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Faith Commitments and Spiritual Influences as Correlates of Adolescents' Involvement in Service in the Valuegenesis Study

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ABSTRACT

FAITH COMMITMENTS AND SPIRITUAL INFLUENCES AS
CORRELATES OF ADOLESCENTS' INVOLVEMENT
IN SERVICE IN THE *VALUEGENESIS* STUDY

by

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Chair: Raymond J. Ostrander

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: FAITH COMMITMENTS AND SPIRITUAL INFLUENCES AS CORRELATES OF ADOLESCENTS' INVOLVEMENT IN SERVICE IN THE *VALUEGENESIS* STUDY

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Problem

There are very few studies that address the relationship between adolescents' commitment to religious values and beliefs and their involvement in service as well as the impact of home, school, and church influences on the service involvement of teenage students attending Seventh-day Adventist schools based on findings from the *Valuegenesis* study. While some of the research studies on *Valuegenesis* are too specific to another topic, other studies are too broad in focus. Therefore this study focuses specifically on teenagers' involvement in service in relation to the spiritual influences they receive from parents and spiritual leaders.

Purpose

The first goal of this research was to examine the changes that took place over the three administrations of the *Valuegenesis* survey, in terms of students' involvement in service. Secondly this study sought to determine the relationship between adolescents' commitment to religious values and Seventh-day Adventist beliefs, and their involvement in service to others. The third goal of this research was to explore the relationship between home, church, and school variables, and the participation in acts of service of students attending Seventh-day Adventist schools.

Methodology

The present research study uses quantitative research methods and is a secondary analysis. Correlations studies were done using the *Valuegenesis* data obtained by permission from the Hancock Research Institute. The population sample included students in Grades 6 through 12 from Seventh-day Adventist schools across North America.

Results

Findings from one-way analyses of variance (ANOVA) provided empirical evidence to the changes in adolescents' service involvement patterns over the three administrations of the *Valuegenesis* study (1990–1991, 2000–2001, and 2010–2011). ANOVA test results for the Horizontal Faith scale indicated a decrease in adolescents' service involvement patterns from *Valuegenesis*[1] to *Valuegenesis*[2] and *Valuegenesis*[3]. Although results for the Evangelism scale were slightly higher in *Valuegenesis*[1] than in *Valuegenesis*[2] and *Valuegenesis*[3], the mean scores in all three studies indicated the same

frequency of students' involvement in mission-oriented service. Likewise, though a slight increase was shown for the Altruism scale from *Valuegenesis*[1] to *Valuegenesis*[2], the mean scores indicated the same frequency of voluntary service involvement among adolescents participating in the studies.

Canonical correlation employed to test the second hypothesis revealed significant relationship between adolescents' commitment to religious values and their involvement in service. Results indicated that the greater adolescents' commitment to religious values and Seventh-day Adventist beliefs the greater their involvement in service. Canonical correlational analysis, employed to test the third hypothesis, identified significant relationship between home, church, and school variables, and the service involvement of adolescents attending Seventh-day Adventist schools. Thus findings from the canonical correlation revealed that the greater the spiritual influences at home, at church, and at the Seventh-day Adventist school the greater adolescents' involvement in service.

Conclusions

Consistent with results from this study, there are some changes in the service involvement attitudes of teenagers from the first to the second and third administrations of the *Valuegenesis* study. Meanwhile this research indicated that adolescents' commitment to religious values and beliefs is significantly related to their involvement in serving others. The current study also revealed a close connection between the influences of the home, the denominational school, and the church, and adolescent students' voluntary participation in service to others.

Andrews University

School of Education

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A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

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I wish to express special thanks to my professors who assisted me in this project. My dissertation committee members gave countless hours of their time to read my drafts and to offer me feedback. Ray Ostrander, the dissertation chair, Jimmy Kijai, the methodologist, and John Matthews, the content specialist, provided me with clear direction, guidance, and support that were of key importance in undertaking and completing this research project. Their insightful contributions are greatly appreciated!

Another word of thanks goes to Roger and Peggy Dudley who introduced me to the book *Valuegenesis: Faith in the Balance* by Dudley and Gillespie (1992). As I read the book I discovered a gap between adolescents' alleged spiritual beliefs and the living out of those beliefs through active participation in service (pp. 22, 24, 45, 82). It was this

encounter that sparked my interest in *Valuegenesis* and helped me choose the topic of my dissertation.

Subsequently I contacted Bailey Gillespie at the John Hancock Center for Youth and Family Ministry and communicated my interest in researching this topic using data from the newest *Valuegenesis* study. I am very grateful to Bailey Gillespie and to the personnel at the John Hancock Center for having shared with me the *Valuegenesis*[3] dataset necessary for conducting this research study.

Special thanks also to Annie Schulz Begle for her help with the mechanics of using the SPSS software. Many others deserve thanks, including colleagues, friends, and church members, who have surrounded me with much valued support during the long months of writing. Often a simple question like, "How is your work on the dissertation?" was just what I needed to regain my focus and motivation and continue writing. Although the names of these individuals who came alongside on my journey constitute too extensive of a list to be included here, their thoughtfulness is appreciated and will be dearly remembered.

CHAPTER 1

INTRODUCTION

Love and loyalty to Christ are the spring of all true service. In the heart
touched by His love, there is begotten a desire to work for Him.
Let this desire be encouraged and rightly guided.
—Ellen G. White, *Education*

Background

From a Christian standpoint, service is the practical implementation of the

spiritual values and beliefs a person holds. Thus service is rooted in a personal

relationship with God and in genuine love for others. Faithfulness to God can only be

maintained as long as it finds expression in disinterested service. The fact that many

adolescents today fail to recognize the importance and value of service involvement

represents a major concern to Christian parents and educators. According to a study on

youth spirituality,

> there are a significant number of children and teens today that have lost touch with
> the value of contributing to the community, of what we used to call making a
> difference in the world; who instead focus on instant gratification, frantically
> searching for pleasure through materialism, reckless adventure, or drugs and alcohol.
> (Zustiak, Mouton, Greer, & Finklea, 2003, p. 178)

For this reason a closer look at the factors that contribute to adolescents' service

involvement stemming from a spiritual understanding will prove beneficial.

Service is viewed by many religious organizations as an expression of a person's

commitment to God and to other human beings. Therefore, the goal of many churches is

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to prepare young people for a life of service (Dudley & Walshe, 2009; Furrow, King, & K. White, 2004; Gillespie, Donahue, Gane, & Boyatt, 2004; Myers, Wolfer, & Garland, 2008; Ratcliff, 2004; C. Smith, 2003; C. Smith & Denton, 2005; Strommen & Hardel, 2000). Service involvement is a core value of Christian living and it is foundational to the Seventh-day Adventist Church's belief system as well (Ji, Pendergraft, & Perry, 2006; Knight, 2010; E. G. White, 1913). Parents, teachers, and church leaders are concerned about equipping the young for a life of service to others (Dudley & Gillespie, 1992; Dudley, 2007; Dudley & Walshe, 2009; Gane, 2005; Gillespie et al., 2004; Lee, Rice, & Gillespie, 1997; Myers & Jackson, 2008; E. G. White, 1913).

The training of students attending Seventh-day Adventist schools for involvement in service raises various questions: "How does their service involvement reflect their faith in God?" "What are their attitudes toward service to God and others?" "What influences contribute to their decision to embrace a life of service?" "How do their perceptions about the spiritual preparation they receive at home, at school, and at church impact on their involvement in service to others?" These are questions that strike a chord with many parents and teachers who are invested in educating and nurturing the young.

Thus one can assume that studies exploring connections that exist between students' faith in God and their altruistic manifestations of service would be important for faith-based systems. As the Seventh-day Adventist Church is one such faith-based system, it maintains that Christian parents, Christian schoolteachers, and spiritual guides at church make a greater impact on young people's faith development when they work together (Dudley, 2000; Dudley & Gillespie, 1992; Gillespie et al., 2004; Knight, 2010; E. G. White, 2003). The goal of Christian education that encompasses faith-based

learning and service could be reached when these entities combine their efforts to provide the foundation for the spiritual growth of the young (Dudley, 2000; Gillespie et al., 2004; Knight, 2010; E. G. White, 2003).

The vital connection that exists between faith in God and the outward manifestation of this belief through acts of service is a concept that many young people fail to recognize (Barna, 2003; Dudley, 2000; Dudley & Gillespie, 1992; Gillespie et al., 2004; Ji et al., 2006). A few studies have been undertaken to measure faith maturity and service involvement among young people attending Seventh-day Adventist schools. These studies reveal that there is a gap between the vertical dimension of faith-based relationship with God and the horizontal dimension of the Christian responsibility to implement one's beliefs into practice through service (Dudley & Gillespie, 1992; Gane & Kijai, 2006; Gillespie et al., 2004; Myers et al., 2008). Some of these studies are referenced to research referred to as *Valuegenesis.*

Valuegenesis is the title of the project conducted by the Seventh-day Adventist Church in collaboration with Search Institute. A driving force behind the project was to better understand the spiritual values held by adolescents who attend Seventh-day Adventist schools across North America. The study was first undertaken during the 1990–1991 academic year. Since then, two other subsequent *Valuegenesis* studies have taken place during the 2000–2001 academic year, and during the 2010–2011 academic year. The survey included questions that sought students' answers on the impact of home, church, and school variables (Gillespie et al., 2004). Understanding such dynamics has the potential to enhance and promote students' faith development and their active involvement in service.

There are several books and studies that report on *Valuegenesis*, providing a general picture of the various themes treated in the study (Dudley & Gillespie, 1992; Gillespie et al., 2004; Rice & Gillespie, 1993). In these studies the connection between faith and service was treated in broad terms. On the other hand there are a number of studies that report on a more specific focus on *Valuegenesis*. Because *Valuegenesis* encompasses survey items that speak to a broad range of faith-related questions, this study purposes to provide a detailed focus on the involvement in service of students attending Seventh-day Adventist schools as a reflection of their faith in God.

The reason why *Valuegenesis* was conducted in the first place was to assess a broad range of spiritual, doctrinal, and moral values held by adolescents attending Seventh-day Adventist schools across North America. Because the spiritual instruction of young people represents one of the church's main concerns, the *Valuegenesis* project was repeated twice after its debut in 1990–1991. The items contained in the initial survey instrument have since been revised for clarity and precision (Gillespie et al., 2004). The three administrations of the study yielded a large set of data that provide impetus for further studies on numerous topics related to the spiritual values of adolescents. Findings from such studies could potentially help educators to seek more effective ways to nurture the spiritual growth of adolescents.

Research findings that emerged from previous analyses of *Valuegenesis* data revealed a disconnect between Adventist students' commitment to God and their service involvement (Dudley & Gillespie, 1992; Gane & Kijai, 2006; Gillespie et al., 2004). These results support Knight's (2010) assumption that one of the greatest difficulties that Christian education faces is the operationalization of the concept of service. In light of

these realities one may recognize the need for educators, parents, and church leaders to take a more intentional stand in preparing students for Christian service.

Statement of the Problem

Little if any literature exists that focuses specifically on the impact of parental, school, and church influences on the service involvement of students who attend Seventh-day Adventist denominational schools. Previous studies on *Valuegenesis* addressed other dimensions of the survey than those that represent the scope of the present study (Beagles, 2009; Carlson, 1996; Gane, 2005). Several other studies treated the proposed topic to some extent, but their focus was to report on the overall findings from *Valuegenesis.* These reports are broad in scope (Dudley & Gillespie, 1992; Gillespie et al., 2004; Rice & Gillespie, 1993). Since so little literature regarding the service involvement of Seventh-day Adventist students exists, a more thorough investigation of students' involvement in service as a reflection of their commitment to religious values and beliefs, and of the influences to which they are exposed at home, at church, and at school, will prove beneficial.

Purpose of the Study

This study focuses on the service involvement of adolescents attending Seventh-day Adventist denominational schools. To this end the study investigates: (a) the changes that surfaced over the two-decade span from the first to the third administration of *Valuegenesis* in regard to the students' involvement in service; (b) the connection between their commitment to the religious values and to the beliefs of the Seventh-day Adventist Church and their involvement in acts of service; and (c) the impact of the

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home, the Seventh-day Adventist school system, and the church on their service involvement.

Significance of the Study

This study makes a significant contribution to the field of religious education. If this study's theoretical framework holds, the findings from this research will potentially help parents, religious educators, and teachers in nurturing adolescents' spiritual growth and their active participation in service. Meanwhile the study will bring clarity to unexplored questions by sparking interest in further research on adolescent spirituality, adolescent involvement in service, the role of Christian education in guiding adolescents' spiritual development, *Valuegenesis*, and other variables described in this study.

Research Questions

The present study will attend to the following questions, and the findings will provide information to parents, teachers, and religious educators in regard to their impact on students' active participation in service:

1. How did adolescents' involvement in service change over the duration of the 20 years from the first administration of *Valuegenesis* to the third administration of the survey in Seventh-day Adventist schools?

2. How do the indices of personal involvement in acts of service reflect adolescents' commitment to the religious values and to the beliefs of the Seventh-day Adventist Church?

3. How do the spiritual influences at home, at the Seventh-day Adventist school, and at church contribute to adolescents' involvement in service?

Research Hypotheses

The following hypotheses stem from the above questions:

1. The involvement in service of adolescents attending Seventh-day Adventist schools has changed from the first administration of *Valuegenesis* (1990), to the third administration of the study (2010).

2. The service involvement of adolescents attending Seventh-day Adventist schools is significantly related to and reflects their commitment to religious values and to the beliefs of the Seventh-day Adventist church.

3. The spiritual influences to which adolescents are exposed at home, at the Seventh-day Adventist school, and at church contribute significantly to their involvement in service to others.

Theoretical Framework

A theoretical framework is a set of philosophical, conceptual, and theoretical assumptions that communicate insight into a research topic, providing support to the research methods employed in the study (Burton, 2011). The theory base that explains the relationship between variables in this study is adopted from experiential learning. The experiential learning model is suitable for this study because it helps support: (a) the connection between the cognitive and the practical aspects of learning and development; (b) the role of the affective domain in making moral decisions; (c) the significance of educational influences through modeling in the process of learning by observation; and (d) the active participation of the student in applying in practice the acquired knowledge

and beliefs (Kolb, 1984). An example of how experiential learning was recently theorized is Kolb's (1984) *Learning Cycle*.

The concept of 'experiential learning' is an ancient practice that goes back to Old Testament Bible times (see Deut 6:5–9). Experiential learning also made its way into ancient Greek educational practices (Henson, 2003) and in the 18th century, the modern era, it was theorized in the writings of Jean Jacques Rousseau (1762). According to Kolb (1984) modern definitions of experiential learning have their origins in the writings of John Dewey, Kurt Lewin, and Jean Piaget (Kolb, 1984, p. xi). Inspired by the learning theories developed by Dewey (1916), Lewin (1951), and Piaget (1970), in more recent decades David Kolb (1984) formulated the *Experiential Learning Cycle*, also known as *Service Learning Cycle* (Kolb, 1984; Strommen & Hardel, 2000, p. 146). Kolb (1984) views learning as a holistic experience, whereby in order for students to acquire knowledge most effectively they need to be exposed to the four dimensions of the cycle: "concrete experience," "reflective observation," "abstract conceptualization," and "active experimentation" (pp. 30, 32).

Because spiritual development, like learning in general, engages the cognitive, affective, and behavioral domains, Kolb's *Learning Cycle*, which describes learning as a holistic endeavor, has been utilized as a suitable theoretic model in the context of religious and spiritual education. As noted by neuroscientists, the affective domain undergirds one's capacity to make moral decisions (Goleman, 2006). Daniel Goleman (2006), who theorized the concept of 'emotional intelligence', stated that "it is not enough to lecture children about values: they need to practice them, which happens as children build the essential emotional and social skills. In this sense, emotional literacy

goes hand in hand with education for character, for moral development, and for citizenship" (p. 286).

Religious educator Jane Thayer (1996) identified connections between the *Learning Cycle* and spiritual growth in supporting young people's overall development. She notes that the biblical notion of learning involves both knowledge acquisition and the active participation of the learner (see John 7:17; Phil 4:9). Since Kolb's *Learning Cycle* has a holistic appeal, including the role of the affective domain in a person's overall development, this model provides the context within which related theoretical insights join to inform the present study. If knowledge that is integrated becomes fixed as enduring understanding (Kolb, 1984, p. 28), then service involvement, as an outward expression of internally held spiritual values, promises to strengthen those beliefs.

Given that this study investigates the connection between the spiritual experiences, beliefs, and understanding of adolescents and their enactment of these values through active involvement in service to God and to others, the theory advanced by Kolb (1984) provides support to this study. Much akin to learning, which moves beyond the confines of formal schooling and takes place in the broad sphere of real-life situations and human endeavors (Kolb, 1984, pp. 32, 34), genuine service that originates in a personal relationship with God is modeled and learned from exposure to various spiritual influences in the home, at school, and at church (Coles, 1997; Dudley, 2007).

The experiential-learning theory formulated by Kolb (1984) thus helps explain the following assumptions advanced in the study: (a) the indicators of personal involvement in acts of service are significantly related to and reflect adolescent students' faith maturity and commitment to Jesus; (b) the religious/spiritual influence and instruction

offered by parents and educators in the home, at school, and at church are significantly related to students' involvement in service. Because these hypotheses stem from the assumptions that the mark of true learning and spiritual growth is found in the practical application of acquired knowledge, beliefs, and principles, the proposed experiential-learning theory helps shape this research study. Given the holistic nature of learning as the interplay between perception, feeling, cognition, and application (see Kolb, 1984, p. 31), it follows that the independent variables (indicators of spiritual growth, spiritual influences at home, spiritual influences at school, and spiritual influences at church) contribute to the dependent variable (the active involvement in service of adolescents attending Seventh-day Adventist schools).

Figure 1 presents a concept map showing the relationship between the variables employed in this study.

Limitations

Although the results of the current study provide valuable support in answering the research questions that were raised for investigation, this study also has several limitations that are worth mentioning:

First, a limitation of the study is that though the *Valuegenesis* study was repeated in three waves, during the 1990–1991, 2000–2001, and 2010–2011 academic years, the data do not lend themselves to analysis as a longitudinal research because each time the study involved students in Grades 6 to 12 attending Seventh-day Adventist schools in North America. Thus each time the sample size and make-up was different. A second limitation of the study is the sizeable amount of surveys that were eliminated from the analysis as a result of the process of cleaning the data (approximately 1,734 on
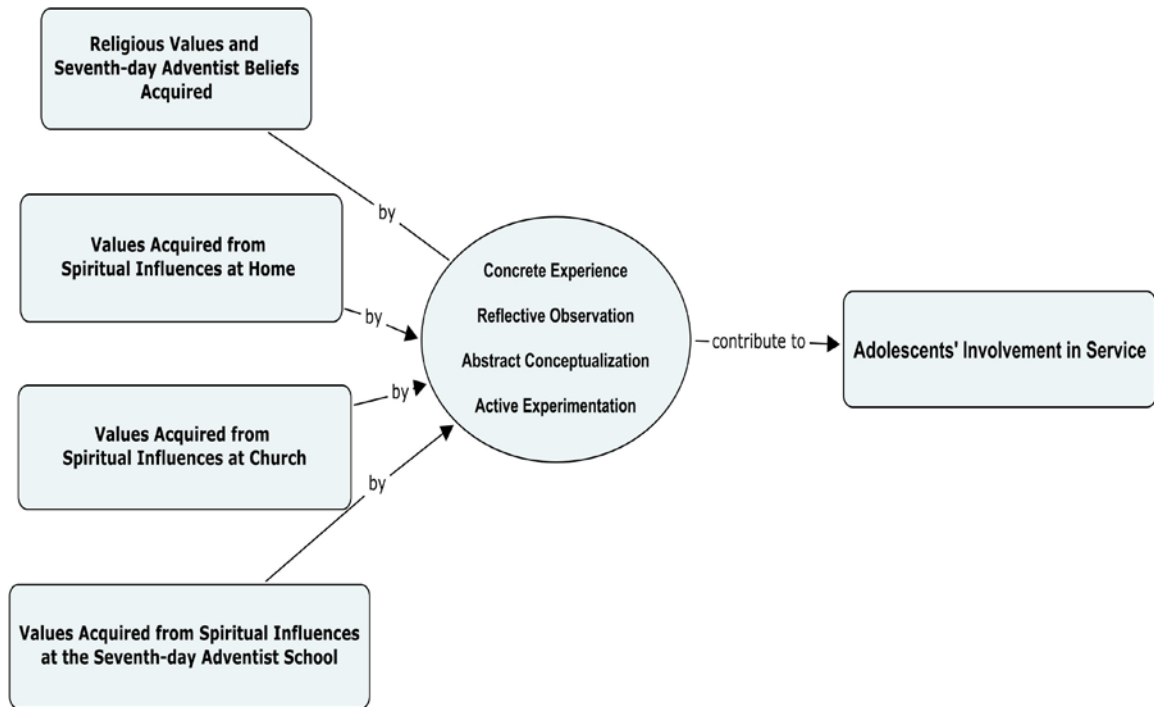
Figure 1. Illustration of the elements of this theoretical framework. **Adolescents' Involvement in Service (dependent variable)** is shaped by: **(a) Commitment to Religious Values and Seventh-day Adventist Beliefs (independent variable)**— acquired by concrete experience, reflective observation, abstract conceptualization, and active experimentation; **(b) Values Acquired from Spiritual Influences at Home (independent variable)**—by concrete experience, reflective observation, abstract conceptualization, and active experimentation; **(c) Values Acquired from Spiritual Influences at Church (independent variable)**—by concrete experience, reflective observation, abstract conceptualization, and active experimentation; **(d) Values Acquired from Spiritual Influences at the Seventh-day Adventist School (independent variable)**—by concrete experience, reflective observation, abstract conceptualization, and active experimentation.

Valuegenesis[1], 4,539 on *Valuegenesis[2]*, and 6,413 on *Valuegenesis[3]* (Donahue, 1990, 2002; Dudley & Gillespie, 1992; Gane, 2005; Gillespie, 2011).

A third limitation of the study is that on *Valuegenesis[3]* there was no scale corresponding with the Altruism scale utilized in *Valuegenesis[1]* and *Valuegenesis[2]*. As a result the ANOVA test employed to test the first null hypothesis is partial, reporting only

results from the first two studies on the Altruism scale. Finally, a limiting factor of the current research study is its specific focus on the values, beliefs, behaviors, and lifestyles of students attending Seventh-day Adventist schools in North America. This is why the findings are not generalizable beyond the Seventh-day Adventist school system in North America on a number of accounts, such as demographic make-up of the samples, specific focus of the surveys on Seventh-day Adventist beliefs and values, and data collection protocols.

Delimitations

Due to the specific focus of this study on adolescents' involvement in service, it did not address many other areas affecting students' spirituality, such as their loyalty to church standards, their involvement or lack thereof in at-risk behaviors, and their familiarity with church doctrines.

Definition of Terms

Altruism: This value is fundamental to the Judeo-Christian religious system of values and it involves disinterested, benevolent behavior of caring and service in response to human need (Ji et al., 2006). The paramount model of altruism is offered in the life of Christ.

Faith-maturity: In this study, faith is defined as "a vibrant, life-transforming experience marked by both a deep, personal relationship to a loving God and a consistent devotion to serving others" (Dudley & Gillespie, 1992, pp. 59–60, cited in Gillespie et al., 2004, p. 97).

General Conference of Seventh-day Adventists: This is the name given to the highest administrative authority within the organizational structure of the Seventh-day Adventist Church (North American Division, 2011).

Learning Cycle: The *Experiential Learning Cycle* was formulated by Kolb (1984) and presents the learning process as a holistic endeavor that comprises four dimensions: "concrete experience," "reflective observation," "abstract conceptualization," and "active experimentation" (pp. 30, 32).

North-American Division of the Seventh-day Adventist church is the name given to an organizational unit of the Seventh-day Adventist Church. This is one of the 13 divisions of the worldwide Seventh-day Adventist Church and includes the United States of America and Canada. A number of churches comprise a conference, several conferences form a union, and several unions of conferences form a division. Each division provides leadership and oversees the work within unions, and unions are responsible for the work of the conferences and churches. In turn, each division belongs to the General Conference of Seventh-day Adventists (North American Division, 2011).

Religious Education: In the context of this study religious education refers to the formal and non-formal spiritual instruction adolescents receive at home, at school, and at church (Dudley & Gillespie, 1992).

Secondary Analysis: "Secondary analysis is the re-analysis of either qualitative or quantitative data already collected in a previous study, by a different researcher normally wishing to address a new research question" (Payne & Payne, 2004).

Service: Much like altruism, service is the unselfish and loving act of helping others without expecting anything in return (Willard & Johnson, 2006).

Seventh-day Adventist Church: A neo-Protestant mainstream denomination that grew out of the Millerite movement of the 1840s (North American Division, 2011). The Seventh-day Adventist Church was officially organized in 1863 and it has a strong commitment to service and to fulfilling the great commission given by Jesus:

> All authority in heaven and on earth has been given to me. Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And surely I am with you always, to the very end of the age. (Matt 28:19–20 NIV)

(Bible passages are taken from the New International Version, unless otherwise specified). Today the Seventh-day Adventist Church has more than 17 million adult members (General Conference of the Seventh-day Adventists, 2013; North American Division, 2011).

Spiritual-growth: In Christian terms spiritual growth has to do with the conversion experience, which involves justification and sanctification. Justification is the process by which God attributes to the repentant sinner Christ's righteousness as a free gift on condition of faith in Jesus (see Rom 1:17; 3:25, 26; 10:5–9). On the other hand, sanctification denotes a process of spiritual transformation rooted in faith and accomplished when the believer fully surrenders to the work of the Holy Spirit and yields obedience to God's law (see Rom 6:13; Col 3:10; 1 Cor 6:19; Gal 2:20; Easton, 1897; General Conference Ministerial Department, 2005, p. 138).

Students: In this study "students" designates the participants who completed the *Valuegenesis* survey, namely students from Grades 6 to 12 attending Seventh-day Adventist schools at the time of the study. Other terms used synonymously with 'students' in reference to the participants in this study include: the young, adolescents, teenagers, and young people (Dudley & Gillespie, 1992).

Valuegenesis: Often spelled "Valugenesis" in the literature, this term was coined to designate the project initiated by the Seventh-day Adventist Church in collaboration with Search Institute. The purpose of the study was to assess the values held by teenagers attending Seventh-day Adventist schools across North America (Dudley & Gillespie, 1992).

Methodology

In this study quantitative research methods were employed in order to investigate the contributing factors that affect students' attitudes toward faith in God and toward their involvement in service. Because the design of the present study is a secondary analysis of the *Valuegenesis[1]*, *Valuegenesis[2]*, and *Valuegenesis[3]* surveys, the data were obtained from the *Valuegenesis* database. Permission to use the *Valuegenesis* data for analysis in this study was granted by Bailey Gillespie from the Hancock Research Center, located at La Sierra University. The sample of student participants from Grades 6 through 12 across the North American Division was selected proportionally based on stratified-random sampling (Dudley & Gillespie, 1992).

Survey items describing young people's service-involvement will represent the dependent variable. The independent variables will be the various scales employed to describe adolescents' commitment to religious values and Seventh-day Adventist beliefs, as well as those associated with spiritual influences at home, at church, and at the Seventh-day Adventist school. A one-way analysis of variance (ANOVA) was employed to answer the first research question about the differences in adolescents' service-involvement patterns on the three *Valuegenesis* studies. For the second research question a canonical correlation analysis was utilized in order to examine the correlation between

adolescents' commitment to religious values and beliefs and their participation in service to others. Similarly canonical correlation analysis was employed to answer the third research question concerning the effect of spiritual influences at home, at church, and at the Seventh-day Adventist school on adolescents' engagement in service.

