, 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.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Joan Appleton. You may ask any questions you have now. If you have any questions later, you are encouraged to contact her at jeappleton@liberty.edu or 731-225-4145. You may also contact the researcher’s faculty sponsor, at .

Whom do you contact if you have questions about your rights as a research participant?

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. 2845, Lynchburg, VA 24515 or e-mail at irb@liberty.edu.
APPENDIX M

Biblical Principle Supporting Theological Literature for the Measurement by Scenario Scale

Introduction

There are two scenarios for each of five spiritually affirming behaviors: accountability, consistent discipline, tone of voice, one-on-one presence, and patience. One scenario in each spiritually affirming behavior response is a positive and one a negative response according to alignment of biblical and literature study. However, the concept of right or wrong and positive and negative would be from the participant’s viewpoint related to his or her worldview.

Scenario One

Independent subvariable: Spiritually affirming behavior: accountability
Dependent subvariable: Morality related to sexuality
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8, pp. 204-207; Tasks 1, 2, 3, 4, 5, 6, 7, pp. 207-209

Scenario Two

Independent subvariable: Spiritually affirming behavior: consistent discipline
Dependent subvariable: morality as to right and wrong
Stonestreet and Kunkle (2017), “Identity after Christianity,” pp. 102-
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 6, 8; Tasks 1, 2, 3, 4, 5, 7

Scenario Three

Independent subvariable: Spiritually affirming behavior: one-on-one presence
Dependent subvariable: Bible truth
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8; Tasks, 1, 2, 4, 5, 6. 7

Scenario Four
Independent subvariable: Spiritually affirming behavior: accountability
Dependent subvariable: Church connection
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 3, 4, 5, 6, 7; Tasks 1, 3, 4, 5, 6, 7

Scenario Five
Independent subvariable: Spiritually affirming behavior: tone of voice
Dependent variable: Bible truth
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8; Tasks 1, 3, 4, 5

Scenario Six
Independent subvariable: Spiritually affirming behavior: patience
Dependent subvariable: Bible truth
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8; Tasks 1, 2, 4, 5, 6, 7
**Scenario Seven**

Independent subvariable: Spiritually affirming behavior: tone of voice

Dependent variable: Morality as to right and wrong (See Kohlberg’s stages of moral development [Stonehouse, 1998])


Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8; Tasks 1, 3, 4, 5


**Scenario Eight**

Independent subvariable: Spiritually affirming behavior: one-on-one presence

Dependent subvariable: Morality related to sexuality


Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8pp. 204-207; Tasks 1, 2, 3, 4, 5, 6, 7


**Scenario Nine**

Independent subvariable: Spiritually affirming behavior: consistent discipline

Dependent subvariable: Bible truth


Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 1, 2, 3, 4, 6, 8; Tasks 1, 2, 4, 5, 6, 7


**Scenario Ten**

Independent subvariable: Spiritually affirming behavior: patience

Dependent subvariable: Church connection

Stonestreet and Kunkle (2017), “In the world but not of it,” pp. 69-73; “Have we lost the culture,” pp. 46-48
Parsons (1998), “Applying developmentalism to Christian nurture,” Beliefs 3, 4, 5, 6, 7; Tasks 1, 3, 4, 5, 6, 7

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