Summary

The present study leads to the conclusion that religious educators at home, at church, and at school play a key role in modeling and teaching spiritual values that inspire adolescents to live meaningful lives of service to others. Therefore the findings from this study will be beneficial to parents, teachers, and church leaders as they commit to the spiritual nurture of the young and inspire them to become actively involved in serving others.

CHAPTER 2

REVIEW OF RELATED RESEARCH LITERATURE

Some make a great mistake by supposing that a high profession will compensate for real service. But a religion which is not practical is not genuine. . . . Every sincere follower of Christ will show that the religion of the Bible qualifies him to use his talents in the Master's service.
—Ellen G. White, *Messages to Young People*

Introduction

The present literature review provides insight into the relevant theory and research that informed this study and includes: (a) an outline of the various theories of adolescent development that relate to experiential learning theory; (b) an overview of the various descriptions of spirituality, religiousness, and faith; (c) an outline of the philosophical implications of postmodernism to adolescents' spirituality; (d) an overview of definitions of the notion of service; (e) a review of current studies that focus on young people's engagement in service; (f) a review of studies that focus on the connection between students' spirituality and their involvement in service; and (g) a presentation of the impact of family, school, and church variables on adolescents' involvement in service.

Implications of Adolescent Development to
Kolb's Learning Cycle

An experiential-learning theory, namely Kolb's (1984) *Experiential Learning Cycle,* constitutes the theoretical framework for this study. Spiritual development is a complex phenomenon that embraces the whole spectrum of factors leading to adolescents' overall development. Because the parental and educational influences play a significant part in shaping the cognitive, moral, and spiritual propensities of the young (Coles, 1997; Goleman, 2006; Vygotsky, 1978), this learning theory helps situate the role of adult influences on the young within the affective domain of learning. Also because this study examined how adolescents' spiritual beliefs, which they form on a cognitive and an affective level, translate in practice through involvement in service to others, Kolb's *Learning Cycle* provides a fitting model for this investigation.

Adolescence is a time when young people undergo numerous changes in most areas of their development. This transitional phase from childhood to adulthood known as adolescence is perceived as a time of great promise as well as of personal crises (Barna, 2003; Dudley, 2007; Erikson, 1959; Kinnaman, 2011; Marcia, 1966; Meschke, Peter, & Bartholomae, 2012; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007). In their reflective study on Stanley Hall's writings concerning adolescent development, Dahl and Hariri (2005) concur that adolescence is a distinct phase of development and therefore needs to be viewed through the prism of multiple perspectives which offer, when combined, a holistic view of adolescent development: "Adolescence is marked by rapid physical, emotional, and social changes, such that genetically driven effects on brain function and behavior are likely to be expressed in new ways during this window of development" (p. 376).

Given the cultural changes in contemporary Western society adolescents are to a great extent the products of the influences that surround them, experiencing a lack of clearly defined social structures and identities (P. Berger, 1990; Newbigin, 2001; Schwartz, 2002). Therefore it is useful to consider the various phases of their overall development as means of obtaining insight into how they mature and function in regard to spirituality and their service involvement. An overview of adolescents' holistic development will be outlined below in light of Kolb's (1984) *Learning Cycle*, focusing on the biological, cognitive, psychosocial, and spiritual dynamics that shape their development during these transitional years.

<center>Biological Development and Learning Theories</center>

When considering development through the prism of the biological changes that teenagers undergo, the age characteristics based on stages of development receive attention in a number of scholarly writings on adolescent development (Bacchini & Magliulo, 2003; Erikson, 1959; Meschke et al., 2012; Piaget, 1970). Age can serve as a criterion to delineate the various phases of physical development and corresponding cognitive progress in adolescents as well as to determine social grouping such as grade level (Meschke et al., 2012). Descriptions of age-based levels of adolescent development vary among scholars.

Meschke et al. (2012) explore intervention models that contribute to adolescents' positive development. They present research-based, developmentally appropriate practices (DAPs) using four age classifications of adolescence: (a) young early adolescence, ages 9–11; (b) early adolescence, ages 12–14; (c) middle adolescence, ages 15–17; (d) late adolescence, ages 18–19 (Meschke et al., 2012). Following are some of

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their observations concerning the biological changes characteristic to adolescents. The biological development of early adolescents is the time of pubertal changes, which usually commences earlier for girls (ages 9–13) than for boys (ages 10–14). As a result of the hormonal changes they experience, young early adolescents may exhibit fluctuating mood changes, erratic behaviors, and an energy surplus. Biological characteristics of early adolescence involve physiological changes that manifest, among other things, in weight gain, growth in height, moodiness. Middle adolescence is the phase in which girls as well as boys start to reach physical maturity. In late adolescence biological development slows down, though young men continue to acquire muscle mass and both males and females are gaining bone mass. Consequently the exaggerated concern with body-image, characteristic to previous phases of adolescent development, diminishes (Meschke et al., 2012).

Results from educational brain-research show that in this design there is an inseparable unity between the mind and the body, that is, between cognition and the biological factors, as identified by Zull (2002) in the description of the four areas of the brain where learning occurs. He posits: "It is through action that the biological wholeness of learning becomes apparent" (p. 204). Eric Jensen (2008), another advocate of brain-based learning, states that when teachers understand students' biological development they could better plan instruction that is in harmony with student development. In his book *The Art of Changing the Brain*, Zull (2002) describes the cerebral cortex, the part of the brain where cognitive learning occurs, as having four areas that are responsible for the functions of sensing, integrating, and motion.

In agreement with Kolb (1984), Zull (2002) recognized that the four parts of the

cerebral cortex, that is, the four areas of the biological brain, correspond with the four

stages of the *Learning Cycle*. With this realization, instruction that relies on "concrete

experience, reflective observation, abstract hypothesis, and active testing" comes

naturally to the learner and promotes easy acquisition of knowledge (Zull, 2002, p. 15).

Thus the concept of experiential learning has its origins in the notion that knowledge

acquisition is rooted in concrete experience (Zull, 2002).

The first stage of Kolb's learning cycle is concrete experience. According to

brain-research, deep learning and instruction occur as a result of "multiple complex and

concrete experiences" (Caine & Caine, 1991, p. 5). This implies that students learn from

all of their life situations and therefore their education needs to include activities that are

rich and stimulating. One of the most fundamental senses through which students learn is

vision. Providing, for example, various concrete illustrations, object lessons, visual

illustrations, and metaphors are ways of ensuring that students absorb meaningful sensory

input for learning (Zull, 2002).

In the reflective observation stage of the *Learning Cycle* students connect the

multiple pieces of information and integrate their knowledge. Zull (2002) explains that

during this process "what we look for is an image that fits all of our experience" (p. 154).

In order for students to effectively integrate information for understanding, the learning

tasks need to engage learners in analytical thinking about the big ideas.

Following is the stage in which students form abstract hypotheses. This process

involves analytical thinking, or what we may call critical thinking. Jensen (2005) noted

that "most of what we call 'higher order' thinking-skills . . . engage the prefrontal cortex,

[the] brain area [which] is primarily responsible for planning judgment, decision making, working memory, and most other critical-thinking skills" (pp. 118, 119). By exposing students to multiple skills and ways of learning, educators may contribute to their enhanced overall development (Jensen, 2005, p. 120).

The fourth stage of Kolb's *Learning Cycle* is active testing. Once the students are able to reflect on and integrate knowledge, they need to be allowed to claim the knowledge as their own by becoming originators of new ideas (Zull, 2002). Thus, active testing is "any action that is inspired by [one's] ideas" (Zull, 2002, p. 206). Furthermore he stated that "we learn both by getting information from the outside through our concrete experience and by putting information back to the outside by our actions. We learn from outside in, and from inside out" (Zull, 2002, p. 209).

Along these lines Jensen (2005) distinguishes between explicit learning, which is gained from text-based sources or in academic settings, whereas implicit learning is acquired through everyday life situations, and various types of experiential learning. Therefore, when involvement in service is an active endeavor, it promises to be beneficial both to the recipients of the service and to the students who provide it.

An understanding of adolescents' biological development is important as it helps educators and parents better to plan learning experiences that are suitable for the learner's age or developmental stage. These research-based methods correspond to students' natural ways of learning since they are in tune with their biological development processes.

Cognitive Development and Learning Theories

The cognitive development of adolescents viewed through the prism of experiential learning finds voice in the writings of major educators and theorists such as Dewey (1938), Piaget (1970), Lewin (1951, 1970), and Kolb (1984).

John Dewey (1938), one of the foremost educational leaders of the 20th century, was instrumental in furthering experiential learning methods as he advanced the idea of linking the domain of abstract knowledge acquisition with the experiential domain through practical applications to everyday life (pp. 35, 44). The contribution of Lewin (1951) to experiential learning theory was his operationalization of learning as a four-stage succession of empirical experience, reflection, abstract thought, and testing in new contexts. His approach of using the action research model of *t*-groups contributes to the description of meaningful learning as being the outcome of the tension between experience and critical thinking. Similarly Piaget (1970) held that children and young people learn through experience and practice, whereby abstract reasoning occurs as a result of children's exploratory actions in concrete settings.

The research of Jean Piaget (1970) in the domains of biology and cognitive development processes contributed to the formulation of his theory of knowledge, based on which meaningful learning occurs when learners are actively involved in creating thought patterns through experimentation and testing. He identified four stages of intellectual development that start at birth and progress through the adolescent years: (a) the sensory-motor stage (age 0–2), (b) the representational stage (2–6 years), (c) the concrete operations stage (7–11 years), and (d) the formal operations stage (12–15 years) (Piaget, 1970).

In keeping with the experiential-learning model put forth by these three scholars, Kolb's (1984) *Experiential Learning Cycle* has four stages, including (a) concrete experience, (b) reflective observation, (c) abstract conceptualization, and (d) active experimentation. Kolb (1984) posited that "learning is the process whereby knowledge is created through the transformation of experience" (p. 38). He viewed knowledge as a continuous process of change that is dynamic and transformational rather than static. Kolb (1984) distinguished experiential learning, which grounds learning in experience, from cognitive theories, where primacy is given to the "acquisition, manipulation, and recall" of information, and from behavioral theories that reject the role of "consciousness and subjective experience" in learning (pp. 20, 21). He defined learning holistically as the interconnection between "thinking, feeling, perceiving, and behaving" (Kolb, 1984, p. 31).

Kolb (1984) described learning as a continuous process that is shaped by the experiences of the learner. He posits that the process of learning is characterized by the interplay of four modes of experiential learning that are grouped in two pairs of opposites. These two pairs of opposites represent two dimensions of learning. One dimension of learning comprises concrete experience and abstract conceptualization as opposite ends of the continuum, and the second dimension includes active experimentation and reflective observation as paired opposites. Thus new knowledge is acquired as the learner experiences each of these conflicting modes of learning. In this sense one moves between the dialectically opposed roles from "actor to observer," and from "specific involvement" to "general analytic detachment," where progress in one learning mode leads to progress in another one as well (Kolb, 1984, pp. 30, 31).

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The brain-based learning model is a novel educational approach that is learner-centered. Henson (2003) argues that learner-centered practices have been in existence for millennia, since the time when Confucius and Socrates supported this philosophy in the fourth and fifth centuries B.C. Some precursors of the Progressive school, which developed the learner-centered educational theory in more recent centuries, were John Locke and his experiential learning model, Pestalozzi, Herbart, and Froebel and their learner-centered curriculum models, and Francis Parker who introduced the learner-centered theory in America (Henson, 2003). Major proponents of the Progressive school of thought in education were: Carleton Washburne, William Kilpatrick, Harold Rugg, George Counts, Boyd Bode, and John Childs (Knight, 1980, pp. 91, 92). Although a contemporary of the scholars who promoted the Progressive movement, Dewey chose a somewhat different course, identifying his educational theory as experimentalism (Ozmon, 2011, p. 130).

Among the contemporary learning models that have been receiving attention in the field of educational theorizing, the 'brain-based learning' model provides scientific support to Kolb's 'experiential learning' theory. Zull (2002) recognized that concrete experience is processed through the sensory cortex, reflective observation occurs in the integrative cortex, abstract hypotheses are constructed in the frontal integrative cortex, and active testing of ideas engage the premotor and motor areas of the brain (pp. 18, 19).

Meschke et al. (2012) discuss cognitive development during adolescence based on four phases of maturation. They posit that each region of the human brain develops at a different time following transformational experiences. Because the prefrontal cortical area of the brain in young early adolescents is not fully developed they may engage in

critical thinking but their decision-making process is less complex than that of older adolescents. According to the next phase of cognitive development, this is the time when metacognition appears and early adolescents advance from concrete to abstract thought processes. As a result they tend to be more interested in planning and completing long-term projects than their younger counterparts when they perceive rewards attached to their work. Teens in the middle adolescence phase have higher cognitive abilities, being able to reason using abstract and hypothetical thinking and to explore various plans for their future. Late adolescence, based on the research review of these authors, is characterized by mature abstract reasoning skills, which help older teenagers to make better decisions using problem solving, controlling their emotions, and avoiding risk factors (Meschke et al., 2012).

Thanks to breakthroughs in neuroimaging methods, research on brain development has been on the rise, including the investigation of possible links existing between religious beliefs and brain functions (DeHaan, Yonker, & Affholter, 2011). For example, Harris et al. (2009) conducted a series of laboratory investigations using functional neuroimaging to explore religious belief as a cognitive function of the brain. The sample of participants included 15 devoted Christians and 15 skeptics who were asked to assess religious and secular statements, classifying them as true or false. The scientists employed functional magnetic resonance imaging (fMRI) to evaluate brain signal changes during these experiments. Findings support the idea that "religious thinking is more associated with brain regions that govern emotion, self-representation, and cognitive conflict, while thinking about ordinary facts is more reliant upon memory retrieval networks" (Harris et al., 2009, p. 1). Harris et al. (2009) conclude that,

regardless of the content of the material being assessed by respondents, information is processed by engaging different areas of the human brain based on whether they are believers or nonbelievers in religion. These findings support the scope of the present study to highlight the significant connection that exists between a person's religious beliefs and his/her actions.

<center>Psycho-social Development and Learning Theories</center>

Due to the multiple changes characteristic of the teenage years, adolescents experience a transition period of identity formation (Erikson, 1959; Marcia, 1966, 1980; Meschke et al., 2012; Schwartz, 2002; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007), a time when they question the value-system of their parents and other authority figures as they engage in decision making (Büssing, Föller-Mancini, & Heusser, 2010).

In the area of psychosocial development, Erik Erikson's (1959) writings are seminal. He identified eight stages of psychosocial development that occur from infancy through the lifespan: (a) trust versus mistrust (1–18 months); (b) autonomy versus shame (18 months–3 years); (c) initiative versus guilt (3–5 years); (d) industry versus inferiority (6–12 years); (e) identity versus role confusion (13-17 years); (f) intimacy and solidarity versus isolation (18–35 years); (g) generativity versus self (35–65 years); (h) integrity versus despair (65 years–death) (Erikson, 1959; Snowman, McCown, & Biehler, 2009). Much like cognitive educational theorists such as Piaget, Erikson (1959) saw the psychosocial development of children as occurring through various stages, while Vygotsky (1978, 1986) believed that children develop cognitively thanks to favorable social and cultural factors. According to Erikson's (1959) theory, individuals need to resolve successfully specific psychosocial crises particular to each stage before moving to

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a different phase of their psychosocial development. Based on Erikson's (1959) theory, adolescence spans the fourth and fifth stages of psychosocial development: industry versus inferiority and identity versus role confusion.

Elaborating on Erikson's theories on identity development, James Marcia (1966, 1980) made a significant contribution. The two initial perspectives on identity formation that Marcia introduced are the notions of identity exploration and identity commitment (Eichas et al., 2010; Marcia, 1966, 1980; Meeus, 2011). In the exploration phase of their identity development, adolescents search through a number of potential choices for commitments they would like to make. Once a lasting identity choice has been made, adolescents enter the identity commitment phase (Eichas et al., 2010; Marcia, 1980; Meeus, 2011). Further expanding on the degree of identity exploration and commitment, Marcia (1980) identifies four identity statuses: (a) identity diffusion (the adolescent has neither explored alternative commitments nor made a commitment); (b) foreclosure (the teenager made a commitment without having explored alternatives); (c) moratorium (the adolescent is exploring various options but has not yet made a commitment); (d) achievement (following a phase of engagement in active exploration, the adolescent successfully made a commitment).

In his longitudinal study on personal and ethnic identity formation in adolescents, Meeus (2011) found support for the significant role of identity development in adolescence. His research revealed potential links between well-adjusted adolescents who have a positive personality profile and supportive family relationships and the ability to make lasting commitments. Consequently Meeus (2011) found that "in general, adolescents with a mature identity show a positive profile on other individual

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characteristics and live in warm families" (p. 90). Meanwhile he came to the realization

that identity development is not a frequently shifting phenomenon as some would assume

since there are no significant evidences that individuals change their identity status time

and again or that they undergo identity crises often (Meeus, 2011, p. 91).

The theories of Piaget and Vygotsky are founded on the assumptions that social

interactions play a critical role in children's and adolescents' cognitive development. It

was Piaget who supported the idea that social interactions with peers contribute positively

to children's learning (Piaget, 1970; Snowman et al., 2009; Vygotsky, 1986).

Furthermore, Piaget (1970) posited that interactions with peers strengthen young people's

social well-being and enhance their cognitive development.

Social constructivist Lev Vygotsky (1986) explained cognitive development in

light of the interactions children and young people have with parents, teachers, peers, and

other individuals with whom they interact. He recognized that children benefit greatly

from interaction with knowledgeable and experienced adults. According to this theory the

cultural and religious values that are held by the significant adults in a child's life are

much more easily acquired by the child through social interaction with those individuals

than if taught through rote learning. An important part of this socio-cultural theory deals

with the "zone of proximal development," which is defined as the threshold between

what the learner understands and the knowledge that he/she could potentially acquire

with direction and assistance from adults or more knowledgeable peers (Vygotsky, 1978,

p. 86).

According to Bandura's *Social Cognitive Learning Theory* (1969, 1986) young

people acquire knowledge by observing the conduct and actions modeled by their

educators or by the significant adults in their lives (Bandura, 1969, p. 46). This philosophy emphasizes the powerful influence that authority figures have on children and adolescents through their personal example. According to this theory, parents could potentially contribute to their children's spiritual development by modeling behaviors consistent with their beliefs.

Contrary to the hypothesis that older students have more positive self-perceptions than younger students, Bacchini and Magliulo (2003) found that age was not a factor that impacted significantly on adolescents' self-image. This study also highlighted the value adolescents ascribed to positive family relationships that enabled them to voice, negotiate, and dialogue with their family members about common values (Bacchini & Magliulo, 2003). So they acknowledge the impact of the socio-cultural advances that have left their mark on adolescents and their development. Consequently the authors found that "despite being immature from a biological point of view, many children of 9–10 years of age tend to adopt precociously adolescent forms of behavior" (Bacchini & Magliulo, 2003, p. 347). These current trends have led to paradigm shifts in the field of theorizing adolescence, whereby developmental theories based on fixed age-stages were exchanged for process-based models that are more suitable given their individualized nature where the emphasis is placed on exchanges between the adolescent and his/her environment (Bacchini & Magliulo, 2003).

The *Learning Cycle* applied to 'brain-based learning theory' helps explain the implications of the affective domain to learning and growth (Jensen, 2005; Zull, 2002). The brain-based educational model has a holistic approach to learning where in addition to physical and cognitive development, emotional awareness, and social interactions have

an important role to play in students' overall development as integrative parts of the academic curriculum (Jensen, 2008; Zull, 2002). Rooted in sensory concrete experience, emotions are significant in contributing meaning to information stored in the brain (Zull, 2002, p. 151). In order for learners to experience the transformation and change that comes as a result of learning, they need to attribute value to knowledge. Zull (2002) phrases this concept in the following way: "The art of changing the brain includes the art of selling importance. Somehow the learner must 'buy in' to importance" (p. 225). In this process the educator has a crucial role to play through modeling the value of knowledge to the learner (Zull, 2002).

Young people's affective development is interconnected with other areas of their development. Because their emotional maturity determines to a great extent their choices on a number of different levels, it is necessary to consider their affective development. Daniel Goleman (2006), who championed the concept of emotional intelligence, noted that there are two distinct minds, the rational and the emotional mind:

> Ordinarily there is a balance between emotional and rational minds, with emotion feeding into and informing the operations of the rational mind, and the rational mind refining and sometimes vetoing the inputs of the emotions. Still, the emotional and rational minds are semi-independent faculties . . . reflecting the operation of distinct, but interconnected, circuitry in the brain. (p. 9)

Furthermore Goleman (2006) speaks to the connection between empathy and altruism, stating that "empathy underlies many facets of moral judgment and action" and "leads to caring, altruism, and compassion" (pp. 105, 285).

In agreement with Hoffman (1984), Goleman (2006) recognized that during their growth process children and young people display gradually increasing levels of empathy. For example, 1-year-olds are capable of showing distress over the hurt of

another child. After the age of 1, children express empathy by attempting to alleviate someone else's pain. By age 2 children become more receptive to how others express their feelings. Late childhood is the time when a child reaches a higher degree of empathy, being able to understand the pain or sorrow experienced by certain social groups (e.g., the poor). With such empathetic insight, adolescents are capable of making moral decisions rooted in the desire to help relieve the burdens of those in adversity (Goleman, 2006).

Additionally Goleman (2006) noted that although the various parts of the human brain develop in a different proportion in childhood, once they start to undergo puberty, adolescents experience the most extensive changes in their brain development. He remarked that parts of the brain that are essential for emotional maturity develop much later than other parts of the brain. As such, the sensory brain develops early on in childhood, the limbic area of the brain develops by early adolescence, and the frontal lobes develop by late adolescence (Goleman, 2006). With this realization, Goleman (2006) advises parents to acknowledge the fact that habits formed during childhood are critical in determining the emotional predispositions that will follow the young throughout their lifetime. Therefore parental guidance that is reliable and receptive to the young can go a long way in shaping young people's emotional responses and their "practice in empathy" (Goleman, 2006, p. 226).

Meschke et al. (2012) describe the social changes experienced by adolescents within the framework of four developmental phases. Here are some of their observations. They note that during early adolescence the role and influence of peers becomes progressively stronger than that of parents or other authority figures. However, they

acknowledge that teenagers whose parents are positively invested in their lives are to a much lesser degree influenced by their peers' negative actions. On the other hand, adolescents benefit greatly from the influence of peers who support prosocial activities.

Early adolescence is a period when teenagers advance in their developmental tendencies toward independence as they recognize the weaknesses of authority figures, renegotiate their relationships with parents and other adults, and give more credibility to their peers in decision-making. During middle adolescence young people possess advanced social skills, though the influence of peers is still more significant than that of adults. Consequently, older teenagers may either participate in risk behaviors when exposed to negative peer-influences, or may be encouraged to engage in prosocial behavior by peers who have a positive influence. In late adolescence young people strive for greater autonomy and view themselves as fully developed adults. They are in a process of experimentation in their identity formation and usually they are experiencing foreclosure or diffused identity status. Many of them have a vision for their future in terms of education, career paths, employment, etc., which helps them put other things into perspective. Meanwhile of great concern to them is their sense of worth and valuation (Meschke et al., 2012).

The affective domain is a vital component of adolescents' overall maturation and as they are gradually gaining greater emotional maturity they become capable of moral decisions and empathetic manifestations (Goleman, 2006) reflected in their service to others.

Spiritual Development and Learning Theories

The *Experiential Learning Cycle* (Kolb, 1984) has implications to the domain of spiritual growth as well. As stated by religious educator Jane Thayer (1996), "because of the intimate association of knowledge and behavior, it seems possible to use learning theory as one way to study maturity in Christ or spiritual growth and maturity" (p. 68). She posited that "learning theory and spiritual development theory are linked by similar philosophical and theological issues" because these theories answer the same underlying questions of how one acquires knowledge and how one undergoes change and transformation as a result of knowledge acquisition (John 17: 3; Eph 3:16–19; Thayer, 1996, p. 26). This twofold aspect of learning, encompassing the theoretical and practical domains, aligns well with the *Learning Cycle*.

If the cognitive components of learning termed concrete experience, reflective observation, and abstract hypotheses are inseparably connected with the practical component of active testing in order for effective growth to take place, then the *Learning Cycle* is a model that helps support the connection that exists between the cognitive and applied components of spiritual growth. As such, both an understanding of spiritual matters through cognitive processing and the active implementation of personal beliefs through participation in altruistic service activities are necessary for spiritual growth (Howard, 2008).

The faith journeys of individuals have often been described in terms of developmental processes in the research literature. For example, Zinnbauer and Pargament (2005) describe both religiousness and spirituality as "constructs [which] have developmental trajectories that reflect and influence other strands of human

development" (p. 38). However the spiritual-/religious-/faith-development of adolescents

has been conceptualized and measured differently over the years and across disciplines.

Thus, in traditional research studies, spiritual development has been widely defined

through stage theories (Erikson, 1968; Fowler, 1981); but more recently through

developmental systems theory (Benson, Roehlkepartain, & Rude, 2003; DeHaan et al.,

2011; Lerner, Dowling, & Anderson, 2003; Regnerus, C. Smith, & B. Smith, 2004).

Developmental systems theories define these constructs in light of their multidimensional

nature, which includes various biological, cognitive, social, and cultural variables that

shape adolescents' faith-based development.

Though there is growing interest in the research literature related to spirituality

and spiritual maturation, scholars affirm that the challenges in investigating development

in this domain are often based on definitional variations between terms like religious

development versus spiritual development. Roehlkepartain, Benson, King, and Wagener

(2006), in their research on the spiritual development of children and adolescents, present

three approaches to the conceptualization of spiritual development. First they address

stage theories, then developmental systems theories, and finally they describe spiritual

development as a process. They acknowledge the theories of Erik Erikson (1964) and

James Fowler (1981) as seminal works. Erikson's (1964) epigenetic theory brought

unparalleled interest to studying the impact of religion and spirituality on development

through his hypothesis according to which a persistent attitude of hope leads to faith

maturity. Erikson regarded religion as the organized framework within which hope is

manifested and nurtured, offering to the believers a philosophy of life, a foundation of

doctrinal beliefs, a code of moral conduct, and a sense of belonging to a faith community

(Roehlkepartain et al., 2006). Although Erikson's (1964) stage theory represented a substantial source of inspiration to Fowler's faith development theory, Fowler (1981) described maturing faith very broadly, suggesting that it could be revealed both in a religious context and apart from it.

Nevertheless Roehlkepartain et al. (2006) identify the shortcomings of the stage theories proposed by Erikson and Fowler due to their rigid rational appeal and to the assumption that the young are restricted to an undeveloped faith. On the other hand, Roehlkepartain et al. (2006) suggest that developmental systems theories offer a broader and more flexible approach to describing and investigating young people's spiritual development, where the emphasis is placed on human interactions and the various contexts, or ecologies that shape them. Finally the authors present spiritual development as a process. When viewed as a process, rather than being focused on fixed stages of development, spiritual development is understood in terms of the gradual character of "spiritual change, transformation, growth, or maturation" that occurs throughout the various phases of life (Roehlkepartain et al., 2006, pp. 9, 10).

The faith development theory developed by James Fowler (1981) has been broadly used as conceptual framework for describing faith maturation. This theory encompasses seven stages and was influenced by the theoretical models of Piaget, Kohlberg, and Selman. Fowler's study comprised a sample of 395 people ranging from 3.5–84 years of age, 97.8% Caucasian, with equal representation of males and females. Despite its frequent use in research, Fowler's theory has been challenged and refuted by scholars (DeHaan et al., 2011). For instance, in their review of empirical studies that explore dimensions of young people's spirituality, religiosity, and/or faith, DeHaan et al.

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(2011) provide an overview of how spirituality and religiosity have been operationalized and evaluated over the past two decades. They acknowledge that Fowler's theory is problematic because it incorporates the quest for meaning apart from religion and it is not aligned consistently with Piaget's stage theory from which it was developed. Another criticism of Fowler's theory concerns the sample of participants included in the study that was non-representative of the wider society (DeHaan et al., 2011). On the contrary DeHaan et al. (2011) recognize ample research supporting the view of embedding the process of faith formation within religious traditions.

Another study that recognizes the shortcomings of stage theories in adolescents' spiritual development is that of Regnerus et al. (2004), who employed data from longitudinal research done with adolescents and their parents, educators, and peers to explore factors contributing to young people's religious development. Regnerus et al. (2004) outline the limitations of research studies that are founded on the stage theories of Fowler's faith development and Kohlberg's moral development given that these conceptualized spirituality too broadly, focusing on emotional and personality factors, and failing to account for the social and cultural milieu that shapes young people's religious development. Therefore Regnerus et al. (2004) concentrate in their study on the ecological framework that facilitates adolescents' religious development, where parents have a primary role to play and friends as well as educators and other significant adults are instrumental in this process (Regnerus et al., 2004). Their findings indicate that parental and peer influences are strong predictors of adolescents' attendance at religious services and that these as well as the school's climate impacted significantly on the importance that adolescents attributed to religion.

Benson et al. (2003) offer an overview of various conceptualizations of spiritual development as a multidimensional process. They remark that spiritual development positively impacts the overall development of children and young people. The definition proposed by Benson et al. (2003) presents spiritual development from a humanistic perspective as "the process of growing the intrinsic human capacity for self-transcendence" motivating a person to search for meaning and purpose (Benson et al., 2003, pp. 205, 208). Though their study presents spirituality and religiosity as well as spiritual development and religious development as fields that share a lot in common, they also recognize the differences in the way these constructs have been defined and theorized. Benson et al. (2003) present spirituality and spiritual development as a broad notion, which encompasses "a wider diversity of beliefs and experiences across multiple religious traditions, cultures, and worldviews" in contrast with religion defined within specific faith traditions (Benson et al., 2003, p. 209). The conclusions drawn by Benson et al. (2003) include the need to move away from explaining spiritual development through stage theories and rather to explore this process in a more comprehensive way that accounts for particular factors that influence individuals as they mature spiritually.

Evan Howard (2008), the author of *The Brazos Introduction to Christian Spirituality*, likewise presents a critique of stage theories for spiritual development, stating that "an approach to the stages of spiritual maturity which assumes that one operational system is a higher faculty than the others is simply inadequate to account for the complexities of personal (and corporate) spiritual development" (Howard, 2008, p. 252). Consequently, the author remarks that there is ample evidence from human ecology showing that people, whether personally or in group settings, present particular

characteristics that may not correspond to prescriptive categorizations, labels, or stages of development. Howard (2008) supports a flexible approach in defining spiritual development where faith maturity is viewed as unique across classifications of age, ethnicity, culture, gender, and personality. He states that the process of Christian maturation needs to be Bible-based and, though it may follow different phases of growth, it will reject narrowly defined standardized stages of development, a process that takes into account both the inward and outward growth of a person or group (Howard, 2008). In this light Howard (2008) describes authentic faith-based growth as a relational dynamic through the process of "Christian transformation," which is characterized by "a Godward reorientation of life" that is expressed in a desire to love and serve God and others (pp. 231, 252).

Lerner et al. (2003) discuss positive youth development and success from a systems-thinking perspective. They claim that an integration of civic and moral identity leads adolescents to contribute positively to the well-being of others. Meanwhile Learner et al. (2003) advance the promising proposition that "all youth possess the capacity for positive development" (p. 172). However, they recognize that spiritual maturity and character are essential ingredients in such a maturation process that enables young people to lead healthy, productive lives and to make a difference in society (Lerner et al., 2003).

Using the context of the Judeo-Christian religious systems, King (2003) advances a conceptual framework based on the postulate that religion offers a foundation that is beneficial to adolescents who are in the identity formation process. He proposes that in addition to enhancing self-perceptions, religion and religious establishments offer young people sensitivity toward the needs of others and a desire to promote the well-being of

society (King, 2003). The framework constructed by King (2003) encompasses three dimensions—ideological, social, and spiritual—that situate identity formation within the realm of religion. He claims that the "identity development that emerges out of the ideological, social, and spiritual context embedded within religion is an identity that transcends the self and can promote a sense of commitment that not only fosters individual well-being but promotes the good of society as well" (King, 2003, p. 197).

The ideological dimension outlines how, in the process of asserting their identity and place in the world, adolescents greatly benefit from a religious belief system in the form of "beliefs, moral codes, and values" (King, 2003, p. 198). When young people's spiritual development is viewed in light of their cognitive development, religion offers opportunities for using analytical skills at a time when teenagers are able to engage in formal operational thinking and thus helps them refine their understanding of religious creeds and principles (King, 2003). The second dimension of the framework presents the benefits of religion within the social context of faith communities where adolescents' identity formation is achieved through meaningful relationships (King, 2003). The third dimension of King's (2003) framework addresses spiritual growth as significant to adolescents' identity formation within a religious system that helps them recognize their worth as children of God.

King (2003) posits that religion positively impacts on adolescents' identity formation as it affirms their value as individuals, it offers direction in their search for meaning, and it provides a faith community: "At its best the religious context provides an anchor as an ideological, social, and spiritual community that serves to ground a young person through the sometimes turbulent waters of adolescence" (p. 203). Thus religion

provides young people with a sense of belonging to a community of believers, which

shapes their self-perceptions in light of their spiritual identity as children of God (King,

2003).

Spiritual development and service involvement that stem from one's relationship

with God are linked to interpersonal relationships (Coles, 1997; Dudley, 2007). Inspired

by Goleman's theory of 'emotional intelligence' Robert Coles (1997) authored a book

entitled *The Moral Intelligence of Children: How to Raise a Moral Child.* In this book he

outlines the ways in which the moral conduct of children and young people develops

under the influence of the daily interactions they experience in the home and at school.

Hence he advocates the crucial role of parents and educators in guiding and educating by

the influence of their personal example. Coles (1997) defines the morality of children and

young people in the following words:

> Good children are boys and girls who in the first place have learned to take seriously
> the very notion, the desirability, of goodness—a living up to the Golden Rule, a
> respect for others, a commitment of mind, heart, soul to one's family, neighborhood,
> nation—and have also learned that the issue of goodness is not an abstract one, but
> rather a concrete, expressive one: how to turn the rhetoric of goodness into action,
> moments that affirm the presence of goodness in a particular lived life. (p. 17)

Much like with any other learning task, adolescents need not only to acquire a

cognitive preparation but also the opportunity to participate actively through service in

order to grow and make progress in their faith journeys (Dudley, 2007). The

Valuegenesis study addresses the faith journey of adolescents attenting Seventh-day

Adventist denominational schools. The operationalization of mature faith in this study

describes it as "a vibrant, life-transforming experience marked by both a deep, personal

relationship to a loving God and a consistent devotion to serving others" (Dudley &

Gillespie, 1992, pp. 59, 60). Based on adolescents' responses to questions assessing their

faith-maturity, they were identified within four categories as having: (a) undeveloped faith, (b) vertical faith, (c) horizontal faith, or (d) integrated faith. The vertical dimension of faith refers to an individual's relationship with God, while the horizontal dimension of faith describes one's interactions with other people. Undeveloped faith designates the experience of the individual who is deficient on the vertical as well as the horizontal functions of faith. Vertical faith describes the person who claims ample faith in the vertical domain while lacking in the horizontal aspect of faith. Horizontal faith on the other hand is characteristic of a person who exerts faith in the horizontal domain, while showing insufficient evidence of vertical faith. The final dimension of faith refers to a person who integrates both the vertical and the horizontal dimension of faith to a high degree (Dudley & Gillespie, 1992).

Dudley proposes that these dimensions of faith could be understood as a developmental model where faith is first incipient. In the next phase, the interest in spiritual matters is kindled and faith gradually progresses to the level of vertical faith, expressed in a close connection with God. When following God's call to extend oneself for the benefit of others, a person shows horizontal faith although, if unchecked, it may override in importance a person's communion with God and may negatively impact on vertical faith. The last phase of the faith formation process integrates the vertical as well as the horizontal aspects of faith (Dudley & Gillespie, 1992; Gillespie et al., 2004).

Character development is another conceptualization of adolescents' faith journey. Knight (2010) presents Christian character development in contrast with the humanist perspective, which aims solely at "the refinement of the natural, un-renewed man" (p. 52). Rather, in Christian terms, character development is closely linked with the

conversion experience and with the process of sanctification, being revealed in service to God and man (Knight, 2010).

From the theories and research on young people's biological, cognitive, psycho-social, and spiritual development presented above it follows that a balanced approach is of key value in fostering students' holistic development through teaching and learning. Developmental theories combined with educational research promote understanding of the multifaceted nature of adolescent holistic development and are in line with Kolb's (1984) learning theory that informs this study.

Conceptual Understandings of Spirituality, Religiousness, and Faith

Though scholars and theologians have been engaged in conversations over the topics of faith, spirituality, and religiousness since the beginning of human history, these concepts and the distinctions between them have also been the object of enduring debates (DeHaan et al., 2011). Over the years scholars have employed these three constructs both as synonymous and as distinct phenomena. Researchers acknowledge the limitations inherent in any attempt to define such complex and multifaceted phenomena as 'spirituality', 'religiousness', and 'faith' and suggest a multidimensional approach to describing them across multiple domains (DeHaan et al., 2011; Hill et al., 2000; Hull, 2006; Ratcliff, 2004; Zinnbauer & Pargament, 2005).

Gordon Allport's (1957) writings play a significant role in bringing the conceptualization of faith to the domain of psychology. Allport (1957) differentiates between the concepts of faith and belief despite their frequent use as interchangeable items. According to him, belief is a mechanical claim that may remain at the level of

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words, while faith is rooted in the hope that one's pursuits will materialize. Allport's (1957) view of faith is a dynamic process that requires intentionality on the part of a person to pursue hope in the realization of certain values: "Good, believed in, finds itself embodied simply because faith changes aspiration into realization, transforms the possible into the actual" (p. 140).

Likewise he emphasizes the important role of faith in pursuing values that are transcendent and spiritual in nature: "Values that cannot be achieved in this world *require* a Kingdom of Heaven" (Allport, 1957, p. 137). In this statement Allport exemplifies the place of faith within a religious framework, where it could be discussed in relation to doctrinal values. Meanwhile Allport (1966) maintained a differentiation between intrinsic religious belief anchored in integrated and enduring faith, and extrinsic religious belief rooted in self-promoting attitudes (Allport, 1966). He hypothesized that these represent two complementary types of motivation to pursue religion. In another work Allport and Ross (1967) advanced the notion that "the extrinsically motivated person uses his religion whereas the intrinsically motivated lives his religion" (p. 434).

DeHaan et al. (2011) posited that religiosity and spirituality are frequently found in association. They noted that, in general, religion is referred to as an established structure of beliefs and spirituality and is a liberating search for significance. DeHaan et al. (2011) describe religiosity as well as spirituality as dynamic phenomena integrating one's relationship with the divine and the intentional search that unfolds within the context of a specific religious faith community. They observed that most people nurture spirituality in a religious setting. Therefore they state that a presentation of these components as opposites is inaccurate. Similarly DeHaan et al. (2011) define faith as the

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expression of faith-based commitments within particular religious traditions. While some scholars prefer exploring faith as a generic construct that encompasses a multitude of religious and nonreligious characteristics, others have recognized the danger of such theories and have integrated this phenomenon in the context of certain faith traditions (DeHaan et al., 2011).

Lerner et al. (2003) define spirituality as a sense of alignment with oneself and with one's environment enabling interaction with, and responsibility toward, others in society. A marked benefit of spirituality is that it calls individuals into relationship with God, with other humans, and with the created world at large (Lerner et al., 2003). According to this definition, spirituality is positioned in a religious framework that offers a set of beliefs necessary for one's commitment to God and to others.

According to Zinnbauer and Pargament (2005) spirituality became the term associated with personal pursuits of transcendent or existential values that provide a sense of significance, belonging, and relatedness. In parallel, religiousness is the term used to describe the creeds, doctrines, and beliefs associated with organized religion where believers openly manifest their faith through corporate worship and participation in a faith community (Zinnbauer & Pargament, 2005, pp. 24, 25). Zinnbauer and Pargament (2005) propose two common means of describing both religiousness and spirituality, namely (a) significance, achieved by ascribing meaning to durable values; and (b) search, designating the quest for values that are considered to have lasting meaning (p. 33).

Additionally Zinnbauer and Pargament (2005) present two different ways of looking at spirituality and religiousness as larger domains that could each encompass the other. As such, when viewed from a contextual perspective, Zinnbauer (Zinnbauer &

Pargament, 2005) defines spirituality as an individual or corporate quest for the sacred, and explains religiousness as an individual or corporate quest for the sacred that unfolds within an organized religious setting. According to this definition, spirituality is viewed as the larger framework that embraces religiousness. On the other hand Pargament (Zinnbauer & Pargament, 2005) offers a different outlook on spirituality and religiousness in light of the role of the sacred in the process of searching for significance. Based on this second definition, spirituality refers to a quest for the sacred, and religiousness stands for a quest for meaning related to the sacred. In this second approach religiousness is presented as the broader phenomenon that incorporates spirituality and relates to all areas of human life (Zinnbauer & Pargament, 2005).

Since the rising scholarly interest in spirituality, the gap between the concepts of religion and spirituality has begun to widen to the extent that these constructs are often viewed as dichotomous (Zinnbauer & Pargament, 2005). Although these two constructs present some dissimilar definitional nuances, Zinnbauer and Pargament (2005) warn that to introduce these dynamic processes as polar opposites is challenging and limiting because there is much overlap between these multidimensional constructs. In order to avoid a reductionist approach in conceptualizing spirituality and religiousness, Zinnbauer and Pargament (2005) propose a multi-level approach that involves investigations attesting to various dimensions of human life, activity, and relationships both at the micro- and the macro-level.

In parallel with contemporary conceptual understandings of the terms spirituality, religiousness, and faith, which are commonly used in the social sciences and in the psychology of religion, the Christian perspective on these constructs presents some

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additional understandings. For example, Gillespie et al. (2004) refer to spirituality as a

term denoting one's active role in maintaining relationship with God and

acknowledgement of His will through religious practices such as Bible reading, praying,

worshipping, and attending church. According to this definition, spirituality is grounded

in a person's faith and unfolds within a religious framework.

Jantos (2007) advanced the perspective that there are significant differences

between theistic spirituality and other broad descriptions of this concept, where the most

important variance is that God is at the core of theistic spirituality while humans are the

focus of secular spiritualities. Since the upsurge of New Age ideologies the terms

spiritual and spirituality have become increasingly vague and fuzzy to the point where

they could designate both religious and nonreligious subject matter (Jantos, 2007, p. 9).

Since God created humanity in His image, Christians find their ultimate source of

happiness in a relationship with God. Jantos (2007) adds that a Christ-centered selfless

spirituality, which is enabled by the Holy Spirit, stands in stark contrast with "secular

humanism and the emerging movement of positive psychology," which emphasize a

focus on self and are detrimental to a person's relationship with God as well as to one's

interactions with others (p. 11).

Howard (2008) describes Christian spirituality as a vibrant phenomenon that is

manifested through the believer's active relationship with God and His children. In light

of this definition the spiritual connection is achieved by two means: "a life of prayer" and

"a life of care" (p. 338). Howard (2008) compares these two essential signs of Christian

spirituality in the life of a believer and states that:

> A life of prayer involves the mutual self-disclosure and self-communication of two
> parties. A life of care goes further. A life of care requires the self-involvement in and

self-giving for another. God has cared for us. We are to care for ourselves and others. (p. 338)

Thus the prayer life of a believer impacts on one's interactions with God and others while caring characterizes a Christian who follows Jesus' example of giving and service (Howard, 2008).

The above overview presents conceptual and practical implications of the concepts of spirituality, religiousness, and faith. In this study the concepts related to spirituality, religiousness, and faith will be described from a Christian perspective. Adolescent spirituality and religiousness is operationalized in this study as "adolescents' commitment to religious values and beliefs" (independent variable) and is explored in connection with their involvement in service (dependent variable). This connection between beliefs and actions is supported by Kolb's (1984) experiential learning theory, which represents the theoretical basis for this work.

Implications of Postmodern Thinking to
Adolescents' Spiritual Lives

Adolescents growing up in this postmodern age face numerous challenges to their spirituality, religious values, and personal philosophy of life. Commencing in the 19th century there have been numerous voices, including Marx, Freud, and Weber, who predicted that religion would cease to exist with the rise of industrialization, but despite their predictions religion is still recognized as an essential element of human existence in the 21st century (Harris et al., 2009, pp. 1, 2). Particularly the past 30 years have witnessed major philosophical paradigmatic changes as postmodern thought has been ushered into Western ideology (Rasi, 2008).

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Postmodernism appeared as a result of a major shift from the traditional quest for truth to the quest for meaning (Sire, 2009). Some of the main tenets of postmodernism are: man's inability to arrive at an understanding of the truth, the existence of multiple ways of knowing held independently by individuals, the oppressive nature of metanarratives (universally held truths), the reliability of personal narratives for conveying individually held notions of truth, the relativity of ethics, the role of narratives in constructing meaning, the centrality of a broadly defined "spirituality" in place of doctrinal beliefs in religion, and the commonly held attitudes of relativism, uncertainty, and disbelief (Rasi, 2008; Sire, 2009). For example, Jean-Francois Lyotard (1924–1998) denied absolute truths or the veracity of metanarratives. Likewise Michel Foucault (1926–1984) denounced commonly held perspectives on truth, history, and ethics. Other prominent postmodern voices were Jacques Derrida (1930–2004), the originator of deconstructionism, and philosopher Richard Rorty (1931–2007) who advanced the theory that there is a disconnect between language and physical reality (Rasi, 2008).

Due to the various shifts in the social, political, and religious makeup of society, life in the 21st century appears to be characterized by insecurity, doubt, disbelief, and deep-rooted anxiety both on a personal and on a collective level (Jantos, 2007). Having lost their trust in religious leaders, many individuals prefer to substitute participation in an organized church with spiritual practices that are advertised as marketable items (i.e., self-help books) (Jantos, 2007).

Many young people try to quench their thirst for a sense of direction and purpose in life by embracing the illusory promise of wealth and prosperity, but sooner or later they have to admit that their pursuits do not bring real happiness. Materialism,

individualism, and consumerism are thus nothing else but unsatisfactory surrogates for true meaning in life, leading to an estrangement from God, from self, and from others, leaving people with a sense of spiritual emptiness. Jantos (2007) comments that "while various alternative spiritual paths are being popularized through print and media, most lead down the path of self-centered practices that only appear to increase the existential emptiness rather than resolve it" (p. 9).

When young people choose to be guided by postmodern thinking they often reject belief in absolute truth and lose the moral anchor for decision making, accepting as a result that "everything in life is negotiable" (Zustiak et al., 2003, p. 33). The adolescent who is guided by a postmodern worldview stands in sharp contrast with Allport's (1957) description of the adolescent several decades ago: "The adolescent is often a moral absolutist and believes that a God must exist in order to guarantee the moral values to which he holds" (pp. 34, 35). Consequently, one of the primary challenges to Christianity in this age is that postmodernism rejects Christian beliefs based on absolute truth and projects them as metanarratives. So how could Christian young people who live in this postmodern age keep their faith rooted in a biblical belief system? And could they make a difference in a world penetrated by postmodern thinking?

Rasi (2008) identifies three approaches that help evaluate postmodernism from a Bible-based Christian perspective: (a) accept the positive insights of postmodern writers to the extent that they harmonize with Bible-based truth, (b) critically assess postmodern perspectives to avoid potential dangers, and (c) reject altogether those views that are irreconcilable with biblical Christianity (Rasi, 2008, pp. 14–16). Young people who embrace Christian Theism base their belief system on a self-evident absolute truth

centered in God, as the source of existence, the source of true knowledge, and the source

of meaning in life (Sire, 2009). The Christian worldview provides a foundation for the

belief that God has an absolute standard for right and wrong stated in His law, and that

He created humans as free moral agents (Sire, 2009). As a result, Christian adolescents

learn to view themselves as valuable individuals who were created in God's image with

freedom of choice. Consequently Christian youth believe that as children of God, created

and redeemed to live for His glory, they are called to serve God and their fellow humans

(Sire, 2009).

The importance of adopting a personal philosophy of life is essential for young

people living in a postmodern society and they need to acknowledge that there are major

differences between the tenets of different worldviews. Kainer (2011) uses the analogy of

a superhighway that has a multitude of exits with promising vistas, to illustrate the maze

of worldviews present in contemporary society. He calls on young people to be alert in

order to avoid confusion amid the great variety of worldviews available in this age

characterized by proliferating pluralism. Because Christian young people need a clear

guide and standard by which to test the validity of their personal philosophy Kainer

(2011) advises that they need to look beyond their personal opinions and sensory

experiences, which are inadequate at best, and turn to God's revelation through the Holy

Scriptures.

Because this research draws on data from students attending Seventh-day

Adventist schools, the study explores the spiritual trajectories of adolescent students who

hold a Christian worldview. Therefore a Christian theist worldview represents the point

of reference when describing adolescents' religious values and beliefs (independent

variable) in relation to their involvement in service (dependent variable).

**Overview of Terms Associated With the
Concept of Service**

Service as a generic construct comprises a wide array of connotations and

manifestations depending, for example, on the scope of the activity, the context in which

it is rendered, the attitudes of the individuals offering the service, and the recipients of

rendered service (Coles, 1993). Following is some terminology commonly associated in

the literature with the concept of service: community-service (Koliba, Campbell, &

Shapiro, 2006; Myers et al., 2008; Planty, Bozick, & Regnier, 2006; Sherr, Garland, &

Wolfer, 2007; C. Smith & Denton, 2005), altruistic behavior (Carlo et al., 2010; Gillespie

et al., 2004; Ji et al., 2006; Knight, 2010), prosocial behavior (Carlo et al., 2010;

Hopkins, McBride, Tyner, & Duffy, 2009), prosocial commitments (Furrow et al., 2004),

volunteering work for others (Büssing et al., 2010; Hugen, Wolfer, & Renkema, 2006;

Markstrom, Huey, Morris Stiles, & Krause, 2010; Myers et al., 2008; Planty et al., 2006;

C. Smith & Denton, 2005), charity (Coles, 1993), service-learning (Billig, 2000; Collier

& Dowson, 2008; Deeley, 2010; Feenstra, 2011; Koliba et al., 2006; Madden, 2000;

McNamara, 2000; Myers & Jackson, 2008), Christian service (Bell, 2003; Gillespie et al.,

2004; Hopkins et al., 2009; Howard, 2008), community ministry (Hugen et al., 2006;

Sherr et al., 2007), and Christian care (Howard, 2008). Several of these terms will be

defined and elaborated in more detail inasmuch as they relate to the focus of this study.

Community service is volunteer work done without financial reimbursement

(Planty et al., 2006). Recently numerous policy makers, educators, and scholars have

recognized the potential value of engaging adolescents in community service in order to instill in them social responsibility, civic responsibility, and long-term involvement in service (Koliba et al., 2006; Planty et al., 2006). However, beyond the benefits of developing good citizenship skills, studies show that community service could contribute to teenagers' faith development. In their study on adolescent faith maturity and community service, Sherr et al. (2007) found that when community service is practiced as "community ministry" it can serve as an effective tool in enhancing "the faith maturity and faith practices of adolescents in congregations" (Sherr et al., 2007, p. 43). This assertion is also supported by Hugen et al. (2006) and by Myers et al. (2008) who investigated the role of community ministry in the faith development of believers.

Altruism is understood to be the essence of the Judeo-Christian belief system and it is based on the principle of "doing good for others when nothing is expected in return" (Ji et al., 2006, p. 156). Nevertheless the key to genuine altruism is found in a selfless and Christ-like attitude toward service, as noted by Knight (2010) who emphasizes the necessity of centering altruism in a personal union with Christ. He posits that "altruism and human goodness . . . are not Christianity" when practiced apart from a communion with Jesus Christ (p. 48). So the true spirit of altruism finds its purest expression in an abiding connection with Jesus.

Coles (1993) describes charity as an obsolete term that corresponds to what today is labeled service. He argues that some attribute to charity patronizing connotations, whereby acts of service are viewed as quick-fix solutions to the needs of others without real concern for their well-being. On the other hand, for Christians, charity sums up one's

moral responsibility and expresses the spirit of empathy and compassion through generous acts of kindness (Coles, 1993).

The origins of service learning reflect the ideology of John Dewey and are tied to the curriculum movement known as progressive education with focus on active learning and experiential education (Kliebard, 2004; Kolb, 1984; Myers & Jackson, 2008). The term service learning was coined in the 1960s by Bill Ramsey and Robert Sigmon who used it in the context of practical training in the belief that it would both enhance students' academic growth and their involvement in community service (Myers & Jackson, 2008, pp. 328, 329).

Service learning is a form of active learning whereby students apply in practice the knowledge acquired in school by involvement in community service projects (Billig, 2000; Deeley, 2010; Feenstra, 2011; Koliba et al., 2006). Billig (2000) acknowledges the different definitional nuances of service learning based on its application in practice. He postulates that depending on whether service learning is viewed as "a philosophy of education," as "a curricular tool," or as "a program design" its implementation changes (Billig, 2000, p. 659). Thus, when perceived as a philosophy of education, service learning is a means of promoting school reform, or a way to apply constructivist theories. If regarded as a tool that integrates community service within the school curriculum, service learning is a form of active learning. When viewed as a program, service learning is usually conceived as a non-mandatory high-school course that involves students in some type of voluntary service project (Billig, 2000, pp. 659, 660). According to Deeley (2010), "service-learning involves a combination of cognitive, affective, and practical aspects, which are connected and drawn together through critical reflection" (p. 51).

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Based on this description, service learning is an effective educational tool that is anchored in and aims at a well-rounded, holistic development.

The critical reflection component of service learning is of key importance in assessment. In today's educational arena, service learning incorporates practical service learning with critical thinking and is viewed as a promising strategy that helps students develop good citizenship skills (Billig, 2000; Myers & Jackson, 2008; Planty et al., 2006). Because of the variety of learning objectives that could be addressed with service learning, Myers and Jackson (2008) contend that this instructional approach is applicable to "faith-based programs" (p. 329). The authors found that "as youth come face-to-face with the needs of the world, service learning experiences can cultivate an openness to discern God's presence and activity in their lives" (Myers & Jackson, 2008, p. 331).

Service learning enlists educators as responsible for equipping, guiding, and challenging youth "to live out their faith in daily life in service among their families, communities, church, and world" (Myers & Jackson, 2008, p. 331). Therefore in Christian schools service learning is the means by which students acquire skills to become Kingdom citizens, being useful members in society as well as individuals who follow Jesus' example of self-sacrificial service, changing the world for Christ (Feenstra, 2011; Hopkins et al., 2009; Howard, 2008; Hugen et al., 2006; Myers & Jackson, 2008).

As seen in the above overview, there are numerous terms associated with the comprehensive concept of service done for the well-being of others. As with service learning (see Deeley, 2010), conceptualizations of service involvement are often described holistically, much like Kolb's (1984) learning theory. Consequently, the

theoretical framework adopted for this study will prove beneficial in describing service as a practical application of conceptually and spiritually held beliefs and values.

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Current Perspectives on Adolescents'
Service Involvement

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In recent years the idea of youth involvement in active service for various causes has received much attention in governmental organizations, educational institutions, as well as church organizations, and has been the focus of numerous research studies in the fields of social science, psychology, and theology. Numerous studies recognizing the positive potential of service involvement in adolescence recommend its intentional inclusion in planned educational curricula and church programming for the youth (Carlo et al., 2010; Deeley, 2010; Dudley, 2000; Feenstra, 2011; Gillespie et al., 2004; Howard, 2008; Koliba et al., 2006; Myers et al., 2008).

Strommen and Hardel (2000) conducted research based on the national study known as the *Harris Scholastic Research,* undertaken in 1989 with students ($N = 5,000$) in Grades 4 through 12 who studied in public, private, or religious schools. In light of this study, service could be guided by various purposes and it could be fueled by various attitudes and orientations of moral responsibility. The authors name five orientations of moral responsibility: "civic humanist, conventionalist, expressivist, theist, and utilitarian" (Strommen & Hardel, 2000, pp. 135, 136). Findings from this research reveal that 25% of the participants had a civic humanist orientation based on the philosophy that one needs to serve the community for the common good of society; 20% of students held a conventionalist orientation, which implies moral decision-making based on values held by parents, educators, and other authority figures; 18% of the students held an

expressivist orientation whereby actions are based on what feels right and what contributes to one's personal contentment; 10% of youth in this study expressed a utilitarian orientation, which also calls for action based on what proves beneficial to the individual and advances one's personal agenda; and finally, 16% of the young people responded affirmatively to a theistic orientation, which empowers action based on the moral judgment of what God and the Scriptures express as being right, good and just. Results from this study reflect the varying interests and orientations of teenagers when it comes to making moral decisions leading to service (Strommen & Hardel, 2000).

Over the years, the promotion of voluntary community service among young people has been a matter of great interest. State leaders and legislators have sought to thus advance among youth values of civic responsibility and lifelong service as well as to help prevent indifference and criticism (Koliba et al., 2006; Planty et al., 2006). Such initiatives were President Kennedy's Peace Corps, President Bush's Points of Light Foundation, and President Clinton's AmeriCorps (Planty et al., 2006). Using the National Education Longitudinal Study, which was conducted with a nationwide sample of youth ($N = 9,966$), Planty et al. (2006) investigated the impact of voluntary community service required in school on the service involvement of young adults. Using a two-stage sampling procedure, initially 24,599 Grade 8 students completed the survey in 1988. A number of participants from the initial study ($N = 9,966$) completed interviews in Grade 10 (1990), in Grade 11 (1992), and in Grade 12 (1994) as well.

These respondents were then followed beyond their high-school years into young adulthood until 2000. As anticipated, the findings reflect that those students who engaged in community service voluntarily during high school had the highest rate of engagement

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in community service in the years following high school (42%). The survey also assessed the motivation of students to participate in community service. The data revealed that students who engaged in community service willingly and not only because this was a school requirement were 38% more likely to participate consistently in service initiatives than were their peers who were not actively engaged in service during high-school (Planty et al., 2006, p. 194). Thus the study supports the idea that involving high-school students in voluntary community service through school or church programs is a high predictor of their involvement in service activities during the young adult years.

In their book *Soul Searching*, Smith and Denton (2005) present findings from the National Study of Youth and Religion. This research was done at the University of North Carolina between 2001 and 2005, focusing on American adolescents' spiritual and religious orientation ($N = 3,290$). In regard to service, this study revealed that teenagers who are more religious are significantly more involved in non-mandatory community volunteer work. In fact, teens who claimed to be earnest believers were engaged twice as much in service activities than those who were not religious. Likewise the adolescents who engaged in volunteering or service projects most frequently were students who indicated being devout observers of religion as compared to the less religiously engaged.

Christian Smith (Smith & Snell, 2009) has co-authored with Patricia Snell a sequel to the initial study on youth and religion and entitled the book *Souls in Transition*. The aim of the longitudinal study was to follow up on the young participants in the National Study of Youth and Religion (NSYR) and explore the faith journeys of these "emerging adults" as they transition from adolescence to adulthood (C. Smith & Snell, 2009, p. 4). Not surprisingly they found that young adults who claimed to be devoted in

their religious beliefs were three times more likely (75% versus 25%) than the religiously disengaged to donate at least $50 of their income to a foundation or mission during the preceding year. Similarly the results revealed that religious young people were more than twice as likely to be engaged in community service that was not mandated by an educational or governmental organization than those religiously disconnected (67% versus 30%). In addition to religion being a strong predictor of American young people's voluntary community-service involvement, C. Smith and Snell (2009) also found that religiously devoted youth are more likely to have close friends who volunteer for community service as compared to those who are religiously indifferent (42% versus 13%).

The research project done by Carlo et al. (2010) was conducted with European American and Mexican American students in Grades 6 through 8 ($N = 904$) who had previously participated in a larger study. This research examined the extent to which adolescents display six prosocial behaviors as well as the factors contributing to these prosocial attitudes. The 25-item prosocial tendencies measure (PTM-R) was used to assess the likelihood of students to display prosocial attitudes. Cronbach's alpha coefficients revealed high internal consistency between the scale items for the six prosocial behaviors: (a) altruistic ($\alpha = .71$), (b) public ($\alpha = .70$), (c) emotional ($\alpha = .84$), (d) dire ($\alpha = .82$), (e) anonymous ($\alpha = .76$), and (f) compliant ($\alpha = .63$) (Carlo et al., 2010, pp. 340, 341). Construct validity tests confirmed the need to differentiate between the various types of prosocial behaviors (Carlo et al., 2010, p. 353). The findings of the study support previous research and indicate a positive connection between 'prosocial

behaviors' and the construct validity variables 'parental monitoring' and 'religiosity' (Carlo et al., 2010, pp. 353, 354).

Findings from the above research studies reflect some of the current approaches to involving adolescents in service in schools, community service organizations, and other institutions. These support the multiple benefits of altruistic manifestations and inform the present study in terms of the positive connections that exist between a person's religious beliefs and values and his/her involvement in service.

Adolescents' Faith-Based Involvement in Service

The connection between a believer's faith-based practices and Christian service has been recognized by numerous scholars (Allport, 1957; Donahue & Nielsen, 2005; Howard, 2008; Strommen & Hardel, 2000; Zinnbauer & Pargament, 2005; Zustiak et al., 2003) as well as by Christian authors (Bell, 2003; Knight, 2010; E. G. White, 1913). A faith-based attitude to serve others is also relevant in this postmodern age and represents a Christian response and solution to a world in search for meaning. In this light Zustiak et al. (2003) offer a well-stated solution to the problems posed by postmodernism, by suggesting that Christianity's most powerful defense

> is not a well-reasoned argument but a wildly loving community. Our Lord did not say that they will know us by our truth—as important as this is—but by our love. At the very heart of the gospel is not a proposition but a person, Jesus Christ, who is made manifest in and through his called-out ones in their life together. (p. 36)

The link between faith and its evidence through service to God and to others is a theme that runs through the Bible as a golden thread. From the beginning of human history, as recorded in the biblical account, God's purpose was for humanity to live in communion with Him and to express their love for Him as defined in the summation of

the law: "Love the Lord your God with all your heart and with all your soul and with all your strength" (Deut 6:5, Matt 22: 37) and "Love your neighbor as yourself" (Lev 19:18, Matt 22:39, Rom 13:9). These statements sum up the essence of God's law, for Jesus Himself has stated that "all the Law and the Prophets hang on these two commandments" (Matt 22: 40). This principle provides clear guidance to the need to show our love for God not only inwardly through prayer, Bible study and meditation, but also through our active service to Him and to our fellow humans.

Allport (1957), who theorized the connections between religion and psychology, remarked that Christianity is founded on truths that promote social well-being, examples including: the Golden Rule (Matt 7:12), Jesus' second commandment (Matt 22:39), the Lord's Prayer (Matt 6:12), and the parable of the sheep and the goats (Matt 25:31–46). He posited that the values one embraces as a result of one's intellectual and spiritual maturity will go beyond selfish purposes and will include "the other" by means of practicing values such as charity, tolerance, and equality (Allport, 1957, p. 15).

Strommen and Hardel (2000) contend that "the service emphasis of the Christian faith stands in contrast to the mind-set of today's culture" and that "over the past several decades there has been a discernible shift from serving others to looking out for 'number one'" (p. 145). The authors suggest that the solution for counteracting this "shift" is to engage young people in service starting in early childhood. Based on the findings from the *Effective Christian Education* study, Benson and Roehlkepartain (1993) noted that the majority of young people were involved in service projects for 5 hours or less during their lifetime. Meanwhile they remarked that in this age in which we live merely 29% of Protestant youth who participated in the study "spent eleven hours or more in a

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congregation-sponsored service project in their lifetime" (Benson & Roehlkepartain, 1993, cited in Strommen & Hardel, 2000, p. 145). These trends are worrisome to anyone who seriously considers children's and young people's spiritual development and commitment to God as reflected in service and daily living.

Donahue and Nielsen (2005) explored the connection between religion and prosocial behavior and corroborated substantial research evidence that shows how patterns of giving and service correlate with Christian beliefs. For example, they recognized that believers contribute to the advancement of religious causes by giving monetary gifts and by personally volunteering to serve others. In addition to promoting the social value of serving others, religious traditions also contribute to social betterment by infusing in young believers such religious values that could act as safeguards against risk behaviors (Donahue & Nielsen, 2005, p. 278).

Zinnbauer and Pargament (2005) acknowledge that the chief purpose of established religions is the personal and corporate quest for the sacred. The secondary aims of religious organizations include voluntary service, education, health programming, and providing "support for the spiritual development of its members" (Zinnbauer & Pargament, 2005, pp. 35, 36).

As already noted (see pp. 47, 48), Howard (2008) describes Christian spirituality in light of two characteristic components—prayer and service:

> Christian spirituality is both a life of prayer and a life of care. Through the life of prayer, we are invited into the very heart of God, free to share ourselves in openness with a God who cares. Through the life of care, we are invited to share the very life of God, a life of self-giving, creative nurture over self, others, and the very creation itself. (p. 364)

Moreover, Howard (2008) recognizes that an attitude of care for the earth and for others is a golden thread that moves throughout the Bible. As such he observes that God's original plan at Creation, that mankind would care for the earth (Gen 2:15), will be maintained even in the earth made new in God's Kingdom (Rev 22:5). Howard (2008) further explains that love characterizes the Christian life in fulfillment of God's mandate of care.

The Seventh-day Adventist church believes that salvation is obtained by faith in the merits of Jesus and is a free gift of God's grace (see Rom 1:17). However, good works are a reflection and evidence of a Christ-centered life of faith (see Jas 2:14, 24, 26). As Dudley and Gillespie (1992) stated, "Adventists believe strongly in service to others. Like our Master we aim to go about doing good, and our schools were established to enable our youth to catch a vision of service to God and humankind" (p. 44). According to Knight (2010) the development of a Christian character is intimately linked to service: "The essence of Christian love and the Christ-like character is service to others" (p. 54). Likewise Bell (2003) defines 'Christian service' as "a stirring to excellence, a surpassing joy, an exuberance, and an empowerment to share and to do within a recreated being within whom Jesus abides by the Holy Spirit Whom He has sent to dwell within us" (p. 187). In recognizing the inseparable connection between faith and service, Bell (2003) states that "the call of faith is a call to service" which implies that the believer who lives in unity with Christ also responds to Jesus' Great Commission to be "His loving presence on Earth" (p. 186).

Findings from the *Valuegenesis* study conducted in Seventh-day Adventist schools across North America revealed an inconsistency between adolescents'

understanding of doctrines and the practical application of those beliefs in their lives (Gillespie et al., 2004). These findings provide empirical support for the fact that a mere knowledge of Christian principles is not sufficient to encourage youth to become engaged in service. Results showing student attitudes toward service are much lower than those reporting on their commitment to God.

Valuegenesis[1] revealed that 95% of the participants indicated a conviction that God loves them, 90% expressed loyalty to the church, and 90% of the youth indicated belief in the main doctrines of the church—the second Advent, the ten commandments, the Sabbath, and the state of the dead (Dudley & Gillespie, 1992, pp. 22, 24, 82). However in the practical field of service the youth ranked much lower. The data show that almost 50% of adolescents in Adventist schools were not involved in any service-type activity. Likewise 44% of teenagers reported that they never participated in evangelistic outreach (Dudley & Gillespie, 1992, pp. 44–46).

In the follow-up study done 10 years later, Gillespie et al. (2004) compared the results of the two administrations of *Valuegenesis*. They found that only 30% of the participants in *Valuegenesis[1]* and 40% of the participants in *Valuegenesis[2]* were willing to provide help to others in matters of faith. Likewise, only 45% of the participants in *Valuegenesis[1]* and 40% of the participants in *Valuegenesis[2]* had a sense of duty for "reducing pain and suffering in the world" (Gillespie et al., 2004, p. 100). Also, only 42% of students participating in *Valuegenesis[1]* and 49% of students participating in *Valuegenesis[2]* shared their faith (Gillespie et al., 2004). Hence a challenge to Adventist young people's faith development is the gap between the knowledge of their

responsibility as Christians and the implementation of their beliefs in practice (Dudley & Gillespie, 1992; Gillespie et al., 2004).

The Faith Maturity Scale used in the *Valuegenesis* study encompasses eight fundamental components that can be summarized in two comprehensive themes: a horizontal theme—based on a faith relationship with God—and a vertical theme—based on service to others (Gillespie et al., 2004). Dudley and Gillespie (1992) describe the two components of the Faith Maturity Index in the following terms: "The vertical theme of having a deep, personal relationship with a loving God and the horizontal theme of translating this personal affirmation into acts of love, mercy, and justice toward others" (p. 64).

Based on the Faith-Maturity scores four categories were created to designate the phases of faith development: (a) undeveloped faith, (b) vertical faith, (c) horizontal faith, (d) integrated faith (Gillespie et al., 2004, pp. 101, 102). On the first administration of *Valuegenesis*, 43% of the respondents reported undeveloped faith, 8% reported vertical faith, 24% reported horizontal faith, and 25% reported integrated faith (Gillespie et al., 2004). However on the second administration of *Valuegenesis* only 28% of the students reported undeveloped faith, 18% reported vertical faith, 14% reported horizontal faith and as many as 40% reported integrated faith (Gillespie et al., 2004, pp. 101, 102).

A study based on *Valuegenesis* by Ji et al. (2006) explored aspects of intrinsic and extrinsic religious orientations based on Allport's (1950) theory. Ji et al. (2006) posit a very pertinent question to the subject of the connections existing between one's faith in God and one's commitment to do service for others: "What influence does religion have on altruistic belief and pro-social behavior?" (p. 156). Their study found that more than

any other measure of personal religiosity, faith maturity impacts on the altruistic manifestations of adolescents. Within the Faith Maturity scale, indices of horizontal faith maturity are more significantly correlated with prosocial/altruistic behaviors than the indices of vertical faith maturity (Ji et al., 2006, p. 172). In contrast to Benson, Donahue, and Erickson (1993) who presented faith maturity as a whole that integrates the vertical and horizontal aspects of faith, Ji et al. (2006) contend that these components of faith maturity are separate and "independent but continuous aspects of religious faith" (p. 172).

Findings from the above studies find resonance in Knight's (2010) remark that "perhaps one of the greatest challenges facing Christian education is to find ways to actualize the rhetoric of service" (p. 56). This issue brings to the fore the crucial role that spiritual/religious educators—parents, teachers, and church leaders—hold in guiding the children and young people. In light of these facts, educators are called to be intentional in preparing the young for Christian service.

Consistent with Kolb's (1984) *Experiential Learning Cycle*, active participation in service corresponds with the active experimentation stage, whereby learners apply in practice the values they had adopted. Given this theoretical understanding, the concept of service involvement will be used in this study to refer to the outward expression of a person's religious values and beliefs.

Home, School, and Church Variables in Relation to Adolescents' Involvement in Service

In their study that examined the role of youth ministry in young students' faith-formation based on the *Valuegenesis* study, Gane and Kijai (2006) observed that factors such as participation in church or school programs, parental religiosity, and parenting

style could potentially contribute to the development of young people's "personal faith or orientation to religion" (p. 62). Although the importance of the home, the church, and the Christian school working together to educate the young is a familiar message in the context of Christian education, it is an idea that requires a larger acceptance among Christian parents, the church, and schoolteachers. It is when these three entities combine their efforts to provide the foundation for the spiritual formation of the young that the goal of holistic education and faith-based learning could be reached.

<div align="center">Home Variables</div>

In the 21st century the influence of popular culture on adolescents is greater than ever before and the ideologies of today's young generation are fashioned to a great extent by the values projected by the entertainment industry (Kainer, 2001, p. 14). However from the beginning of human history God intended the home to be the setting where spiritual values could be modeled and practiced and where the young would learn to love and serve God and others (E. G. White, 2003, p. 20). Therefore parental involvement and positive influences in the home are of primary importance in helping children and adolescents to embrace values that contribute positively to their development and prepare them to become useful members of society.

From the earliest Bible times children and young people had to learn the importance of service to those around them (May, Posterski, Stonehouse, & Cannell, 2005; E. G. White, 1898, 1999, 2002, 2003). The Bible records many stories of children and youth who placed their skills and talents in service to God and as a result He achieved great things through them. Take for instance Samuel's early years when, as a young person, he learned to serve God and others effectively:

Young as he was when brought to minister in the tabernacle, Samuel had even then duties to perform in the service of God, according to his capacity. These were at first very humble, and not always pleasant; but they were performed to the best of his ability, and with a willing heart. His religion was carried into every duty of life. He regarded himself as God's servant, and his work as God's work. His efforts were accepted, because they were prompted by love to God and a sincere desire to do His will. (E. G. White, 1999, p. 573)

Of Jesus, the ultimate example for Christians, E. G. White (1898) records: "His willing hands were ever ready to serve others" (p. 68). She continues,

In His industrious life there were no idle moments to invite temptation. No aimless hours opened the way for corrupting associations. So far as possible, He closed the door to the tempter. . . . Jesus lived in a peasant's home, and faithfully and cheerfully acted His part in bearing the burdens of the household. He had been the Commander of heaven, and angels had delighted to fulfill His word; now He was a willing servant, a loving, obedient son. He learned a trade, and with His own hands worked in the carpenter's shop with Joseph. (p. 72)

These Bible stories provide insight into the child-rearing practices that were foundational to Judeo-Christian parenting and education, whereby the spiritual preparation of children and youth happened on the backdrop of an active implementation of the beliefs and values in daily practice. In fact, studies show that when spiritual training happens in relational, dialogical, and informal settings, it has the potential to help the young commit their lives to God (De Roos, 2001, cited in Ratcliff, 2004, p. 217). As the words of the apostle indicate, "faith without deeds is dead" (Jas 2:26). Hull (2006) concurs with this truth by stating that "faith without action isn't really faith at all" (p. 107). Therefore "a spiritual person is a person of action" (pp. 107, 108).

Allport (1957) found substantial proof to support the observation that adults who are most spiritual grew up in families with parents who were similarly spiritually devout. Moreover he recognized that very frequently young people who reject their parents' authority are deeply influenced by the parents' religious life. Therefore when young people experience disappointment in their secular pursuits, they often adopt the

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worldview of their parents as being a trustworthy source of direction in life (Allport, 1957).

In a study done by Lee et al. (1997), the authors explored the connection between the family worship patterns and the beliefs, values, and behaviors of adolescents attending Seventh-day Adventist schools. Data for this study were collected from students enrolled in Seventh-day Adventist schools in Grades 6 through 12 ($N = 7,658$) who completed survey questionnaires. Using hierarchical cluster analysis, 11 worship behavior variables were selected. Results show the following worship patterns: no worship (27%), infrequent father led (13%), infrequent mother/youth led (9%), mother led (7%), father led (15%), rotated (14%), and shared (15%) (Lee et al., 1997, p. 375).

Findings from this study reveal the positive impact on adolescents of regular family worship where they take active part in worship practices. One specific positive effect of family worship was emphasized in the finding that "active faith, including reported helping of others, was higher in . . . groups in which youth frequently read, prayed, and talked about God during family worship" (Lee et al., 1997, p. 380). Conversely Lee et al. (1997) reported that "possibly worship activities that do little to actively involve the youth, lower the youth's maturing faith" (p. 378). According to Bandura's (1986) *Social Cognitive Learning Theory*, young people learn more easily by following the behaviors of significant adults in their lives (Lee et al., 1997, p. 373). Based on this theory, parents can potentially contribute to their children's spiritual development by modeling behaviors that are consistent with their beliefs, including prayer, Bible study and service to others (Lee et al., 1997). Results of examining the relationship between family worship and active youth involvement in matters related to faith and service

indicate that "active faith, including reported helping of others, was higher in all three of the groups in which youth frequently read, prayed, and talked about God during family worship" (Lee et al., 1997, p. 380). These findings provide positive support to the role of family worship in nurturing young people's active involvement in service.

Strommen and Hardel (2000) analyzed some of the main studies realized through the Search Institute in the major American denominations and found that "fewer church families are producing the kind of youth whose hearts are committed to the mission of Jesus Christ" (p. 14). In fact they found that today few homes guide their children to adopt and commit to "a life of faith, service, and responsible living" (Strommen & Hardel, 2000, p. 15). Given that the home has a primary role in the spiritual development of the young, the authors call for parents to be more intentional about the spiritual nurture of their children (Strommen & Hardel, 2000).

The National Longitudinal Study of Adolescent Health collected data from adolescents in Grades 7 to 12, as well as from parents, teachers, and community members. Regnerus et al. (2004) analyzed data from both waves of this study. Their study explored the role of social and religious contexts in the spiritual growth of adolescents. Their findings reveal that parents play the most significant role in the spiritual development of their teenage children. Parents leave a lasting impression on adolescents by their faith practices despite the usual tendency of teenagers to resist parental authority (Regnerus et al., 2004, p. 34). Likewise peers and school factors are strong predictors of adolescents' church attendance (Regnerus et al., 2004). The study reports predicted probabilities on adolescents' church attendance and their attitudes toward religion contingent on their social relationships.

For example, the probability of adolescents attending church weekly is 2 out of 3 if their parents attend church regularly. On the other hand, the probability of adolescents attending church on a weekly basis is .08 if their parents do not attend church. Meanwhile the probability of adolescents' regular church attendance is only .48 where their circle of friends attends church on a weekly basis (Regnerus et al., 2004, p. 34). Though important, the influence of friends, schoolmates, and acquaintances in the wider community is much less significant than that of parents in predicting church attendance patterns (Regnerus et al., 2004, p. 34). Moreover the authors noted that the interactions with family members, friends, schoolmates, and community members stemming from their spirituality also helped shape the external behavior and conduct of adolescents (Regnerus et al., 2004, p. 35). Findings from this study offer additional evidence of the significant impact of parental and educational influences on teen spirituality, which in turn have a bearing on all other aspects of their lives.

The first two waves of the *Valuegenesis* study, analyzed by Gillespie et al. (2004), revealed, in harmony with other research, that family worship has a primary role in shaping adolescents' religiousness and their acquisition of spiritual values. Gillespie et al. (2004) stated that "nothing is more important than having a rich, loving, and caring family life" (p. 321), and that "there is no better power for change than when parents live the religion they believe" (p. 322). Findings revealed that the number of students who reported having family worship regularly has decreased on *Valuegenesis[2]* compared to the family worship patterns reported on the first administration of the survey. For example, while 23% of students who had worship daily at the time of *Valuegenesis[1]* only 7% of them had family worship daily on *Valuegenesis[2]* (Gillespie et al., 2004). Similarly,

while 49% of students reported having weekly family worship in the *Valuegenesis[1]* survey, only 32% of them reported experiencing family worship once a week during *Valuegenesis[2]* (Gillespie et al., 2004).

An observation that emerged from the analysis of *Valuegenesis* data indicates that those parents who are devout and committed to the beliefs and values of the Adventist denomination have family worship regularly (Gillespie et al., 2004). Following the survey analysis, Gillespie et al. (2004) encourage parents to be intentional in making family worships stimulating, inspiring, and pertinent to young people's understanding in order to maintain their interest in the family altar.

Bunge (2008) in his study on the faith formation of children and young people promotes 10 best practices that could potentially contribute to the spiritual growth of adolescents through the indwelling work of the Holy Spirit. These 10 practices are specifically valuable in helping parents and religious educators to enhance young people's faith and service practices: (a) Scripture reading, (b) prayer and worship, (c) positive role models, (d) involvement in service activities, (e) singing, (f) fostering an appreciation for the natural environment, (g) education and vocational training, (h) nurturing positive life attitudes, (i) listening skills, and (j) acknowledging the parameters of parental authority (Bunge, 2008, pp. 355, 356). It is obvious that one of the best practices in parenting adolescents, as researched by Bunge (2008), addresses the cultivation of young people's active involvement in service.

The role of religious parents in guiding their children's service orientation has also been reported in the study conducted by King (2003). The results of his research study show that young people who have a dynamic religious life hold in common with

their parents the same religious creeds and spiritual values to a much higher extent than do young people who are religiously inactive. Similarly King (2003) recognized that young people's active engagement in religion positively impacts on the development of their personal philosophy of life and on their identity formation. This study provides evidence to the positive parental influence on adolescents' spiritual development grounded on active engagement in religion which holds personal as well as shared benefits.

According to Ellen White (1913), the author of a number of books addressed to Christian educators and parents, "the great work of parents and teachers is character building—seeking to restore the image of Christ in those placed under their care" (p. 61). In light of this recommendation parents have a sacred calling to act as God's representatives in the redemptive work of drawing children and young people to Him. Additionally she posited that one's love for God is reflected in a Christian life committed to service: "Love and loyalty to Christ are the spring of all true service. In the heart touched by His love, there is begotten a desire to work for Him" (p. 268). God's love in us is the transforming power that enables us to do genuine service for others. Christian parents are encouraged to cultivate in their children such willingness to live for others.

<center>School Variables</center>

The philosophical underpinnings of postmodernism also influence the educational forces responsible for training and preparing the young generation. A problematic factor, as stated by Cherryholmes is that in postmodernism "the norm for curriculum . . . is not consensus, stability, and agreement but conflict, instability, and disagreement" (Cherryholmes, 1988, cited in Pinar, Reynolds, Slattery, & Taubman, 2008, p. 489). On

the other hand the majority of young people spend much of their time in virtual spaces,

using high-tech gadgets for gaming and entertainment purposes, which act as surrogates

for spiritual values, meaningful relationships and worthwhile endeavors in day-to-day

life. Rather than showing more interest in learning and in a system of faith-based values,

many students today are entertainment-oriented, skeptical, and disengaged in their overall

development (Noddings, 1992). However it has been remarked by researchers that the

school can further develop and expand the parental influence in the life of the student,

although it is recognized that the school cannot replace the role of a parent (Anderson &

Smith, 1999; Ennis & McCauley, 2002; Noddings, 1992).

Among the tasks that characterize effective Christian education, Strommen and

Hardel (2000) identify three that relate directly to young people's outward expression of

their commitment to Christ through service: (a) moral responsibility, (b) involvement in

service, and (c) involvement in mission outreach. The authors posit that by developing

moral responsibility, by engaging in service to others, and by participating in missionary

pursuits, young people learn to view faith in God as a dynamic phenomenon that has

enduring implications for their lives (Strommen & Hardel, 2000).

Among the findings from the National Longitudinal Study of Adolescent Health,

Regnerus et al. (2004) report on the role of Christian education in adolescents' spiritual

growth. Results from this study show the primary role of parental influences. Yet

Regnerus et al. (2004) posit that beyond the home there are other social influences, such

as friends, school, and community, that significantly impact the spiritual lives and

religious practices of teenagers. An essential factor that determines the quality of the

religious influence of the social milieu on young people is "the religious character of their

families, friendship groups, and schools," noted Regnerus et al. (2004, p. 35). The school environment was found to be important among the ecological contexts that shape adolescent spirituality and their attitudes toward religion. Analysis revealed that the likelihood of adolescents attending church regularly due to the influence of their school's average church attendance was .48 compared to the much more significant influence of parental regular church attendance patterns (2 in 3). On the other hand, the probability of adolescents rating religion as important to them is higher in connection with the school context (.61) than with any other social or religious context (Regnerus et al., 2004, p. 34). Therefore when adolescents attend a school that ascribes great value to religion, the students are significantly more likely to rate religion as meaningful. Findings from this study help emphasize the role of educational influences within various ecological structures that contribute to the spirituality and religious practices of adolescents.

Gillespie et al. (2004) noted that in addition to the Faith-Maturity Index, which assesses various aspects of one's religious life, the survey questionnaire used for the second wave of the *Valuegenesis* study includes a new scale, namely the Intrinsic and Extrinsic Religious Scale. Analyzing the data from this scale, which was based on Allport's (1957) theory of intrinsic versus extrinsic religiosity, Gillespie et al. (2004) reported that 44% of the adolescents in the study were intrinsically oriented and just 6% of them were extrinsically oriented in their religious practices (pp. 80, 81). On the other hand the survey included items that probed students' attitudes toward their school. Based on these survey items the researchers identified eight positive school influences that focus on the impact of excellence in teaching, Adventist values, and school environment. Commenting on the role of the positive school climate Gillespie et al. (2004) stated:

"Schools that participate in these and make them a central concern have significant impact on the faith maturity, intrinsic faith development, and commitment to the Adventist church" (p. 325). Therefore the role of Christian education proves to be extremely significant, next to that of parents, in adolescents' faith-development and faith-based practices.

Collier and Dowson (2008) conducted a study on Christian education involving Grade 8 students ($N = 110$). After presenting the shortcomings of "transmissional" pedagogical models, the authors propose an alternative "transformational" model that engages adolescents actively in developing a system of beliefs and values (pp. 203, 204). This study adopted the Attitudes and Values Survey (AVS) designed by the Australian Council for Education Research (ACER). The six components that were explored through the survey assessed adolescents' conscience, compassion, emotional growth, social growth, service to others and commitment to God (Collier & Dowson, 2008, p. 207). The researchers postulated that in order for young people to construct a biblical worldview and a system of values that will guide their decision making aright, they need to be educated to assess critically the contemporary cultural standards from a biblical perspective (Collier & Dowson, 2008). Thus they propose an alternative pedagogical model applicable in the Christian educational context, which includes five components: (a) cognitive scaffolding of theological concepts; (b) specific values education; (c) critical evaluation of contemporary culture; (d) service-oriented instruction; and (e) association between church and school (Collier & Dowson, 2008). This model of transformational pedagogy promises to help Christian educators enhance the spiritual growth and faith development of the adolescents.

The Seventh-day Adventist church has an educational system founded on clearly established educational goals and Bible-based principles:

The Seventh-day Adventist philosophy of education is Christ-centered. . . . Education in its broadest sense is a means of restoring human beings to their original relationship with God. Working together, homes, schools, and churches, cooperate with divine agencies in preparing learners for responsible citizenship in this world and in the world to come. . . . Adventist education imparts more than academic knowledge. It fosters a balanced development of the whole person—spiritually, intellectually, physically, and socially. Its time dimensions span eternity. It seeks to develop a life of faith in God and respect for the dignity of all human beings; to build character akin to that of the Creator; to nurture thinkers rather than mere reflectors of others' thoughts; to promote loving service rather than selfish ambition; to ensure maximum development of each individual's potential; to embrace all that is true, good, and beautiful. (*General Conference Policy Manual*, 2003, pp. 221-228)

Knight (2010) identifies "primary, secondary and ultimate aims" of Christian education. In harmony with White (2003), he states: "The primary goal of Christian education in the school, the home, and the church is to lead young people into a saving relationship with Jesus Christ" (Knight, 2010, p. 50). This primary goal of Christian education is holistic in nature as it seeks to lead to the complete restoration of students' spiritual, mental, physical and moral capacities into Christlikeness (E. G. White, 2003, p. 13).

The secondary aims of education, as identified by Knight (2010), include: the development of a Christian character and mind-set, as well as occupational/professional preparation for life. The secondary aims of Christian education are holistic in the sense that the objectives encompass students' spiritual development—through character development and the formation of a Christian way of thinking, as well as their academic, physical, social, and moral development—through the emphasis on job preparation for usefulness in society.

The "ultimate aim" of Christian education, which Knight (2010) equates with the "final outcome" of Christian education, is "service to God and man for both the here and the hereafter" (p. 55). This educational goal, as with the previously mentioned ones, requires the development and employment of all the powers in serving others. In this sense, Knight (2010) notes that

the message of the parable of the talents [see Matt 25:14–26] is that the greater our natural endowments and the greater our opportunities for their development, the more responsibility we have to image Christ in faithful service to those who have mental, spiritual, social, emotional, or physical needs. (p. 56)

To this end Christian education seeks to help students internalize the connection between serving God and man because "our service to man is indissolubly linked to our service to God" (Knight, 2010, p. 56). Educators need to be aware of and sensitive to the ways in which students learn and develop. A holistic, learner-centered approach to education and spiritual development where learners co-construct their knowledge by testing it in practice is in line with the scope of the current research study.

Consistent with the *Mission Statement* of the North American Division of the Seventh-day Adventist Church, the goals of Christian education emphasize the significant connection between young people's relationship with God and their willingness to serve:

The primary aim of Seventh-day Adventist education is to provide opportunity for students to accept Christ as their Savior, to allow the Holy Spirit to transform their lives, and to fulfill the commission of preaching the gospel 'to all the world'. . . . Students are educated to accept service as a way of life, to be sensitive to the needs of the people in the home and society, and to become active members in the Church. (North American Division, 2011)

In her book *Education*, E. G. White (2003) provides support to a curriculum based on the holistic development of students, stating that "true education . . . is the harmonious development of the physical, the mental, and the spiritual powers" (p. 13). In the model

of "true education," the spiritual component needs to be viewed in the broader perspective of holistic development. Young people need to learn that all of their capacities are a gift from God; developing all of these skills harmoniously represents the aim of "true education"—to restore in them God's image. E. G. White (2003) advises parents, teachers, and significant others, who are involved in children's spiritual guidance, to consider that "in the highest sense the work of education and the work of redemption are one" (p. 30). This suggests that parents, church leaders, and teachers are called to the noble work of restoring God's image in children and young people.

Although educators acknowledge that at times they are the single constant support systems in these children's lives, they must also recognize that without the presence of dependable parents who care for the child, their efforts do not avail much (E. Berger, 1999). Ideally parents and teachers need to cooperate in order to ensure the best education for the children in their care. As E. G. White (2003) reminds us, in order to be effective, parents and teachers involved in the spiritual guidance of young people need to act upon the imperative that "in the highest sense the work of education and the work of redemption are one" (p. 30). Thus religious educators need to be intentional in helping young people in their faith journeys with the Savior.

Church Variables

Research evidence shows that church life in North America "has become culturally individualistic and subjectivistic, driven by religious 'seekers' bearing consumerist mentalities about faith" (C. Smith & Denton, 2005, p. 5). Following such a realization the question arises, "How could the church support this generation of young people in their faith development and in their active involvement in church?"

C. Smith (2003) explored the impact of religion on the lives of American youth and proposed nine core factors that positively influence the spiritual trajectories of young people. These include: (a) moral directives; (b) spiritual experiences; (c) role models; (d) community and leadership skills; (e) coping skills; (f) cultural capital; (g) social capital; (h) network closure; and (i) extra-community links. These are grouped into three domains of influence—moral order, learned competencies, and social and organizational ties (C. Smith, 2003, pp. 17, 19). In agreement with empirical evidence from numerous other research studies, the author recognizes the positive role of religion and religious organizations in providing young people with the moral values and ethical standards necessary for positive decision making in life (C. Smith, 2003).

The National Study on Youth and Religion (NSYR), a telephone survey done with a nationally representative sample of young people ($N = 3,290$) revealed that over 80% of adolescents believe in God, 10% of them are uncertain in their beliefs, and 3% totally lack belief in God (C. Smith & Denton, 2005). The study also revealed that adolescents who are more religiously devout tend to be significantly more involved in voluntary service initiatives (50%) compared with those who are religiously uncommitted (25%) (C. Smith & Denton, 2005, p. 230).

The study conducted by Furrow et al. (2004) with 801 high-school students offers an insight into the positive role of religion. As the literature revealed, religious belief has been a long-standing source of personal meaning and purpose in life, offering young people the foundation "relevant to identity formation" (Furrow et al., 2004, p. 17). As hypothesized, the results of the study indicate that religious belief in adolescence is

positively correlated with "personal meaning" and "prosocial concerns" (Furrow et al., 2004, p. 22).

Furrow et al. (2004) recognized that a community of believers within a faith tradition provides young people with a sense of belonging, which not only enhances their identity development and faith commitment but also propels them to engage actively in service for others (p. 18). Thus a young person's religious identity grounded in the context of a faith community is presented as a key factor in strengthening young people's belief systems, enhancing their spiritual growth, and motivating them to contribute to the well-being of others.

Furrow et al. (2004) also recognized the unique role that the church holds as a religious institution in providing an environment that is beneficial to young people's commitment to God. Three means by which churches offer this support as suggested by Furrow et al. (2004) are the conceptual, the relational, and the spiritual domains. Church organizations can potentially provide prosocial instruction as well as modeling of prosocial values and conduct (Furrow et al., 2004). All of these dynamics and religious influences that are embedded in the structure of church life cultivate in young people religious and social values, leading to their religious and spiritual growth, and to healthy prosocial interactions.

In a study conducted with members ($N = 946$) from 35 churches representing various Protestant denominations that participated in service activities and members ($N = 3,959$) who did not participate in service activities, Myers et al. (2008) explored the connection between service-learning and faith maturity (p. 369). A multiple hierarchical regression analysis presented the impact of service-learning components on faith maturity

and faith practices, where service-learning components are correlated with the horizontal aspects of faith maturity ($R^2 = 26\%$) and faith practices ($R^2 = 17.9\%$), as well as with the vertical aspects of faith maturity ($R^2 = 14.6\%$) and faith practices ($R^2 = 8\%$) (Myers et al., 2008, pp. 377, 378). Findings from this study support the need for churches to provide faith-based service-learning opportunities for the young.

Gillespie et al. (2004), who co-authored a book on the first two *Valuegenesis* studies, discuss the role and mandate of the church toward the young. They suggested the necessity for the church to be a welcoming place in order to offer the support needed for the young to develop and maintain "intrinsic" religion and "mature faith" (Gillespie et al., 2004, p. 324). In addition the authors recommend that churches utilize creative and stimulating programming that engages young people in critical thinking on topics that are relevant and essential to the formation of their theological understanding.

In the second administration of the *Valuegenesis* study, Gillespie et al. (2004) observed that on questions pertaining to the importance of religion in their lives, 50–58% of the students answered affirmatively. When questioned about their faith in Jesus and personal commitment to him as many as 90% of the young people who were surveyed answered affirmatively (Gillespie et al., 2004, p. 54). These findings are encouraging, indicating that the majority of Seventh-day Adventist young people in the church express belief in Jesus and count religion as important in their lives. The two administrations of *Valuegenesis* also reveal an increase over the 10-year period in the number of young people who devoted time to personal devotions including prayer and Bible study (Gillespie et al., 2004, pp. 54, 55).

The study conducted by Gane (2005) based on findings from the second administration of the *Valuegenesis* reveals a strong relationship between young people's involvement in youth ministry and their denominational loyalty and commitment to church values and standards. Analyses of variance (ANOVA) at α = .05 revealed significant difference between students who reported being involved in youth ministry and those who were not engaged in youth ministry, as well as a significant relationship between involvement in youth ministry and indices of commitment to Seventh-day Adventist beliefs (Gane, 2005, pp. 85–87). Additionally independent sample *t* tests (α = .05) indicated that young people who participated in youth ministry by leading out in worship were more likely to view their church as cognitively engaging ($t = 24.80$, $p < .001$), warm ($t = 21.98$, $p < .001$), and welcoming ($t = 21.85$, $p < .001$) (Gane, 2005, pp. 141, 142). The study conducted by Gane supports the strong relationship existing between adolescents' active participation in church activities and their faith maturity and denominational loyalty.

Dudley and Walshe (2009) in their *Ministering With Millennials* report at the 180° Symposium recognize that during adolescents' quest for identity their search also comprises forming a worldview. They posit that along with the development of an identity that encompasses the physical, mental, and social domains "the young person must formulate a religious and spiritual identity" (p. 5). Dudley and Walshe (2009) acknowledge the key role that the church plays in enhancing and supporting young people's spiritual identity formation. In this sense they state: "We cannot hope to retain young adults if they do not perceive the Adventist church as supporting their own identity" (p. 5).

Furthermore Dudley and Walshe (2009) elaborate on the characteristics and components of a distinctively Adventist system of spiritual values with which adolescents could identify. They propose that this spiritual identity must have the following features: (a) focus on the central pillars of the Christian faith as modeled by Jesus; (b) focus on relationship building and active involvement in mission and service; (c) focus on living out in practice the doctrines of the Adventist church. However studies conducted with Adventist teenagers indicate that nurturing meaningful and healthy relationships with postmodern adolescents in the church potentially contributes to their spiritual well-being within the faith community (Dudley, 2000; Dudley & Walshe, 2009).

Markstrom et al. (2010) completed a study with adolescents ($N = 428$) investigating the relationship between empathy, religiosity, and spirituality. Hierarchical multiple regressions were employed to investigate the connection between the constructs of care, volunteerism, empathetic manifestations, and religious attendance and beliefs. The results show a significant relationship between indices of 'care' and 'religious attendance' ($\beta = .110$; $p < .01$) and between 'care' and 'religious beliefs' ($\beta = .203$; $p < .01$). Likewise the multiple regression tests revealed significant relationships between 'volunteerism' and 'religious attendance' ($\beta = .335$; $p < .01$), and between 'volunteerism' and 'beliefs' ($\beta = .165$; $p < .01$). Though the tests did not reveal significant relationship between 'religious attendance' and 'empathy', 'care' appeared to be a strong predictor of 'empathetic concern' ($\beta = .600$; $p < .01$) (Markstrom et al., 2010, pp. 68, 69).

Religious educators in the church who are involved in the spiritual education of young people need to recognize that their role is to model the desired characteristics of a Christian disciple, to guide the students in their understanding of God and to lead

children to trust in Jesus as their personal Savior. The goal of religious education and spiritual training in the church, as stated by educator Dean Feldman, is "to help young people begin to see themselves not as consumers of religion but as practitioners of faith" (Feldman, 2000, cited in Strommen & Hardel, 2000, p. 145).

The above studies present evidence to the influences that the home, the church, and the school have on adolescents' development. Consistent with theories of cognitive and social development (see Bandura, 1986; Piaget, 1970; Vygotsky, 1986) as well as with Kolb's (1984) learning theory, which incorporates the affective domain, parents and educators play a key role in children's and adolescents' development. This study will explore the relationship between the spiritual influences of parents, religious educators, teachers (independent variables), and the involvement in service of adolescents attending Seventh-day Adventist schools (dependent variable).

Summary of the Literature

The reviewed literature relevant to the topic reflects a compendium of varying perspectives regarding the influences that shape adolescents' service involvement. Engaging students actively in service initiatives for various purposes has been receiving increased attention in governmental, educational, and church organizations in recent years. In response, numerous research studies have confirmed the positive results of involving adolescents in service. Developmental and learning theories offered an insight into adolescents' natural processes of maturation. The role of parental and educational influences was also documented in numerous studies as instrumental in adolescents' spiritual development and their service involvement.

Adolescence is a critical time when the young experience numerous developmental changes. Kolb's theory, which represents the theoretical backbone of this study, afforded a closer look at the interconnected nature of the biological, the cognitive, the psychosocial, and the spiritual aspects of adolescent development. In looking at developmental and learning theories the literature revealed varying views. Some theorists explained human development and learning through the prism of stage theories. These scholars advanced that humans grow and develop through a series of fixed phases delineated by age. On the other hand, opponents of stage theories viewed development as more fluid and particular to the individual. Thus process- and systems-theories evolved, describing development as the product of the interaction between the individual and the environment.

Research studies consistently confirm the crucial role of educational influences on the formation of adolescents. Parents and educators leave a strong impression on the young through their example and their teaching. Studies show that, especially when it comes to the transmission of moral and spiritual values, parents and teachers have a key part to play. As educators model the moral values they wish to impress onto the young, they help lay the foundation for engagement in service of the children and adolescents in their care.

Amid the conflicting values of a postmodern society where pluralism is rampant, having a well-defined belief system is vital for adolescents. Ample research evidence documents the positive role of religion in the identity formation and overall development of adolescents. Moreover, studies confirm that adolescents who report being religiously devout rank much higher in their commitment to serve others than those youth who do

not consider themselves religious. Thus faith-maturity is directly related to adolescents' willingness to serve.

While the theories and research findings reviewed in the literature confirm the connection existing between adolescents' faith in God and their participation in service, it is critical to study the trends in adolescent service involvement in recent years. The *Valuegenesis* studies conducted in Seventh-day Adventist schools offer such insight. Results from the previous two *Valuegenesis* studies revealed a contrast between students' reported faith commitment to God and their attitudes toward service. While commitment to God ranked very high among students, their scores on service involvement were much lower. Given the theoretical and research findings concerning adolescent development as well as the recent statistical findings based on the *Valuegenesis* studies, the Christian home, church, and educational system face the challenge to more intentionally prepare adolescents for service to others.

CHAPTER 3

RESEARCH METHODOLOGY

While being and doing may be distinguished, they may not be separated. The call to faith
is a call to service. In responding to God's call to be in relationship with Him,
we discover our meaning, and we find purpose. . . .
We are His loving presence on Earth.
—S. Bell, *A Time To Serve*

Introduction

Valuegenesis is the name given to the project done by the Seventh-day Adventist

church through Search Institute in order to assess the values of over 10,000 students

enrolled in Seventh-day Adventist denominational schools across North America.

Students from Grades 6 through 12 comprised the sample of participants surveyed in the

study. The original questionnaire included over 500 items (Gillespie et al., 2004). The

Valuegenesis survey was administered in 1990–1991, in 2000–2001, and in 2010–2011.

The content of the survey was refined over the years leading to fewer and more focused

questions. Though the study measures students' responses to a broad range of values, the

purpose of the present research is to focus on the factors that impact on young people's

involvement in service as a reflection of their relationship with God.

The goals of this study are: (a) to examine the changes in the service involvement

patterns of adolescents attending Seventh-day Adventist schools over the three

administrations of *Valuegenesis*, (b) to explore the relationship between adolescents'

commitment to God and their involvement in service, and (c) to examine the relationship

between home, church, and school influences and adolescents' active participation in service.

Research Questions

Following are the questions that guided the data analysis, offering insight into how young people's spiritual development influences their active participation in service to God and to others:

1. How did adolescents' involvement in service change over the duration of the 20 years from the first administration of *Valuegenesis* to the third administration of the survey in Seventh-day Adventist schools?

2. How do the indices of personal involvement in acts of service reflect adolescents' commitment to the religious values and to the beliefs of the Seventh-day Adventist Church?

3. How do the spiritual influences at home, at the Seventh-day Adventist school, and at church contribute to adolescents' involvement in service?

Research Hypotheses

The following hypotheses stem from the above questions:

1. The involvement in service of adolescents attending Seventh-day Adventist schools has changed from the first administration of *Valuegenesis* (1990), to the third administration of the study (2010).

2. The service involvement of adolescents attending Seventh-day Adventist schools is significantly related to and reflects their commitment to religious values and to the beliefs of the Seventh-day Adventist church.

3. The spiritual influences to which adolescents are exposed at home, at the Seventh-day Adventist school, and at church contribute significantly to their involvement in service to others.

The statistical operations employed in answering the first question of the study include descriptive statistics (means, standard deviations, percentages), as well as One-way ANOVA analysis of variance. The second question is answered using canonical correlational analysis, drawing on scales and items from *Valuegenesis*[3], addressing students' commitment to religious values and Seventh-day Adventist beliefs, as well as their involvement in service. Finally, canonical correlational analysis is employed to answer the third question of the study, which addresses the relationship between the home, school, and church variables that contribute to adolescents' involvement in service.

Research Design

The present study is a secondary analysis of *Valuegenesis* data as it relates to Adventist young people's involvement in faith and service. According to E. Smith (2008) secondary analysis involves "re-analyzing existing data sets with novel statistical or theoretical approaches" (p. 324). Since the design of the present study is a secondary analysis of the *Valuegenesis* surveys, the data were obtained from the *Valuegenesis* database. The data sets from this study are found at Search Institute, at Andrews University, at La Sierra University, and at the General Conference of Seventh-day Adventists. Dudley and Gillespie (1992) found the instrument to be "comprehensive," and participants required approximately an hour and a half to fill out the surveys (Dudley & Gillespie, 1992, p. 13).

Description of the Population

The population of participants for this study was made up of students from Grades 6 through 12 who attended Seventh-day Adventist schools in North America. The respondents were selected proportionally from Seventh-day Adventist schools in Canada and the United States based on a "stratified-random method" (Dudley & Gillespie, 1992, p. 14). The population for the three *Valuegenesis* surveys was comprised of students between 10 and 21 years of age. The number of students who completed *Valuegenesis* questionnaires ranged between approximately 15,000 for *Valuegenesis[1]*, 16,020 for *Valuegenesis[2]*, and more than 18,000 for *Valuegenesis[3]* (Donahue, 1990, 2002; Dudley & Gillespie, 1992; Gane, 2005; Gillespie, 2011). However the failure of respondents to provide adequate answers to key questions, such as grade level and school attended, resulted in their being removed from the data for analysis, a process called 'cleaning the data' (Donahue, 1990, 2002). Thus the usable data from *Valuegenesis[1]* (1990–1991) comprised a sample size of 13,266 students attending Seventh-day Adventist schools (Dudley & Gillespie, 1992). Data cleaned for analysis from *Valuegenesis[2]* (2000–2001) yielded a sample size of 11,481 student respondents in Seventh-day Adventist schools (Gane, 2005). Following the process of data cleaning, the sample size for *Valuegenesis[3]* (2010–2011) included 11,587 participating students from Seventh-day Adventist schools.

Instrumentation

Description

The *Valuegenesis* instrument was developed in collaboration with the Search Institute in Minneapolis and a number of researchers from Andrews University, La Sierra University, and several other educational institutions (Dudley & Gillespie, 1992). The

Valuegenesis[1] survey (1990–1991) consists of 465 items, the *Valuegenesis[2]* survey, (2000–2001) consists of 396 items, and the *Valuegenesis[3]* survey (2010–2011) consists of 407 items. Data for *Valuegenesis[1]*, *Valuegenesis[2]*, and *Valuegenesis[3]* were obtained from the *Valuegenesis* database found at La Sierra University and Search Institute. Since young people's involvement in service and their spirituality are complex phenomena, a number of scales from the *Valuegenesis* surveys were employed in order to explore the effect of various factors that impact on their involvement in service.

Here is the list of specific scales and survey items from the *Valuegenesis* questionnaires that were employed in this study:

1. Faith-Maturity

2. Commitment to Jesus Christ

3. Importance of Religion

4. Evangelization

5. Altruism

6. Enjoyment of Service

7. Joining Other Students in Service Activities

8. Personal Devotion

9. Belief Orthodoxy

10. Understanding of the Bible

11. Understanding of the Writings of Ellen White

12. Quality of Religious Education

13. Faith-related Experiences at Home

14. Frequency of Family Worship

15. Nature of Family Worships

16. Leading Family Worship

17. Quality of Family Worships

18. Family Climate

19. Frequency of Participation in Family Service Projects

20. Father's Religiousness

21. Mother's Religiousness

22. Frequency of Faith-related Talk with Father

23. Frequency of Faith-related Talk with Mother

24. Faith-related Experiences at Church

25. Meaningfulness of Young-adult Programs at Church

26. Positive Church Influences

27. Faith-related Experiences at School

28. Meaningfulness of Young-adult Programs at School

29. Positive School Influences

30. Influences on Spiritual Development (at home, at school, and at church)

31. Priority of Having a Personal Relationship with God

32. Importance of Religious Faith in Shaping Daily Life

33. Involvement in Young People's Programming at Church.

   In harmony with the theoretical framework of this study, the items and scales that were selected from the *Valuegenesis* survey instrument reflect the unity that exists between beliefs and actions. In other words, because knowledge that is applied in practice becomes fixed as enduring understanding (Kolb, 1984, p. 28), involvement in service as

an outward expression of internally held spiritual values and beliefs could potentially strengthen the spiritual beliefs and values one holds. In agreement with Kolb's (1984) experiential learning cycle, service involvement rooted in spiritual growth is akin to learning being shaped by exposure to various spiritual influences in the home, at school, and at church (Coles, 1997; Dudley, 2007).

Kolb's (1984) learning theory represents the theoretical frame of reference to explain the hypotheses postulated in this study: (a) there are differences in adolescents' service involvement patterns over the three administrations of the survey; (b) the indices of personal involvement in acts of service are significantly related to students' commitment to the religious values and beliefs of the Seventh-day Adventist Church; and (c) the indices of students' involvement in service are significantly related to the religious/spiritual influences of parents and educators in the home, at school, and at church. If both learning and spiritual growth could be explained through the holistic interaction between perception, feeling, cognition, and application (see Kolb, 1984, p. 31), then the independent variables (commitment to religious values and beliefs of the Seventh-day Adventist Church, spiritual influences at home, spiritual influences at school, and spiritual influences at church) should be significantly related to the dependent variable (the active involvement in service of adolescents attending Seventh-day Adventist schools).

Validity of the Instrument

The *Valuegenesis[1]*, *Valuegenesis[2]*, and *Valuegenesis[3]* were based on the original survey design realized in 1990. The entities that designed the instrument and tested it confirmed its validity. Search Institute (Minneapolis, MN) realized the field research. The

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validity of the instrument indicates whether the survey data are accurate, that is, whether the questions measured the variables they were intended to measure, whether the questions were worded in a manner accessible to the participants to understand, and whether respondents were truthful in completing the questionnaire (Punch, 2003). To ensure the validity of the research findings, measures were taken to eliminate from the *Valuegenesis* data participants whose answers reflected that they deliberately provided inaccurate responses (Donahue, 1990, 2002; Dudley & Gillespie, 1992; Gillespie, 2011). Another means of maintaining the validity of the data was through the way the survey questions were worded by qualified survey designers. A third means of upholding the validity of the survey data was by evaluating the responses in comparison with expected patterns of student responses on surveys done in denominational schools (Gane, 2005).

<div align="center">Research Teams Involved in Valuegenesis</div>

The research team that collaborated on the *Valuegenesis*[1] study was composed of Charles Smith, Bailey Gillespie, Stuart Tyner, Steve Case, Peter Benson, Michael Donahue, and Roger Dudley (Dudley & Gillespie, 1992). For the *Valuegenesis*[2] study the core team of researchers included Bailey Gillespie, Michael Donahue, Charles Smith, and Barry Gane, who worked in collaboration with research consultants Ed Boyatt, Janet Mallery, Ella Simmons, Edwin Hernandez, Jerry Lee, Won Kil Yoon, and Jane Thayer (Gillespie et al., 2004). The *Valuegenesis*[3] advisory team consisted of Bailey Gillespie, Michael Donahue, Chang Ho Ji, Ed Boyatt, Tom Smith, Doug Hermann, Kelly Bock, Denis Plubell, Steve Pawluk, Tim Gillespie, John Anthony, and Elisa Kido (Gillespie, 2010).

These research teams brought to the study their valuable insight and expertise in the fields of research design, theology, education, and sociology (Gane, 2005). After the first administration of *Valuegenesis*, the researchers responsible for the survey design and data analysis revised a number of scales for clarity and conciseness. Thus the *Valuegenesis[1]* survey is the longest (465 items) and the *Valuegenesis[2]* survey is the shortest (396 items). Following this process of revision the researchers verified the validity of the surveys in collaboration with Search Institute (Gane, 2005).

Reliability of Scales

Reliability is the measure that indicates the consistency of responses, that is, whether participates would answer the same way if they were given the same survey questionnaire repeatedly (Punch, 2003). The reliability of the scales was calculated using Cronbach's Alpha measures and the reliability coefficients that correspond to the scales are listed in Tables 1–3. These tables include the variables, scales, survey items, and reliability estimates, utilized in the subsequent research analysis.

Table 1 lists the survey items from the three *Valuegenesis* surveys that were employed to answer the first research question: How did adolescents' involvement in service change over the duration of the 20 years from the first administration of *Valuegenesis* to the third administration of the survey in Seventh-day Adventist schools? The analysis for the first research question drew on data from all three studies in order to show the changes that occurred in adolescents' involvement in service over the years.

In examining adolescents' service involvement in the three *Valuegenesis* studies, three scales from the survey were employed: Horizontal Faith, Evangelism, and Altruism. The Altruism scale includes the same four questions on the *Valuegenesis[1]* and

Valuegenesis[2] surveys, but on the *Valuegenesis[3]* survey the Altruism scale involves a greater number of questions (324–330). Also, while the Altruism scale on *Valuegenesis[1]* and *Valuegenesis[2]* measures the frequency of voluntary service hours per month, a similar scale in *Valuegenesis[3]* measures the frequency of voluntary service per week. Due to these differences between the surveys, the items of the third study could not be included in testing the first hypothesis and answering the first research question.

Table 2 presents the *Valuegenesis[3]* survey items that were utilized in answering the second research question: How does adolescents' involvement in acts of service reflect their commitment to religious values and Seventh-day Adventist beliefs? Table 3 lists the *Valuegenesis[3]* survey items that were employed in the analysis exploring the third research question: How do the spiritual influences at home, at the Seventh-day Adventist school, and at church contribute to adolescents' involvement in service?

Procedure and Data Analysis

In this study, the involvement in service of adolescents attending Seventh-day Adventist schools represents the dependent variable. The independent variables are: (a) Adolescents' Commitment to Religious Values and to the Beliefs of the Seventh-day Adventist Church, (b) the Impact of Home Variables on Adolescents' Involvement in Service, (c) the Impact of the Seventh-day Adventist School on Adolescents' Involvement in Service, and (d) the Impact of Church Variables on Adolescents' Service Involvement.

The data sets for the three *Valuegenesis* studies (1990, 2000, and 2010) were obtained from the John Hancock Center for Youth Ministry, La Sierra University. The

Table 1

Items and Scales Associated With Adolescents' Service Involvement Based on the Valuegenesis Studies

Variable	Scales	V[1]* Items	V[2]* Items	V[3]* Items	Reliability Estimates		
					V[1]*	V[2]*	V[3]*
Adolescents' Service Involvement	Faith Maturity (Horizontal Faith)	4, 18, 21, 23, 28, 29	1, 3–5, 7, 8	1, 3–5, 7, 8	.81	.81–.88	.73
	Evangelism	46–48	18–20	59–61	.81	.72–.81	.79
	Altruism	49–52	21–24		.68	.61–.73	

* V[1], V[2], and V[3] are abbreviations for *Valuegenesis[1]*, *Valuegenesis[2]*, and *Valuegenesis[3]*.

Table 2

Items and Scales Associated With Adolescents' Commitment to Religious Values and Seventh-day Adventist Beliefs as Well as With Their Involvement in Service Based on Valuegenesis[3]

Variables	Scales	Items	Reliability Estimates
Commitment to Spiritual Values and SDA Beliefs	Faith Maturity (Vertical Faith)	2, 6, 9–12	.80
	Commitment to Jesus Christ	13	
	Importance of Religious Faith	14	
	Personal Devotion	62–64, 66, 67	.67
	Belief Orthodoxy	81–106	.89
	Understanding of the Bible	119	
	Understanding of E. G. White's role	120	
	Personal Relationship with God	367	
	Importance of Faith in Daily Life	398	
Adolescents' Service Involvement	Faith Maturity (Horizontal Faith)	1, 3–5, 7, 8	.73
	Evangelism	59–61	.79
	Altruism	324–330	.82
	Enjoyment of Service	331	
	Involvement in Service Projects	332	

Table 3

Items and Scales Associated With Home, School, and Church Variables and Adolescents' Involvement in Service Based on Valuegenesis[3]

Variables	Scales	Items	Reliability Estimates
The role of the home in the spiritual growth of adolescents	Faith-related Experiences at Home	52, 57	.74
	Frequency of Family Worship	184	
	Nature of Family Worships	185	
	Leading out in Family Worship	186	
	Quality of Family Worships	187–189	.72
	Family Climate	196–200	.88
	Participation in Family Service Projects	208	
	Father's Religiousness	209	
	Mother's Religiousness	210	
	Faith-related Talk with Father	211	
	Faith-related Talk with Mother	212	
	Home Influences on Faith Development	246–249, 252	.83
The role of the church in the spiritual growth in the spiritual of adolescents	Faith-related Experiences in Church	53, 54, 56	.74
	Church Influences on Faith Development	232, 234, 244, 254, 256–259	.83
	Quality of Religious Education at Church	350–356	.92
	Meaningfulness of Church Youth Programs	357	
	Positive Church Influences	395–397	.67
The role of the school in the faith growth of adolescents	Faith-related Experiences at School	55	
	School Influences on Faith Development	235–243, 251, 253, 355	.88
	Meaningfulness of School Programs	357	
	Positive School Influences	399–401	.62

Table 3—*Continued*.

Variables	Scales	Items	Reliability Estimates
Adolescents' service involvement	Faith Maturity (Horizontal Faith)	1, 3–5, 7, 8	.73
	Evangelism	59–61	.79
	Altruism	324–330	.82
	Enjoyment of Service	331	
	Involvement in Group Service Projects	332	

SPSS software program was used to perform the statistical analyses. The various scales were categorized according to the variables to which they correspond.

Descriptive statistics, as well as One-way ANOVA, were employed in the data analysis pertaining to the first research question that draws on data from the three *Valuegenesis* studies. Canonical correlational analysis was used to correlate items from the *Valuegenesis*[3] survey that address students' commitment to religious values and Seventh-day Adventist beliefs with items that assess their involvement in service. Finally, canonical correlational analysis was employed to correlate items from the *Valuegenesis*[3] survey to explore the relationship between the home, school, and church variables that contribute to adolescents' involvement in service.

Following the data analysis, conclusions were drawn and recommendations were made for parents, teachers, and religious educators who, through personal influence, modeling, and encouragement, can potentially contribute to the spiritual growth and service involvement of adolescents. Likewise, recommendations were given for curriculum designers and researchers. The report and explanation of the findings as well as the subsequent recommendations are presented in Chapter 5.

Summary

This chapter presented the research design of the study, including information about the entities that granted permission to use the data for the secondary analysis. Then the research questions and hypotheses that drove the data analysis were listed. Next the population of participants was described. In the following section an overview of the instrumentation was presented where the variables were identified and the corresponding scales and survey items were listed. In this section was also included a report of the

validity and reliability of the survey instrument. Finally data analysis procedures were

described with particular reference to the statistical analyses utilized to test the null

hypotheses.

CHAPTER 4

PRESENTATION OF FINDINGS

Through love for God and others we are empowered to live out an authentic life of care,
our calling from the beginning.
—E. B. Howard, *The Brazos Introduction
to Christian Spirituality*

Introduction

The main goal of this study was to identify the factors that contribute to

adolescents' involvement in service as an expression of their faith in God. This research

explored the changes in adolescents' service involvement over the course of the three

administrations of *Valuegenesis*. Another aim of the study was to identify the connection

between teenagers' commitment to religious beliefs of the Seventh-day Adventist Church

and their involvement in service. Along with these aims, the study also sought to analyze

the impact of the home, school, and church variables on adolescents' active involvement

in service to others.

The results of the data analysis are organized in several main sections in this

chapter. The first section presents the demographic characteristics of the samples. The

next three sections respectively offer insight through descriptive statistics (means,

standard deviations, and percentages) into the indices of service involvement, the indices

of commitment to religious values and church beliefs, as well as the home, church, and

school variables. The three subsequent sections present results pertaining to the research

questions enunciated in this study. The first of these sections presents the results of the

one-way analysis of variance, which was used to determine whether there are significant

changes in adolescents' service involvement over the three administrations of the

Valuegenesis study. The second of these sections presents the results of the canonical

correlation analysis conducted to examine the relationship between the commitment to

the religious values and beliefs of the Seventh-day Adventist church of adolescents who

participated in the *Valuegenesis[3]* study and their involvement in service. Similarly the

third research question was addressed. Canonical correlational analysis was conducted to

determine the connection between home, school, and church variables and the

involvement in service of adolescents who participated in the *Valuegenesis[3]* study. The

final subsections of the chapter present the results of the analysis.

Sample Characteristics

This study draws on data from the three *Valuegenesis* studies collected from

students in Grades 6 through 12 in 1990–1991, 2000–2001, and 2010–2011. The samples

of participants for the three administrations of *Valuegenesis* were similar in terms of

gender divisions, with a 2.1% increase in the number of male students and a decrease of

2.5% in the number of female participants from *Valuegenesis[1]* to *Valuegenesis[3]*. In terms

of the ethnic makeup of the student population attending Seventh-day Adventist schools,

there are several demographic changes that occurred from *Valuegenesis[1]* to *Valuegenesis[2]*

and *Valuegenesis[3]*. While the number of Native American students decreased from 1.1–

0.6%, there was a 1.5% increase in the Asian/Pacific Islander population of students. The

Black/African American student population was consistent over the years, with a 0.3%

decrease from *Valuegenesis[1]* to *Valuegenesis[2]* (1990–2000) and a 0.6 increase from

Valuegenesis[2] to *Valuegenesis*[3] (2000–2010). The Latino/Hispanic student population increased consistently, representing 9.2% of the sample in 1990, 10.6% in 2000, and 16% of the student population in 2010. On the other hand, the White student population decreased by 3.7% between the first and second study and by 15.2% between the second and third studies. A rapidly growing segment of the student population is made up of students who have more than one racial background, a group that augmented from 14.4% in 1990 to 25.2% in 2010.

The ages of the students in Grades 6 through 12 ranged from 10 to 21. It is interesting to note that while only 4.3% of students were 11 or younger when they entered Grade 6 in 1990, this number nearly doubled, whereby in 2010, 8.3% of 6th-graders reported being 11 years old or younger. On the other hand the student population that was 18 years old or older decreased over the years from 8.5% in 1990 to 5.7% in 2010. These figures indicate a shift in the schooling age patterns, where children start school earlier and graduate at a younger age than in past decades.

Students' age at baptism also changed over the years. The number of students who reported not being baptized in 2000 was only 1% of the sample while in 2010 as much as 31.2% of students indicate not being baptized. In 1990, 18.1% of the students were baptized at the age of 9 or younger, while in 2010 only 11.9% of the students were baptized at such a young age. Yet the greatest number of baptisms among Seventh-day Adventist students takes place between age 9 or earlier, and 12–62.4% in 1990; 50% in 2000; and 49% in 2010—as reported on *Valuegenesis*.

In terms of family makeup, the samples are very similar and not much changed over the course of the 20 years among students attending Seventh-day Adventist schools.

Seventy-eight to 80% of students live in two-parent homes and approximately 20–22% of students live in single-parent households. The student sample is proportionate and evenly distributed across the grades over the three studies. A detailed listing of the demographics for *Valuegenesis[1]*, *Valuegenesis[2]*, and *Valuegenesis[3]* is displayed in Table 4.

Indices of Adolescents' Service Involvement

The three *Valuegenesis* survey questionnaires include a number of variables that define the service involvement of Seventh-day Adventist adolescent students. The service involvement construct is defined through the following scales and items: Horizontal Faith, Evangelism, Altruism, Enjoyment of Service, and Joining Others in Service Activities. These items are listed in detail in Table 1 in Chapter 3. The Horizontal Faith scale measures students' attitudes toward service involvement. Six items that define Horizontal Faith were chosen from each of the three surveys. Each of these items is based on a 5-point Likert scale, where 1 = Never and 5 = Often.

The Evangelism scale measures the frequency with which young people serve others by sharing their faith. The three items that make up the Evangelism scale have a 6-point answer scale, where 1 = 1–2 times and 6 = 40 or more times. The Altruism scale on the first two surveys is composed of four items that are scaled on a 6-point scale, while the Altruism scale on *Valuegenesis[3]* consists of seven items that are scaled on a 5-point Likert scale. Because of major differences between the Altruism scale on the first two *Valuegenesis* surveys and the voluntary service items on *Valuegenesis[3]*, only the Altruism scale from *Valuegenesis[1]* and *Valuegenesis[2]* was used to answer the first research question. The items included on the *Valuegenesis[3]* survey that describe altruistic service involvement do not appear on the previous two studies.

Table 4

Demographic Characteristics of Samples in Valuegenesis[1], Valuegenesis[2], and Valuegenesis[3]

Demographics	Valuegenesis[1]		Valuegenesis[2]		Valuegenesis[3]	
	n	(%)	*n*	(%)	*n*	(%)
Gender						
Male	6,052	(45.9)	5,374	(46.8)	5,560	(48.0)
Female	7,134	(54.1)	6,107	(53.2)	5,980	(51.6)
Race						
American Indian	146	(1.1)	116	(1.0)	76	(0.6)
Asian/Pacific Islander	1,215	(9.4)	1,070	(9.4)	1,254	(10.9)
Black/African American	1,318	(10.2)	1,118	(9.9)	1,206	(10.5)
Latino/Hispanic	1,195	(9.2)	1,207	(10.6)	1,833	(16.0)
White	7,207	(55.7)	5,901	(52.0)	4,233	(36.8)
Mixed racial background	1,862	(14.4)	1,931	(17.0)	2,900	(25.2)
Age						
11 or younger	564	(4.3)	437	(3.8)	959	(8.3)
12	1,083	(8.2)	1,342	(11.7)	1,511	(13.1)
13	1,258	(9.6)	1,611	(14.1)	1,603	(13.9)
14	1,800	(13.7)	1,675	(14.6)	1,694	(14.7)
15	2,348	(17.8)	1,741	(15.2)	1,710	(14.8)
16	2,539	(19.3)	1,736	(15.2)	1,782	(15.4)
17	2,461	(18.7)	1,630	(14.2)	1,645	(14.2)
18–21	1,117	(8.5)	1,275	(11.2)	655	(5.7)

Table 4—*Continued.*

Demographics	Valuegenesis[1]		Valuegenesis[2]		Valuegenesis[3]	
	n	(%)	*n*	(%)	*n*	(%)
Age at baptism						
Not baptized	3,778	(18.4)	113	(1.0)	3,590	(31.2)
9 or under	2,103	(18.1)	67	(0.6)	1,375	(11.9)
10	1,362	(11.7)	3,119	(27.4)	1,239	(10.8)
11	1,647	(14.2)	1,168	(10.2)	1,280	(11.1)
12	2,138	(18.4)	1,343	(11.8)	1,740	(15.1)
13	1,174	(10.1)	1,500	(13.2)	1,135	(9.8)
14	611	(5.3)	1,993	(17.5)	611	(5.3)
15	250	(2.1)	1,115	(9.8)	326	(2.8)
16	112	(1.0)	640	(5.6)	151	(1.3)
17	62	(0.5)	301	(2.6)	57	(0.5)
18 or over	29	(0.2)	158	(1.4)	19	(0.2)
Family Background						
Live in two-parent home	10,425	(79.8)	9,244	(80.8)	8,763	(78.0)
Don't live with two parents	2,645	(20.2)	2,190	(19.2)	2,477	(22.0)
Parents not divorced/separated	9,706	(74.7)	8,332	(72.9)	8,188	(72.5)
Parents divorced/separated	2,379	(21.1)	2,797	(21.5)	2,655	(23.2)
Not married	297	(2.3)	325	(2.8)	517	(4.6)
Not sure	201	(1.5)	117	(1.0)	205	(1.8)
Grade						
6	1,041	(7.9)	1,312	(11.4)	1,334	(11.5)
7	1,217	(9.2)	1,618	(14.1)	1,560	(13.5)
8	1,229	(9.3)	1,760	(15.3)	1,650	(14.2)
9	2,346	(17.7)	1,770	(15.4)	1,788	(15.4)
10	2,368	(17.9)	1,811	(15.8)	1,717	(14.8)
11	2,417	(18.3)	1,645	(14.3)	1,759	(15.2)
12	2,611	(19.7)	1,645	(14.3)	1,759	(15.2)

Therefore these items were not utilized in the analysis for testing the first null hypothesis. However they were included in the canonical correlation analyses conducted to answer the second and third research questions. These items are Enjoyment of Service, scaled on a 5-point Likert scale, and Joining Others in Service Activities using a 4-point scale.

The Horizontal Faith scale from *Valuegenesis[1]* has a mean score ($M = 3.91$, $SD = 1.11$), indicating that students "sometimes" wish to help others by reducing poverty and suffering in the world, and by applying in practice their religious values in serving the needs of others. On *Valuegenesis[2]* the mean score on the Horizontal Faith scale ($M = 3.07$, $SD = .76$) indicates that adolescents feel responsibility and engage in service activities only "once in a while." This represents a drop in adolescents' desire to serve others from the first to the second administration of the study. The mean score associated with the Horizontal Faith scale on *Valuegenesis[3]* ($M = 3.15$, $SD = .76$) indicates a similar trend from *Valuegenesis[2]* to *Valuegenesis[3]* in regard to adolescents' attitudes toward service, that is, they engage in service now and then.

Results from the three studies on the Evangelism scale are almost the same with some fluctuations in participation from *Valuegenesis[1]* ($M = 2.46$, $SD = 1.25$), to *Valuegenesis[2]* ($M = 2.17$, $SD = 1.12$), and to *Valuegenesis[3]* ($M = 2.23$, $SD = 1.22$). Thus, on average students in all three studies indicated on the Evangelism scale that they have shared their faith "3–5 times" over the past year. Similarly, results from *Valuegenesis[1]* ($M = 2.10$, $SD = .89$) and *Valuegenesis[2]* ($M = 2.28$, $SD = .94$) in regard to Altruism are consistent over the years. On the Altruism scale their responses indicate that on average, students participate in volunteer activities in their community for "1–2 hours" during a typical month. Students' responses to the Enjoyment of Service question reported on

Valuegenesis[3] ($M = 3.97$, $SD = .87$) indicate that on average students enjoy serving others. On the item measuring students' level of interest in joining others in service activities, students reported on average ($M = 2.69$, $SD = .92$) that they "tend to be a bit interested." An overview of the service involvement indices and the corresponding mean scores and standard deviations for each scale are listed in Table 5 (see a detailed description of the items in these scales in Table 13 in the Appendix).

Indices of Adolescents' Commitment to Religious Values and Beliefs

The *Valuegenesis*[3] survey questionnaire contains a number of variables that define adolescents' commitment to religious values and beliefs. The scales and items related to the construct of adolescents' commitment to religious values and Seventh-day Adventist beliefs include: Faith Maturity (Vertical Faith), Commitment to Jesus Christ, Importance of Religious Faith, Personal Devotion, Belief Orthodoxy, Understanding of the Bible, Understanding of E. G. White's Role, Personal Relationship with God, Importance of Faith in Daily Life. The item Importance of Religious Faith is different from the item Importance of Religious Faith in Shaping Daily Life. While the first question seeks an answer to students' attitudes toward religious faith, the second question investigates whether religious faith is internalized to the degree that it transforms one's daily life.

The six questions that make up the Vertical Faith scale measure students' faith-based attitudes toward God. Commitment to Jesus Christ is an item that measures the degree to which adolescents are committed to Jesus. Importance of Religious Faith is an item that measures the degree to which religious faith is important to adolescents. All of these items employ a 5-point Likert scale.

Table 5

Service-Involvement Items in Valuegenesis[1], Valuegenesis[2], and Valuegenesis[3]

| Scale* | Valuegenesis[1] | | | | | Valuegenesis[2] | | | | | Valuegenesis[3] | | | | |
	N	M	SD	Min	Max	N	M	SD	Min	Max	N	M	SD	Min	Max
HF	13,266	3.91	1.11	1	5	11,481	3.07	0.76	1	5	11,586	3.15	0.76	1	5
EV	13,261	2.46	1.25	1	6	11,450	2.17	1.12	1	6	11,503	2.23	1.22	1	6
AL	13,264	2.10	0.89	1	6	11,480	2.28	0.94	1	6					
ES											9,984	3.97	0.87	1	5
JSA											9,995	2.69	0.92	1	4

*HF=Horizontal Faith; EV=Evangelism; AL=Altruism; ES=Enjoyment of Service; JS=Joining Other Students in Service Activities.
For details on scaling options for each of the variables please refer to Table 13 in the Appendix.

The Personal Devotion scale is made up of five questions that measure on a 7-point scale the frequency of adolescents' participation in personal religious practices. The Belief Orthodoxy variable consists of 26 questions and uses a 5-point scale to measure the extent to which adolescents accept the Seventh-day Adventist church's beliefs. A single item using a 5-point scale measured adolescents' understanding of the Bible, and another single item using a 6-point scale assessed their understanding of the role of Ellen White. The item Priority of Having a Personal Relationship with God was measured using a 5-point Likert scale. Finally, the item Importance of Religious Faith in Shaping Daily Life measured on a 5-point scale the degree to which adolescents considered religion as important in shaping their daily life and activities.

The indices of commitment to religious values and Seventh-day Adventist beliefs are listed in Table 6 (see a more detailed list of the items in these scales in Table 14 in the Appendix). Some of these variables are single items (i.e., Commitment to Jesus Christ) and some are scales with two or more items (i.e., Personal Devotion). Table 6 contains the sample size, mean, and standard deviation, as well as the possible range of value for each of the scales that measure commitment to religious values. On the Faith Maturity (Vertical Faith) scale, adolescents reported being "sometimes" engaged in faith-related activities that strengthen their relationship with God ($M = 3.73$, $SD = .77$).

Students reported their commitment to Jesus ($M = 3.97$, $SD = .99$) at a level-4 answer choice (on a 5-point scale), suggesting that their commitment to Christ has developed gradually, over a period of time. Likewise students scored high on the question of the importance of religious faith in personal life. On a scale, where a score of 1 indicates that religious faith is the most important influence in one's life and a score of 5

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Table 6

Adolescents' Commitment to Religious Values and Seventh-day Adventist Beliefs Based on Valuegenesis[3]

Scales/items	N	M	SD	Min	Max
Faith Maturity (Vertical Faith)	11,586	3.73	0.77	1	5
Commitment to Jesus Christ	11,543	3.97	0.99	1	5
Importance of Religious Faith	11,522	2.36	0.99	1	5
Personal devotion	11,570	3.40	1.10	1	7
Belief Orthodoxy	11,568	4.44	0.48	1	5
Understanding of the Bible	11,300	3.89	0.92	1	5
Understanding of the Role of Ellen White	11,332	4.42	1.34	1	6
Priority of Having a Personal Relationship with God	9,481	4.17	1.98	1	5
Importance of Religious Faith in Shaping Daily Life	9,001	2.17	0.94	1	5

Note. For details on scaling options for each of the variables please refer to Table 14 in the Appendix.

indicates that religious faith is not an important influence in one's life, the mean score (M = 2.36, SD = .99) indicates that the majority of adolescents attending Seventh-day Adventist schools answered, "It is a very important influence in my life."

On the Personal Devotion scale the mean score (M = 3.40, SD = 1.10) indicates that on some activities that define personal devotional life, adolescents are deficient as they engage in them only "1–3 times a month." When it comes to the Belief Orthodoxy scale, adolescents reported (M = 4.44, SD = .48) that they "lean toward believing" most of the doctrines of the Seventh-day Adventist church.

In regard to their understanding of the Bible, students' answers (M = 3.89, SD = .92) show that they have a correct understanding of the Scriptures, according to which "the Bible is the work of people who were inspired by God and who presented God's message in terms of their own place and time." Likewise their understanding of the role of Ellen White in the Seventh-day Adventist church is correct, as they reported (M = 4.42, SD = 1.34) that "Ellen G. White genuinely loved God and wrote in order to share her understanding of God's activity in the world." On average (M = 4.17, SD = 1.98) adolescents agree "somewhat" that a personal relationship with God is a chief priority for them. Finally, for the majority of students (M = 2.17, SD = .94) religion is "Very important" in shaping how they live their daily lives.

Home, School, and Church Variables

A number of items and scales that measure the spiritual influences at home, at church, and at the Seventh-day Adventist school were selected from the *Valuegenesis*[3] survey to examine their relation to adolescents' involvement in service.

On the Faith-related Experiences in the Home subscale adolescents reported ($M = 2.69$, $SD = .77$) that "sometimes" they "participate in family projects to help other people" and that they "talk to parents about God and faith." The mean score for the frequency of family worship ($M = 4.00$, $SD = 2.41$) indicates that the average student experiences family worship "2–3 times a month." When it comes to the nature of their family worship, students defined it ($M = 3.42$, $SD = 1.56$) as being "mostly praying together."

On average, participants reported ($M = 2.41$, $SD = 1.13$) that their mother usually leads out in family worship. Next, students evaluated the quality of their family worship ($M = 1.57$, $SD = .20$) to be "meaningful." In rating their family climate the average student ($M = 5.00$, $SD = 1.01$) agrees that they live in a loving family. Regarding the frequency of participating in family service projects adolescents indicated ($M = 2.40$, $SD = .93$) that they "rarely" do so. In rating their father's religiousness ($M = 4.68$, $SD = 1.61$) the average student reported: "Although he is religious, it is not easy to tell how it impacts his life." Their mother's religiousness was rated at the same level only slightly higher ($M = 5.24$, $SD = 1.21$). Evaluating the frequency of their faith-related talk with their father the students indicated ($M = 3.98$, $SD = 2.20$) that they do so "About once a month." In contrast, students rated higher the frequency of faith talk with their mother ($M = 4.66$, $SD = 2.14$), suggesting that they talk with their mother about faith "About 2–3 times a month." Table 7 displays the sample size, mean, and standard deviation, as well as the possible range of value for the items and scales associated with the variables that define spiritual influences at home, at church, and at the Seventh-day Adventist school (see a more detailed list of the items in these scales in Table 15 in the Appendix).

Table 7

Home, School, and Church Variables Based on Valuegenesis[3]

Scales/items	N	M	SD	Min	Max
Home Variables					
Faith-related Experiences at Home	11,582	2.69	0.77	1	4
Frequency of Family Worship	11,200	4.00	2.41	1	8
Nature of Family Worship	8,669	3.42	1.56	1	5
Leading Family Worship	8,631	2.41	1.13	1	4
Quality of Family Worships	8,708	1.57	0.20	1	2
Family Climate	11,303	5.00	1.01	1	6
Frequency of Participation in Family Service Projects	11,231	2.40	0.93	1	4
Father's Religiousness	11,160	4.68	1.61	1	6
Mother's Religiousness	11,124	5.24	1.21	1	6
Frequency of Faith-related Talk with Father	11,105	3.98	2.20	1	9
Frequency of Faith-related Talk with Mother	11,088	4.66	2.14	1	9
Parental Influences on Faith Development	10,963	3.63	1.01	1	5

Table 7—*Continued*.

Scales/items	*N*	*M*	*SD*	Min	Max
Church Variables					
Faith-related Experiences at Church	11,580	2.65	0.75	1	4
Church Influences on Faith Development	11,057	3.29	0.92	1	5
Quality of Religious Education at Church	9,888	4.19	1.17	1	6
Meaningfulness of Young-adult Programs at Church	9,554	1.24	0.43	1	2
Positive Church Influences	9,489	3.06	0.49	1	4
School Variables					
Faith-related Experiences at School	11,553	2.57	1.03	1	4
School Influences on Faith Development	11,039	3.47	0.82	1	5
Meaningfulness of Young-adult Programs at School	9,562	1.28	0.45	1	2
Positive School Influences	9,483	3.14	0.46	1	4

Note. For details on scaling options for each of the variables please refer to Table 15 in the Appendix.

On the Influences on Religious Development scale, students' answers reflect ($M = 3.63$, $SD = 1.01$) that the family in which they grew up has "somewhat" helped in developing their religious faith.

In terms of adolescents' faith-related experiences at church, their answers show ($M = 2.65$, $SD = .75$) that the adults and youth in their church "sometimes" care about them. On the other hand, students feel ($M = 3.29$, $SD = .92$) that church programing and various church influences do not contribute too much to their religious development. On the Quality of Religious Education scale at church, students reported ($M = 4.19$, $SD = 1.17$) that it is "somewhat true" that their adult leaders at church are warm and friendly. Students also rated the young adult programs at their local church to be meaningful ($M = 1.24$, $SD = .43$). Likewise adolescents perceive ($M = 3.06$, $SD = .49$) their local church to "sometimes" have a positive impact on them.

In reflecting upon their faith-related experiences at school, students answered ($M = 2.57$, $SD = 1.03$) that in the last few years they "sometimes" talked to a teacher at school about God or faith. In comparison with the frequency of talking to a church pastor about God or faith, which was rated at a level 2, "Rarely," it may be interesting to note that students talk with their teachers about religious matters more frequently. Regarding the religious activities, programs, and people at school ($M = 3.47$, $SD = .82$) students hardly view these as significant factors in their faith development. Much like with young-adult programs at church, students agreed ($M = 1.28$, $SD = .45$) that youth programming at school is meaningful to them. They also indicated ($M = 3.14$, $SD = .46$) that their school is "sometimes" a positive influence on them.

Testing the First Null Hypothesis

The first null hypothesis stems from the first research question:

1. How did adolescents' involvement in service change over the duration of the 20 years from the first administration of *Valuegenesis* to the third administration of the survey in Seventh-day Adventist schools?

The null hypothesis for this question states:

1. The involvement in service of adolescents attending Seventh-day Adventist schools has changed from the first administration of *Valuegenesis* (1990), to the third administration of the study (2010).

In order to examine adolescents' service involvement across the three *Valuegenesis* studies, a series of one-way Analysis of Variance (ANOVA) tests were conducted using the scales and items that measure service involvement: Horizontal Faith, Evangelism, and Altruism. Analyses for subsequent research questions employ additional items associated with service involvement that appear only on the *Valuegenesis*[3] questionnaire but they could not be utilized to perform one-way analyses of variance using data from the three studies. ANOVA test results are listed in Table 8.

Since the Horizontal Faith scale on *Valuegenesis*[1] contains seven answer options and the same scale on the *Valuegenesis*[2] and *Valuegenesis*[3] surveys contains only five answer choices, the Horizontal Faith scale was recoded. Because the last two answer options on the *Valuegenesis*[1] survey, "almost always true" and "always true," do not appear on the subsequent surveys, these answer choices were recoded into a level 5 answer choice, describing the frequency of service as "often," which corresponds to the numbering and answer options of this scale across the three surveys.

Table 8

Measures of Service Involvement Based on the Three Valuegenesis Surveys

Scale	Valuegenesis Study #	N	M	SD	df^a	F	η^2
Horizontal Faith	1	13,266	3.62	0.86	36296	1737.41[*]	.09
	2	11,481	3.07	0.76			
	3	11,552	3.15	0.76			
Evangelism	1	13,261	2.46	1.25	36211	1585.91[*]	.08
	2	11,450	2.17	1.12			
	3	11,503	2.23	1.22			
Altruism	1	13,264	2.10	0.89	24742	232.70[*]	.01
	2	11,480	2.28	0.94			

[a.]numerator $df = 2$.
[*] $p < .001$.

On the horizontal dimension of the Faith Maturity scale the highest mean score ($M = 3.62$, $SD = .86$) was recorded on the *Valuegenesis[1]* survey. This indicates that, on average, students who participated in the study in 1990 were "sometimes" involved in the service activities associated with the Horizontal Faith scale. The mean score ($M = 3.07$, $SD = .76$) on the Horizontal Faith scale on *Valuegenesis[2]* was only slightly lower than the mean score on this scale for *Valuegenesis[3]* ($M = 3.15$, $SD = .76$), showing adolescents' willingness to serve "once in a while."

Based on these ANOVA test results there is a decline in the service involvement patterns of adolescents on the Horizontal Faith scale from the first to the second *Valuegenesis* study and from the first to the third study with only a slight increase from the second to the third administration of *Valuegenesis*. The ANOVA test for the Horizontal Faith items revealed that at $\alpha = .05$ there are significant differences ($F_{(2, 36296)} = 1737.41$; $p < .001$) between the samples of participants in the three *Valuegenesis* studies in terms of involvement in service. Because the overall F test results were significant, a follow-up post hoc analysis was conducted. The Games Howell post hoc test was selected because the homogeneity of variance assumption was not met ($p < .05$).

The Games Howell post hoc test revealed significant differences between the studies on the Horizontal Faith scale ($p < .001$). The results on this scale from the first *Valuegenesis* study were significantly higher ($M = 3.62$, $SD = .86$) than those from the second ($M = 3.07$, $SD = .76$) and the third ($M = 3.15$, $SD = .76$) *Valuegenesis* studies, and the results of the second study were significantly lower ($M = 3.07$, $SD = .76$) than those from the third ($M = 3.15$, $SD = .76$) study.

Because the Evangelism scale in *Valuegenesis[1]* contains seven answer options and the same scale in the second and third surveys contains six answer options, the Evangelism scale was recoded. Thus the first answer option from *Valuegenesis[1]*, "never," which does not appear on subsequent surveys, was ascribed a value of 0 while the other answer choices were recoded to correspond with the numbering and the answer options from the second and third surveys. The ANOVA tests revealed only slight differences between the groups in regard to their involvement in evangelism. Results for the Evangelism scale were slightly higher in *Valuegenesis[1]* ($M = 2.46$, $SD = 1.25$) than in *Valuegenesis[2]* ($M = 2.17$, $SD = 1.12$) and *Valuegenesis[3]* ($M = 2.23$, $SD = 1.22$). However, the mean scores in all three studies indicated the same frequency of students' involvement in mission-oriented service.

The ANOVA test for the Evangelism scale items at $\alpha = .05$ shows significant differences ($F_{(2, 36211)} = 1585.91$; $p < .001$) between the samples of participants in the three *Valuegenesis* studies on measures of involvement in mission outreach. Because the overall F test results for the Evangelism scale were significant, a follow-up post hoc analysis was conducted. The Games Howell post hoc test was selected because the homogeneity of variance assumption was not met ($p < .05$) for the Evangelism scale. The Games Howell post hoc test revealed significant differences ($p < .001$ on all contrasts) between the results of all three *Valuegenesis* studies. The mean scores for the Evangelism scale in all three studies indicated the same frequency of students' involvement in mission-oriented service, that is, that students shared their faith in Jesus "3–5 times" a year.

On the Altruism scale, students were asked to report their involvement in volunteer-type service activities in their church, school and/or community. The scale that measures adolescents' involvement in voluntary service on *Valuegenesis³* consists of seven questions while the Altruism scale on *Valuegenesis¹* and *Valuegenesis²* comprises only four questions. Meanwhile the Altruism scale on the first two surveys measures the frequency of voluntary service involvement per month, while the corresponding scale on *Valuegenesis³* measures the frequency of voluntary service per week. Because the number of items, the content of the questions, and the answer choices differ on these scales, the Altruism scale from *Valuegenesis³* was not included in the analysis for testing the first hypothesis.

A slight increase is shown in Altruism from *Valuegenesis¹* ($M = 2.10$, $SD = .89$) to *Valuegenesis²* ($M = 2.28$, $SD = .94$), although on average participants in both studies reported the frequency of their service involvement to be "1–2 hours" during a typical month. The ANOVA test for the Altruism scale at $\alpha = .05$ shows significant differences ($F_{(2, 24742)} = 232.70$; $p < .001$) between the samples of participants in the first two *Valuegenesis* studies on measures of involvement in altruistic behaviors. Although the *F* test for the Altruism scale was significant, a follow-up post hoc test could not be conducted because there were only two groups included in this ANOVA test. However, the results reveal significant differences between the Altruism indices of the first and second *Valuegenesis* studies ($p = .001$), with results from *Valuegenesis²* being significantly higher on the Altruism scale ($M = 2.28$, $SD = .94$) than those from *Valuegenesis¹* ($M = 2.10$, $SD = .89$).

Since the *F* tests show significant difference ($p < .001$ on all contrasts) between the samples of the three *Valuegenesis* studies on measures of student involvement in service, the null hypothesis was rejected. Therefore the alternative hypothesis was maintained, according to which, the involvement in service of adolescents attending Seventh-day Adventist schools has changed. On the Horizontal Faith variable there was a decrease from the first (1990) to the second (2000) and from the first (1990) to the third (2010) administration of *Valuegenesis*. On the Evangelism variable the frequency of adolescents' participation in mission-oriented service was similar across the three administrations of *Valuegenesis*. Likewise adolescents' participation in service as measured by the Altruism scale was similar from the first to the second administration of the study.

Testing the Second Null Hypothesis

The second null hypothesis stems from the second research question:

2. How do the indices of personal involvement in acts of service reflect adolescents' commitment to the religious values and to the beliefs of the Seventh-day Adventist Church?

The null hypothesis for this question is that:

2. The service involvement of adolescents attending Seventh-day Adventist schools is significantly related to and reflects their commitment to religious values and to the beliefs of the Seventh-day Adventist church.

Canonical correlational analysis was the procedure applied in order to test this hypothesis and to determine whether there is a positive relationship between adolescents'

service involvement (dependent variable) and their commitment to religious values and Seventh-day Adventist beliefs (independent variable). Zero-order correlations between indices of service involvement and commitment to religious values and beliefs are listed in Table 9. The correlations between service involvement variables range from .23 to .46 indicating that these variables are connected with each other. On the other hand, the correlations among scales measuring adolescents' commitment to religious values and Seventh-day Adventist beliefs show a very wide range from .12 to -.60. Inter-correlation between service involvement scales and indices of commitment to religious values and beliefs range between -.01 and .67. Listed in Table 10 are the canonical loadings, standardized coefficients, canonical correlation, and within-set variance (% of variance) for the canonical correlation conducted to investigate the relationship between service involvement and commitment to religious values and beliefs.

The correlation between the first pair of canonical variates is .72, indicating that there is a 56% ($.72^2 = .56$) overlapping variance between the first pair of canonical variates. The correlation between the second pair of canonical variates is .25, indicating a 6% ($.25^2 = .06$) overlapping variance between the second pair of canonical variates. The correlation between the third pair of canonical variates is 0.14, showing a 2% ($.14^2 = .02$) overlapping variance between the third pair of canonical variates. The fourth and the fifth correlations are insignificant. Included with the canonical correlations are Chi-squares, of which the first four, $\chi^2_{(45)} = 6564.33$; $\chi^2_{(32)} = 698.44$; $\chi^2_{(21)} = 191.30$; and $\chi^2_{(12)} = 31.25$, are significant at $p < .001$. The fifth Chi-square, $\chi^2_{(5)} = 4.19$, is not significant ($p = .52$). The relationship between the two sets of variables is explained almost exclusively by the

Table 9

Inter-correlations Between Service Involvement and Commitment to Religious Values and Seventh-day Adventist Beliefs
(N = 7, 863)

	HF	EV	AL	ES	JS	VF	CJ	IR	PD	BO	UB	UW	PRJ	IRF
Service Involvement														
Horizontal faith	—													
Evangelism	.44	—												
Altruism	.39	.39	—											
Enjoyment of service	.41	.24	.43	—										
Joining others in service activities	.35	.23	.45	.46	—									
Commitment to Religious Values & Beliefs														
Vertical faith	.67	.44	.31	.35	.32	—								
Commitment to Jesus Christ	.34	.25	.16	.19	.19	.52	—							
Importance of religious faith	-.44	-.33	-.24	-.25	-.25	-.60	-.46	—						
Personal devotion	.44	.44	.35	.26	.28	.52	.37	-.47	—					
Belief orthodoxy	.28	.19	.12	.16	.15	.36	.29	-.32	.35	—				
Understanding of the Bible	.08	.05	-.01	.08	.06	.13	.12	-.13	.12	.27	—			
Understanding the role of E. G. White	.15	.11	.07	.11	.10	.19	.17	-.18	.23	.39	.30	—		
Having a personal relationship with Jesus	.35	.26	.20	.25	.24	.50	.38	-.47	.40	.37	.14	.18	—	
Importance of faith in shaping daily life	-.39	-.30	-.25	-.29	-.28	-.53	-.38	.55	-.45	-.34	-.13	-.19	-.49	—

Note. HF=Horizontal faith, EV=Evangelism, AL=Altruism, ES=Enjoyment of Service, JSA=Joining Others in Service Activities, VF=Vertical Faith, CJ=Commitment to Jesus Christ, IR=Importance of Religious Faith, PD=Personal Devotion, BO=Belief Orthodoxy, UB=Understanding of the Bible, UW=Understanding of the role of E. G. White, PRJ=Priority of Having a Personal Relationship with Jesus, IRF=Importance of Religious Faith in Shaping Daily Life.

Table 10

Canonical Correlational Analysis for Service Involvement and Commitment to Religious Values and Beliefs

	Canonical Loadings					Standardized Canonical Coefficients				
	1	2	3	4	5	1	2	3	4	5
Set 1 Variables										
Horizontal faith	-.94	.26	-.14	-.16	.03	-.73	.75	-.51	-.28	.18
Evangelism	-.68	-.52	-.12	.48	-.16	-.31	-.59	-.10	.91	-.21
Altruism	-.50	-.64	.07	-.58	-.05	-.01	-.75	-.30	-.92	-.11
Enjoyment of service	-.52	.02	.70	-.19	-.46	-.08	.22	.78	.01	-.89
Join others in service activities	-.49	-.21	.63	-.10	.55	-.12	-.10	.62	.21	.99
% of Variance Redundancy	.22	.01	.00	.00	.00					
Set 2 Variables										
Vertical faith	-.97	.25	-.03	-.02	-.01	-.78	.83	-.51	-.43	-.56
Commitment to Jesus Christ	-.51	.02	.12	.44	.36	.05	-.02	.03	.54	.39
Importance of religious faith	.66	.04	-.13	-.22	-.60	.05	.00	.18	-.31	-.97
Personal devotion	-.72	-.65	-.04	.19	-.11	-.27	-1.09	-.32	.18	-.38
Belief orthodoxy	-.41	.09	.12	.34	.08	-.01	.16	-.18	.22	.17
Understanding of the Bible	-.12	.18	.38	.70	-.43	.03	.16	.31	.68	-.50
Role of E. G. White	-.23	.06	.28	.17	-.14	-.02	.09	.19	-.13	-.09
Personal relationship with Jesus	-.54	-.01	.53	.12	.11	-.00	.02	.55	.05	-.05
Importance of religious faith in shaping daily life	.61	.16	-.64	.20	-.19	.06	.21	-.86	.60	-.03
% of Variance Redundancy	.17	.00	.00	.00	.00					
Canonical Correlation	.72	.25	.14	.06	.02					
Wilk's Chi-square	6564.33	698.44	191.30	31.25	4.19					
df	45	32	21	12	5					
p	.00	.00	.00	.00	.52					

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first canonical function (r_c = .56). Therefore only the first canonical function is interpreted.

Canonical loadings of .3 (absolute value) are interpreted (Tabachnick & Fidell, 2001). The first canonical function indicates that low scores in Horizontal Faith (-.94), Evangelism (-.68), Enjoyment of Service (-.52), Altruism (-.50), and Joining Other Students in Service Activities (-.49) are associated with low scores in Vertical Faith (-.97), Personal Devotion (-.72), Priority of Having a Personal Relationship with Jesus (-.54), Commitment to Jesus Christ (-.51), Belief Orthodoxy (-.41), and high scores in Importance of Religious Faith (.66), and Importance of Religious Faith in Shaping Daily Life (.61). It needs to be noted here that low scores for Importance of Religious Faith and the Importance of Religious Faith in Shaping Daily Life indicate positive responses while high scores indicate negative responses. Consequently, high scores on scales associated with commitment to religious values and beliefs indicate greater service involvement.

The first pair of canonical variates appears to suggest that greater commitment to religious values and Seventh-day Adventist beliefs—defined as Vertical Faith, Personal Devotion, Importance of Religious Faith, Importance of Religion in Shaping Daily Life, Priority of Having a Personal Relationship with Jesus, Commitment to Jesus Christ, and Belief Orthodoxy—are associated with greater involvement in service—defined as Horizontal Faith, Evangelism, Enjoyment of Service, Altruism, and Joining Other Students in Service Activities. Consequently, the null hypothesis was rejected and the alternative hypothesis will be maintained, according to which, the service involvement of adolescents attending Seventh-day Adventist schools is related to and reflects their commitment to religious values and beliefs of the Seventh-day Adventist church.

Testing the Third Null Hypothesis

The third null hypothesis stems from the third research question:

3. How do the spiritual influences at home, at the Seventh-day Adventist school, and at church contribute to adolescents' involvement in service?

The null hypothesis for this question is that:

3. The spiritual influences to which adolescents are exposed at home, at the Seventh-day Adventist school, and at church contribute significantly to their involvement in service to others.

Canonical correlational analyses were conducted in order to test this hypothesis and explore the relationship between home, school, and church variables (independent variable), and adolescents' Involvement in Service (dependent variable). Zero-order correlations between adolescents' Service Involvement and indices of Home, School, and Church variables are listed in Table 11.

Correlations among service involvement variables range from .22 to .45, indicating that these variables are somewhat related to each other. On the other hand, correlations among scales measuring religious influences at home, at school, and at church on adolescents' service involvement have a broad range from -.02 to .73. Inter-correlations among service involvement, and the religious influences at home, at school, and at church, range between .02 and .44. Listed in Table 12 are the canonical loadings, the standardized coefficients, the canonical correlation and the within-set variance (% of variance) for the test conducted to examine the relationship between service involvement and religious influences on adolescents.

Table 11

Inter-correlations Between Service Involvement and Spiritual Influences at Home, at School, and at Church (*N* = 6,372)

	HF	EV	AL	ES	JSA	FEH	FFW	NFW	LFW	QFW	FC	FSP	FR	MR	TF	TM	HIF	FEC	CIF	QRE	MCP	PCI	FES	SIF	MYS	PSI
Service Involvement																										
HF	—																									
EV	.44	—																								
AL	.38	.39	—																							
ES	.41	.25	.41	—																						
JSA	.34	.22	.45	.45	—																					
Commitment to Religious Values and Beliefs																										
FEH	.44	.36	.33	.30	.27	—																				
FFW	.13	.12	.13	.09	.09	.26	—																			
NFW	.20	.16	.14	.16	.14	.30	.41	—																		
LFW	.11	.08	.07	.07	.06	.10	.04	.14	—																	
QFW	.18	.14	.15	.14	.12	.28	.13	.20	.12	—																
FC	.21	.14	.13	.21	.15	.37	.14	.22	.08	.29	—															
FSP	.34	.28	.35	.29	.28	.58	.22	.22	.10	.22	.31	—														
FR	.09	.04	.02	.08	.05	.16	.17	.15	-.05	.08	.21	.15	—													
MR	.13	.05	.04	.11	.09	.21	.17	.16	.04	.10	.23	.15	.35	—												
TF	.19	.20	.18	.11	.11	.31	.27	.22	-.02	.14	.24	.25	.57	.17	—											
TM	.25	.25	.24	.17	.17	.37	.29	.24	.09	.16	.21	.26	.07	.42	.47	—										
HIF	.31	.24	.23	.22	.22	.43	.27	.30	.10	.32	.49	.34	.33	.25	.37	.29	—									
FEC	.39	.32	.29	.25	.25	.47	.15	.20	.08	.22	.32	.36	.13	.15	.21	.21	.36	—								
CIF	.35	.34	.40	.23	.26	.33	.18	.19	.09	.23	.23	.33	.13	.14	.22	.24	.52	.46	—							
QRE	.34	.27	.30	.31	.28	.37	.17	.20	.09	.29	.39	.35	.15	.20	.20	.22	.47	.58	.53	—						
MCP	-.21	-.14	-.17	-.21	-.19	-.16	-.06	-.11	-.05	-.19	-.18	-.17	-.06	-.06	-.08	-.08	-.22	-.21	-.25	-.25	—					
PCI	.14	.06	.08	.10	.10	.15	.06	.09	.04	.12	.19	.13	.11	.11	.09	.08	.20	.25	.18	.33	-.11	—				
FES	.33	.29	.24	.22	.19	.37	.07	.14	.08	.16	.18	.22	.04	.08	.13	.19	.23	.41	.24	.29	-.20	.12	—			
SIF	.39	.33	.38	.28	.28	.32	.12	.17	.10	.25	.27	.31	.10	.13	.18	.23	.53	.37	.73	.45	-.37	.17	.32	—		
MYS	-.18	-.14	-.19	-.15	-.17	-.21	-.08	-.14	-.08	-.26	-.22	-.23	-.07	-.10	-.11	-.11	-.30	-.36	-.38	-.50	.29	-.19	-.15	-.29	—	
PSI	.14	.04	.07	.13	.11	.12	.03	.06	.03	.08	.15	.09	.08	.08	.07	.06	.16	.16	.13	.21	-.24	.38	.12	.19	-.11	—

Note. HF=Horizontal Faith, EV=Evangelism, AL=Altruism, ES=Enjoyment of Service, JSA=Join Others in Service Activities, FEH=Faith-related Experiences at Home, FFW=Frequency of Family Worship, NFW=Nature of Family Worships, LFW=Leading out in Family Worship, QFW=Quality of Family Worships, FC=Family Climate, FSP=Participation in Family Service Projects, FR=Father's Religiousness, MR=Mother's Religiousness, TF=Faith-related Talk with Father, TM=Faith-related Talk with Mother, HIF=Home Influences on Faith Development, FEC=Faith-related Experiences in Church, CIF=Church Influences on Faith Development, QRE=Quality of Religious Education at Church, MCP=Meaningfulness of Church Youth Programs, PCI=Positive Church Influences, FES=Faith-related Experiences at School, SIF=School Influences on Faith Development, MYS=Meaningfulness of Youth Programs at School, PSI=Positive School Influences.

Table 12

Canonical Correlational Analysis for Service Involvement and Religious Influences in the Home, the School, and the Church

	Canonical Loadings					Standardized Canonical Coefficients				
	1	2	3	4	5	1	2	3	4	5
Set 1 Variables										
Horizontal faith	-.82	.27	.39	.31	.10	-.45	.37	.73	.74	.20
Evangelism	-.72	-.31	.30	-.52	-.18	-.32	-.40	.38	-.89	-.37
Altruism	-.74	-.40	-.48	.17	.18	-.33	-.79	-.59	.41	.51
Enjoyment of service	-.59	.56	-.40	-.32	.27	-.13	.72	-.40	-.66	.56
Join others in service activities	-.56	.26	-.46	.15	-.62	-.13	.25	-.35	.21	-1.08
% of Variance Redundancy	.21	.01	.01	.00	.00					
Set 2 Variables										
Faith-related experiences at home	-.75	.16	.27	.04	.10	-.31	.11	.50	.13	.08
Frequency of family worship	-.25	-.03	-.03	-.02	-.14	.04	-.09	-.09	.03	-.08
Nature of family worship	-.35	.18	.08	-.06	-.14	-.07	.16	.03	-.06	-.08
Lead family worship	-.17	.07	.13	.02	-.19	-.04	.03	.14	.00	-.17
Quality of family worship	-.31	.10	-.00	.05	.15	.01	-.04	.02	.07	.30
Family climate	-.35	.41	-.03	-.25	.17	.08	.24	-.13	-.43	.35
Family service projects	-.66	.08	-.36	.14	.25	-.20	-.01	-.71	.21	.37
Father's religiousness	-.12	.25	.10	-.02	.11	.03	.33	-.00	-.22	.24
Mother's religiousness	-.18	.35	.10	.21	-.28	.07	.23	.12	.48	-.30
Faith-related talk with father	-.36	-.19	.13	-.16	.04	-.05	-.46	.12	.05	-.00
Faith-related talk with mother	-.48	-.11	.05	-.23	-.23	-.15	-.09	-.09	-.49	-.15
Home influences on faith development	-.53	.17	.13	.09	-.15	.07	.12	.34	.16	-.36
Faith-related experiences at church	-.66	.10	.33	.02	-.04	-.12	-.01	.66	.14	.20
Church influences on faith development	-.70	-.34	-.16	.15	-.14	-.16	-.81	-.18	-.05	-.19
Quality of religious education at church	-.64	.28	-.24	-.17	-.31	-.17	.39	-.55	-.69	-.33
Meaningfulness of church programs	.38	-.34	.22	-.02	.18	.08	-.29	.17	.14	.20
Positive church influences	-.20	.25	.01	.40	-.03	.04	.05	.07	.42	.04
Faith-related experiences at school	-.57	.07	.31	-.21	-.08	-.17	-.04	.22	-.31	-.15
School influences on faith development	-.73	-.04	-.13	.25	.10	-.28	.12	-.09	.43	.56
Meaningfulness of programs at school	.35	-.04	.20	-.27	.56	-.06	.11	.09	-.42	.57
Positive school influences	-.20	.39	-.06	.31	.02	-.01	.24	-.07	.23	.05
% of Variance Redundancy	.10	.00	.00	.00	.00					
Canonical Correlation	.66	.27	.19	.09	.03					
Wilk's Chi-square	4421.68	764.12	285.00	59.54	7.17					
df	105	80	57	36	17					
p	.00	.00	.00	.01	.98					

The correlation between the first pair of canonical variates is .66, indicating that there is a 44% ($.66^2$ = .44) overlapping variance between the first pair of canonical variates. The correlation between the second pair of canonical variates is .27, showing that there is a 7% ($.27^2$ = .07) overlapping variance between the second pair of canonical variates. The correlation between the third pair of canonical variates is .19, indicating a 4% ($.19^2$ = .04) overlapping variance between the third pair of canonical variates. The fourth and fifth correlations are not significant.

Included with the canonical correlations are Chi-squares, of which the first three, $\chi^2_{(105)}$ = 4421.68; $\chi^2_{(80)}$ = 764.12; and $\chi^2_{(57)}$ = 285.00, are significant at $p < .001$. The fourth Chi-square, $\chi^2_{(36)}$ = 59.54 (p = .01); and the fifth Chi-square, $\chi^2_{(17)}$ = 7.17 (p = .98), are not significant at $p < .001$. The first canonical correlation accounted for the significant relationships between home, school, and church variables and adolescents' involvement in service. Therefore, the first canonical function is interpreted as it accounts for the significant relationship between the two sets of variables (r_c = .44).

Canonical loadings of .3 (absolute value) are interpreted (Tabachnick & Fidell, 2001). In the first canonical loading, low scores in Horizontal Faith (-.82), Altruism (-.74), Evangelism (-.72), Enjoyment of Service (-.59), and Participation in Service Projects with other students (-.56) are associated with low scores in Faith-related Experiences at Home (-.75), School Influences on Faith Development (-.73), Church Influences on Faith Development (-.70), Involvement in Family Service Projects (-.66), Faith-related Experiences at Church (-.66), Quality of Religious Education at Church (-.64), Faith-related Experiences at School (-.57), Home Influences on Faith Development (-.53), Faith-related Talk with Mother (-.48), Faith-related Talk with Father

(-.36), Nature of Family Worship (-.35), Family Climate (-.35), Quality of Family

Worship (-.31), high scores in Meaningfulness of Youth Programs at Church (.38), and

Meaningfulness of Youth Programs at School (.35). It is worth mentioning that for

Meaningfulness of Youth Programs at Church and Meaningfulness of Youth Programs at

School, low scores indicate positive responses while high scores indicate negative

responses. Thus, high scores on home, school, and church variables are associated with

high service involvement scores.

The canonical variates appear to suggest that the greater the exposure to positive

influences at home, at school, and at church, the greater the willingness of adolescents to

get involved in service to others. As a result of this analysis, the null hypothesis was

rejected and the alternative hypothesis was maintained, according to which, home,

school, and church variables contribute significantly to adolescents' service involvement

patterns.

Summary of Findings

Descriptive Statistics

The construct of service involvement in this study consists of the following

variables: Horizontal Faith, Evangelism, Altruism, Enjoyment of Service, and Joining

Others in Service Activities. The first three scales, namely Horizontal Faith, Evangelism,

and Altruism were employed in the analyses throughout the study. However, because the

survey items Enjoyment of Service and Joining Others in Service Activities are included

only on *Valuegenesis[3]* these items were only employed in the canonical correlational

analyses conducted to answer the second and the third research questions. Descriptive

statistics of these variables are summarized below:

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Service Involvement

1. Service involvement among adolescents based on the Horizontal Faith variable ranges from "sometimes" in *Valuegenesis[1]* ($M = 3.91$, $SD = 1.11$), to "once in a while" in *Valuegenesis[2]* ($M = 3.07$, $SD = .76$) and *Valuegenesis[3]* ($M = 3.15$, $SD = .76$).

2. Results from *Valuegenesis[1]* ($M = 2.46$, $SD = 1.25$), *Valuegenesis[2]* ($M = 2.17$, $SD = 1.12$), and *Valuegenesis[3]* ($M = 2.23$, $SD = 1.22$) indicate that students shared their faith "3–5 times" during the previous year.

3. Similar results were recorded on the Altruism measures from *Valuegenesis[1]* ($M = 2.10$, $SD = .89$) to *Valuegenesis[2]* ($M = 2.28$, $SD = .94$), indicating that students volunteer in their community for "1–2 hours" a month.

4. On the Enjoyment of Service item, listed only in *Valuegenesis[3]*, students reported on average ($M = 3.97$, $SD = .87$) that they enjoy serving others.

5. On Joining Others in Service Activities, another *Valuegenesis[3]* item, students reported on average ($M = 2.69$, $SD = .92$) that they are somewhat interested.

<div align="center">Results of the Data Analysis</div>

This study encompasses data from the three *Valuegenesis* studies conducted with students in Grades 6 through 12 attending Seventh-day Adventist schools. The population sample for *Valuegenesis[1]* comprised 13,266 students, the *Valuegenesis[2]* sample comprised 11,481 students, and the *Valuegenesis[3]* comprised 11,586 students. The major findings of this study are summarized in the numbered list below:

Service Involvement Over Time

1. Results from a series of one-way analysis of variance revealed that on the

Horizontal Faith scale ($\alpha = .05$) there were significant differences ($F_{(2, 36296)} = 1737.41$; $p < .001$) between the groups.

2. On the Horizontal Faith scale a decline in adolescents' response toward service involvement was recorded from *Valuegenesis[1]* to *Valuegenesis[2]* and to *Valuegenesis[3]*.

3. There was only a slight, but not significant, increase in service participation from the second to the third study. If students in *Valuegenesis[1]* reported participating in service to others sometimes, students in *Valuegenesis[2]* and *Valuegenesis[3]* indicated being involved in service only once in a while.

4. One-way analysis of variance results for the Evangelism scale ($\alpha = .05$) revealed significant differences ($F_{(2, 36211)} = 211.23$; $p < .001$) between the groups.

5. However, in terms of the frequency of their participation students reported similarly across the three *Valuegenesis* studies that they shared their faith in Jesus "3–5 times" a year.

6. One-way analysis of variance indicated ($\alpha = .05$) significant differences ($F_{(2, 24742)} = 232.70$; $p < .001$) between the groups on the Altruism scale as well.

7. However the participants in *Valuegenesis[1]* and *Valuegenesis[2]* reported similarly the frequency of their participation in voluntary service to be 1–2 hours per month.

8. *F* tests on each ANOVA revealed significant differences ($p < .001$ on all contrasts) between the groups. Therefore the null hypothesis was rejected and the alternative hypothesis was upheld, according to which there are changes in adolescents' service involvement patterns from the first to the third administration of the *Valuegenesis* study.

**Relationship Between Adolescents' Service
Involvement and Their Commitment to
Religious Values and Beliefs**

1. Canonical correlational analysis indicates that high scores on commitment to

religious values and beliefs variables are associated with high scores on service

involvement variables.

2. These canonical variates seem to suggest that the greater adolescents'

commitment to religious values and Seventh-day Adventist beliefs, the greater their

involvement in service activities.

3. Based on these findings, the null hypothesis was rejected and the alternative

hypothesis was adopted, according to which adolescents' commitment to religious values

and Seventh-day Adventist beliefs contributes to their engagement in service to others.

**Relationship Between Adolescents' Service
Involvement and Spiritual Influences
at Home, at Church, and at the
Seventh-day Adventist School**

1. Canonical correlational analysis indicates that high scores on home, school, and

church variables were associated with high scores on the service involvement variables.

2. Consequently the canonical variates indicate that the more positive the home,

school, and church influences, the stronger the likelihood for students to engage in

service to others.

3. Since there is significant relationship between service involvement and home,

school, and church variables, the null hypothesis was rejected and the alternative

hypothesis was upheld, according to which spiritual influences at home, at church, and at

the Seventh-day Adventist school contribute to adolescents' service involvement.

As a result of these analyses the three null hypotheses were rejected because: (a) the service involvement of adolescents has changed over the duration of the three *Valuegenesis* studies; (b) adolescents' commitment to religious values and Seventh-day Adventist beliefs was significantly correlated with their service involvement; and (c) there was significant relationship between home, school, and church variables and adolescents' involvement in service.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In all that concerns the well-being of the child, it should be the effort of parents and
teachers to co-operate.

—Ellen G. White, *Education*

Background and Problem

From a Christian perspective, a person's commitment to God and to religious

values and beliefs needs to find expression in service to others (Dudley & Walshe, 2009;

Gillespie et al., 2004; Furrow et al., 2004; Ji et al., 2006; Knight, 2010; Myers et al.,

2008; Ratcliff, 2004; C. Smith, 2003; C. Smith & Denton, 2005; Strommen & Hardel,

2000; E. G. White, 2003). Therefore it is troubling that many adolescents do not seem to

recognize the value of serving those in need as an expression of their love for God

(Dudley & Gillespie, 1992; Dudley, 2007; Dudley & Walshe, 2009; Gane, 2005;

Gillespie et al., 2004; Lee et al., 1997; Myers & Jackson, 2008; Zustiak et al., 2003).

Strommen and Hardel (2000) compared major studies done through Search

Institute in American denominations. Their findings indicate that the number of families

that raise children who hold strong Christian values and who serve others has been

consistently decreasing. The authors call for parents to be more intentional about

instilling in their children values that will strengthen their spiritual growth. According to

Strommen and Hardel (2000) the Christian imperative to serve others is diametrically

opposed to the mind-set that guides contemporary culture, whereby a gradual shift has

occurred over the past recent decades from an altruistic, other-centered approach to a self-centered approach to life. Similarly Benson and Roehlkepartain (1993) in a research drawing from the *Effective Christian Education* study (1990), a research project of Search Institute, revealed facts about the service involvement patterns of Protestant youth. They found that the majority of participants in their study participated in service activities for 5 hours or less during their lifetime (Benson & Roehlkepartain, 2000, cited in Strommen & Hardel, 2000, p. 145).

Consistent with findings from *Valuegenesis*[1] (Dudley & Gillespie, 1992) a significant gap exists between participating students' reported faith in God as well as their beliefs in the main doctrines of the church (90–95%), and their involvement in service (30–56%). Results from *Valuegenesis*[2] (40–49%) also indicate adolescents' reduced involvement in service (Gillespie et al., 2004). Similarly Gane and Kijai (2006) have recognized the disparity existing between the alleged belief in God of the participants in *Valuegenesis*[2] and their involvement in service to others.

There is a very limited number of empirical studies that focus on the changes in the service involvement patterns of adolescents attending Seventh-day Adventist schools in North America over the three administrations of *Valuegenesis.* Likewise, studies have not focused on the connection between adolescents' service involvement and their commitment to religious values and Seventh-day Adventist beliefs using data from *Valuegenesis*[3]. Similarly the relationship between the influences of the home, the church, and the Seventh-day Adventist school and adolescents' service involvement has not yet been explored sufficiently in recent studies analyzing *Valuegenesis*[3] data.

Although several studies have been written, which report the results of the

Valuegenesis surveys on a broad spectrum (Dudley & Gillespie, 1992; Gillespie et al.,

2004; Rice & Gillespie, 1993), these do not adequately address the questions raised in

this study. Similarly, research studies that have examined in detail specific areas of the

Valuegenesis study (Beagles, 2009; Carlson, 1996; Gane, 2005) do not focus on the topic

of adolescents' service involvement. Therefore this study was undertaken to provide

empirical evidence on the connection that exists between adolescents' involvement in

service and the religious values they hold as well as between the influences of the home,

the church, the Seventh-day Adventist school and their participation in service to others.

Related Literature

The connection between Christian beliefs and service is well documented in

scholarly literature (Allport, 1957; Donahue & Nielsen, 2005; Howard, 2008; Strommen

& Hardel, 2000; Zinnbauer & Pargament, 2005; Zustiak et al., 2003). In this postmodern

age, where adolescents are confronted with shifting values that threaten their spirituality,

altruistic service rooted in Christian values and beliefs provides a most valuable solution

to the problems posed by the prevalently individualistic focus of society (Kainer, 2011;

Rasi, 2008; Sire, 2009; Zustiak et al., 2003). In this sense, Zustiak et al. (2003) posited

that the best solution to the problems posed by postmodernism is found in "a wildly

loving community" that is making a difference in the world.

In harmony with studies that support the link between adolescents' commitment

to God and to religious values, and their service involvement, Sherr et al. (2007)

discovered that community service or "community ministry" is related to adolescents'

spiritual growth and in fact it enhances "the faith maturity and faith practices of

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adolescents in congregations" (p. 43). This assertion is supported by research studies done by Hugen et al. (2006) and by Myers et al. (2008) who investigated the relationship between community service and faith development.

Results from the National Study of Youth and Religion (NSYR) indicate that adolescents who stated having a strong religious commitment were twice as likely to be involved in service than their counterparts who did not claim to be religious (Smith & Denton, 2005). In the follow-up longitudinal study based on the NSYR, Smith and Snell (2009) confirmed the previous results. They showed that religiously devout participants engaged three times more frequently in benevolent charitable giving and were twice as actively involved in voluntary community service compared with those who were indifferent toward religion.

A number of research studies support the relationship between spiritual influences in the home and adolescents' service participation (Gillespie et al., 2004; King, 2003; Lee et al., 1997; Regnerus et al., 2004). In accord with Bandura's (1986) Social Cognitive Learning Theory the research done by Lee et al. (1997) showed that adolescents learn best from the modeling and mentorship of significant adults in their lives. Their study revealed that family worship meaningfully influences the values, beliefs, and behaviors adopted by adolescents. Moreover Lee et al. (1997) found that those adolescents who participated actively in family worship by reading, praying, and talking about God, engaged in service to others more frequently when compared to their peers who did not participate in family worship.

Results from a study done by King (2003) likewise support the significance of parental spiritual guidance in relation to adolescents' attitudes toward and involvement in

service. He found that adolescents whose parents hold strong religious values and beliefs are much more likely to be religiously active than their counterparts whose parents are religiously disengaged. This research showed that parents' spiritual and religious influences contribute to adolescents' active involvement in faith-based practices and have both individual and collective benefits.

Having analyzed data from both waves of the National Longitudinal Study of Adolescent Health, Regnerus et al. (2004) found that parents hold the most significant place in nurturing the spiritual values, spiritual growth, and religious practices of adolescents (Regnerus et al., 2004). Similarly Gillespie et al. (2004), who reported on the first two waves of the *Valuegenesis* study, acknowledge the primary role of family worship in adolescents' faith maturation and spiritual growth. Their study revealed that parents who are strongly committed to the beliefs and values of the Seventh-day Adventist church have family worship regularly (Gillespie et al., 2004). Hence Gillespie et al. (2004) call parents to be intentional about having regular family worship in ways that inspire and stimulate adolescents' interest in spiritual values and practices.

Educational research supports the notion that the school continues the education begun in the home (Gillespie et al., 2004; Regnerus et al., 2004; Strommen & Hardel, 2000). Although it is recognized that the school cannot replace the role of a parent, its influence is nevertheless significant in providing the learner with direction and guidance for life (Anderson & A. B. Smith, 1999; Ennis & McCauley, 2002; Noddings, 1992).

In their research, Regnerus et al. (2004) found that adolescents were significantly more likely (61%) to rate religion as important to them if they experienced Christian education than if their religious influences came from another social or religious

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institution (Regnerus et al., 2004, p. 34). Results from this study suggest that adolescents who attend denominational schools are most likely to view religion as important to them.

Strommen and Hardel (2000) identified three areas of activity that Christian education helps support. These relate directly to students' outward expression through service of their commitment to Christ: (a) moral responsibility, (b) involvement in service, and (c) involvement in mission outreach. According to the authors, students who have a sense of moral responsibility, who engage in service to others, and who participate in missionary pursuits, learn to view faith in God as a dynamic phenomenon that has enduring implications for their lives.

In their study on *Valuegenesis* Gillespie et al. (2004) found that a positive school climate contributes significantly to adolescents' "intrinsic faith experiences" (p. 82). Similarly, the authors recognized that by building a positive school climate, Seventh-day Adventist schools potentially contribute to students' faith development (p. 325). Consistent with these research studies, the literature shows that, next to the significant role of parental influences, Christian education has the potential to meaningfully influence adolescents' spiritual development and their faith-based practices.

Related literature documents the importance of spiritual influences at church on adolescents' spiritual growth (Dudley & Walshe, 2009; Furrow et al., 2004; Gillespie et al., 2004; C. Smith & Denton, 2005). Work done by C. Smith and Denton (2005) on The National Study on Youth and Religion (NSYR) indicates that religiously devout adolescents (over 80%) were significantly more involved in voluntary service initiatives (50%) compared to those who were religiously disengaged (25%). Similarly Furrow et al. (2004) found that a church community that welcomes the young and instills in them a

sense of belonging, potentially promotes their spiritual growth as well as their active

participation in service to others.

In addition, Gillespie et al. (2004) recognized that by creating a welcoming

environment the church could potentially support the faith journeys of children and youth

toward internalized spiritual and religious values and ultimately toward faith maturity.

The authors propose that the church needs to adopt creative methods in planning

programming for adolescents. To this end, youth programming could draw on

adolescents' critical thinking skills to help them acquire the spiritual understanding

necessary to grapple successfully with the complex issues they face.

Along the same lines, Dudley and Walshe (2009) acknowledge the key role of the

church in fostering the spiritual identity formation of the young. They posit that the

church can contribute significantly to youth retention by being supportive of their

spiritual growth and spiritual identity formation. One of the components of spiritual

identity formation referred to by Dudley and Walshe (2009) is active participation in

mission and service. In other words, this article presents service involvement as vitally

important to adolescents' spiritual identity formation. Consistent with other research,

these studies emphasize the critical role of the church in nurturing adolescents' spiritual

development by meeting their need for positive and meaningful relationships at church.

Purpose of the Study

This study investigates: (a) the changes that surfaced over the two-decades span

from the first to the third administration of *Valuegenesis* in regard to students' service

involvement; (b) the connection between their commitment to the religious values and to

the beliefs of the Seventh-day Adventist Church and their involvement in acts of service;

and (c) the impact of the home, the Seventh-day Adventist school, and the church on their service involvement.

Research Methods

Research Questions

Following are the questions that guided the data analysis, offering insight into how young people's spiritual development influences their active participation in service to God and to others:

1. How did adolescents' involvement in service change over the duration of the 20 years from the first administration of *Valuegenesis* to the third administration of the survey in Seventh-day Adventist schools?

2. How do the indices of personal involvement in acts of service reflect adolescents' commitment to the religious values and to the beliefs of the Seventh-day Adventist Church?

3. How do the spiritual influences at home, at the Seventh-day Adventist school, and at church contribute to adolescents' involvement in service?

Research Hypotheses

The following hypotheses stem from the above questions:

1. The involvement in service of adolescents attending Seventh-day Adventist schools has changed from the first administration of *Valuegenesis* (1990), to the third administration of the study (2010).

2. The service involvement of adolescents attending Seventh-day Adventist schools is significantly related to and reflects their commitment to religious values and to the beliefs of the Seventh-day Adventist church.

3. The spiritual influences to which adolescents are exposed at home, at the Seventh-day Adventist school, and at church contribute significantly to their involvement in service to others.

Research Design

This study is a secondary analysis that employs data from the three *Valuegenesis* studies. The data were gathered from students in Grades 6 through 12. The *Valuegenesis* surveys were administered to students attending Seventh-day Adventist schools in North America during one of the academic years 1990–1991, 2000–2001, and 2010–2011. After the process of cleaning the data, of the 15,000 students who completed *Valuegenesis[1]* surveys, 13,266 were valid and usable. The second *Valuegenesis* survey was completed by 16,020 students, of which only 11,481 returned valid surveys as revealed by the data cleaning process. Of the 18,000 participants who completed *Valuegenesis[3]* surveys, only 11,587 were kept as valid data.

Three research questions and corresponding hypotheses were tested in this study. A series of one-way analysis of variance (ANOVA) tests were employed to answer the first research question that adolescents' involvement in service has changed from the first to the third administration of *Valuegenesis*. The second research question was tested using canonical correlation analysis to explore the relationship between adolescents' commitment to religious values and Seventh-day Adventist beliefs, and their involvement

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in service. Canonical correlation analysis was employed to test the third research question that home, school, and church variables contribute to adolescents' involvement in service.

Summary of Major Findings

Demographics

This study encompasses data from the three *Valuegenesis* studies conducted with students in Grades 6 through 12 attending Seventh-day Adventist schools. The population sample for *Valuegenesis[1]* comprised 13,266 students, the *Valuegenesis[2]* sample comprised 11,481 students, and the *Valuegenesis[3]* comprised 11,586 students. The number of female participants was somewhat higher (54.1%, 53.2%, and 51.6%) than that of male participants across the three studies, but there was a 2.1% increase in the number of male participants and a decrease of 2.5% in the number of female participants from the first to the third study (see Table 4 in Chapter 4 for a detailed list of demographics). The age of the participants ranged from 10 to 21.

All racial groups were represented. Though the majority of students were Caucasian on all three studies (55.7%, 52%, and 36.8%) there was an 18.9% decrease in this population from the first to the third study. On the other hand the Latino/Hispanic student population increased by 6.8% from *Valuegenesis[1]* to *Valuegenesis[3]*. The number of students who reported having "more than one racial background" increased by 10.8%. The student population representing other racial backgrounds did not change much across the studies.

The number of students who reported being baptized in the Seventh-day Adventist Church increased from *Valuegenesis[1]* (81.6%) to *Valuegenesis[2]* (98.9%), and decreased from *Valuegenesis[1]* and *Valuegenesis[2]*, to *Valuegenesis[3]* (68.8%). Across the

three studies the majority of the students indicated that they live in a family with two parents (79.8%, 80.8%, and 78%), and a number of them indicated living with parents who were not divorced or separated (74.7%, 72.9%, 72.5%).

Findings Related to Research Questions

The results of this study revealed that: (a) there was a change in adolescents' service involvement over the course of the three *Valuegenesis* studies that span 20 years; (b) there is a significant relationship between adolescents' commitment to religious values and Seventh-day Adventist beliefs and their engagement in service to others; and (c) the home, school, and church variables are significantly related to adolescents' active involvement in service to others.

The ANOVA test results show that changes occurred from the first to the second and to the third administrations of the survey in terms of participants' patterns of service involvement (see Table 8 in Chapter 4). The Horizontal Faith scale was one of the scales employed to define the service involvement variable. On this scale students participating in the first administration of *Valuegenesis* scored highest on average, indicating that they were sometimes involved in the activities such as: helping others with their religious struggles, having a deep sense of reducing pain and suffering in the world, investing time and money to help others, feeling God's presence in their relationships, desiring to reduce poverty in their country and around the world, and having a faith perspective in dealing with political and social issues. On the second and third administrations of *Valuegenesis*, students scored lower on the Horizontal Faith questions, showing that they were involved in those service activities only "once in a while." Findings from ANOVA analyses for the

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Horizontal Faith scale indicate a decrease in service involvement from the first to the second and third administrations of the survey.

Similarly, on the Evangelism scale the ANOVA test results indicate significant changes between the samples of participants in the three studies. In *Valuegenesis[1]*, adolescents reported having shared their faith with others once or twice over the previous year by encouraging someone to believe in Jesus, by sharing about God's work in their lives, or by encouraging someone to connect with the Seventh-day Adventist church. A significant increase in evangelistic service participation was revealed between the first and the second, and between the first and the third administrations of the survey, whereby on the second and third surveys students reported having shared their faith with others "3–5 times" during the previous year.

Significant changes between the samples were revealed in the ANOVA test for the Altruism scale as well. This scale measured the frequency of students' involvement in activities such as: helping the poor, hungry, and sick; finding solutions to the problems that others face; promoting social equality; and making one's town or city a better place to live. Though there was a slight increase in students' voluntary service to others from the first to the second administrations of *Valuegenesis*, the two groups of participants reported similarly the frequency of their voluntary service to be approximately 1–2 hours a month. Because the ANOVA test results for service involvement indices across the three studies showed significant differences, the first null hypothesis was rejected.

Canonical correlation analysis employed to test the second null hypothesis revealed significant relationship between adolescents' commitment to religious values and Seventh-day Adventist beliefs and their involvement in service. Those participants

who indicated being actively involved in service to others had a strong commitment to religious values and Seventh-day Adventist beliefs (see Tables 9 and 10 in Chapter 4).

Because the relationship between the two sets of variables (variables defining service involvement and variables defining commitment to religious values and SDA beliefs) was explained almost exclusively by the first canonical function (r_c = .56), only the first canonical function was interpreted. The first pair of canonical variates indicated that greater commitment to religious values and Seventh-day Adventist beliefs among adolescent students—measured through indices of Vertical Faith, Personal Devotion, Importance of Religious Faith, Importance of Religion in Shaping Daily Life, Priority of Having a Personal Relationship with Jesus, a Commitment to Jesus, and Belief Orthodoxy—are related to greater involvement in service—measured through indices of Horizontal Faith, Evangelism, Enjoyment of Service, Altruism, and Joining Other Students in Service Activities. In other words, results from this canonical correlational analysis suggest that the greater adolescents' commitment to religious values and Seventh-day Adventist beliefs, the greater is the likelihood of their active participation in service. Figure 2 presents the correlation between indices of adolescents' involvement in service and indices of their commitment to religious values and Seventh-day Adventist beliefs, employed to test the second hypothesis in this study.

Findings from canonical correlational analysis conducted to test the third null hypothesis confirmed the relationship between home, school, and church variables and adolescents' involvement in service. Because the first pair of canonical variates accounted to the greatest extent (r_c = .44) for the significant relationship between home,

Figure 2. Illustration of the canonical correlation between indices of adolescents' service involvement and indices of their commitment to religious values and Seventh-day Adventist Beliefs. **Adolescents' Involvement in Service (Dependent Variable)** described as Horizontal Faith, Evangelism, Enjoyment of Service, Altruism, and Joining Others in Service Activities is correlated with **Commitment to Religious Values and Seventh-day Adventist beliefs (Independent Variable)** described as Vertical Faith, Personal Devotion, Importance of Religious Faith, Importance of Religious Faith in Shaping Daily Life, Personal Relationship with Jesus, Commitment to Jesus Christ, and Belief Orthodoxy.

school, and church variables and adolescents' involvement in service, only the first canonical function was interpreted (see Tables 11 and 12 in Chapter 4).

Thus the first pair of canonical variates indicates that higher scores in home, school, and church variables—measured through indices of Faith-Related Experiences at Home, School Influences on Faith Development, Church Influences on Faith Development, Involvement in Family Service Projects, Faith-Related Experiences at Church, Quality of Religious Education at Church, Faith-Related Experiences at School, Home Influences on Faith Development, Faith-Related Talk with Mother, Meaningfulness of Youth Programs at Church, Faith-Related Talk with Father, Nature of Their Family Worship, Family Climate, Meaningfulness of Youth Programs at School, and Quality of Family Worship—are associated with adolescents' greater service involvement—measured through indices of Horizontal Faith, Altruism, Evangelism, Enjoyment of Service, and Joining Other Students in Service Activities. Thus the canonical variates suggest that the greater the exposure to positive influences at home, at school, and at church, the greater the willingness of adolescents to get involved in service to others.

Figure 3 presents the correlation between indices of adolescents' involvement in service and indices of spiritual influences at home, at church, and at the Seventh-day Adventist school, that were employed to test the third hypothesis in this study.

Discussion of Major Findings

The theoretical foundation that informed this study was adopted from experiential learning. The *Learning Cycle* theorized by Kolb (1984) defines learning as a holistic
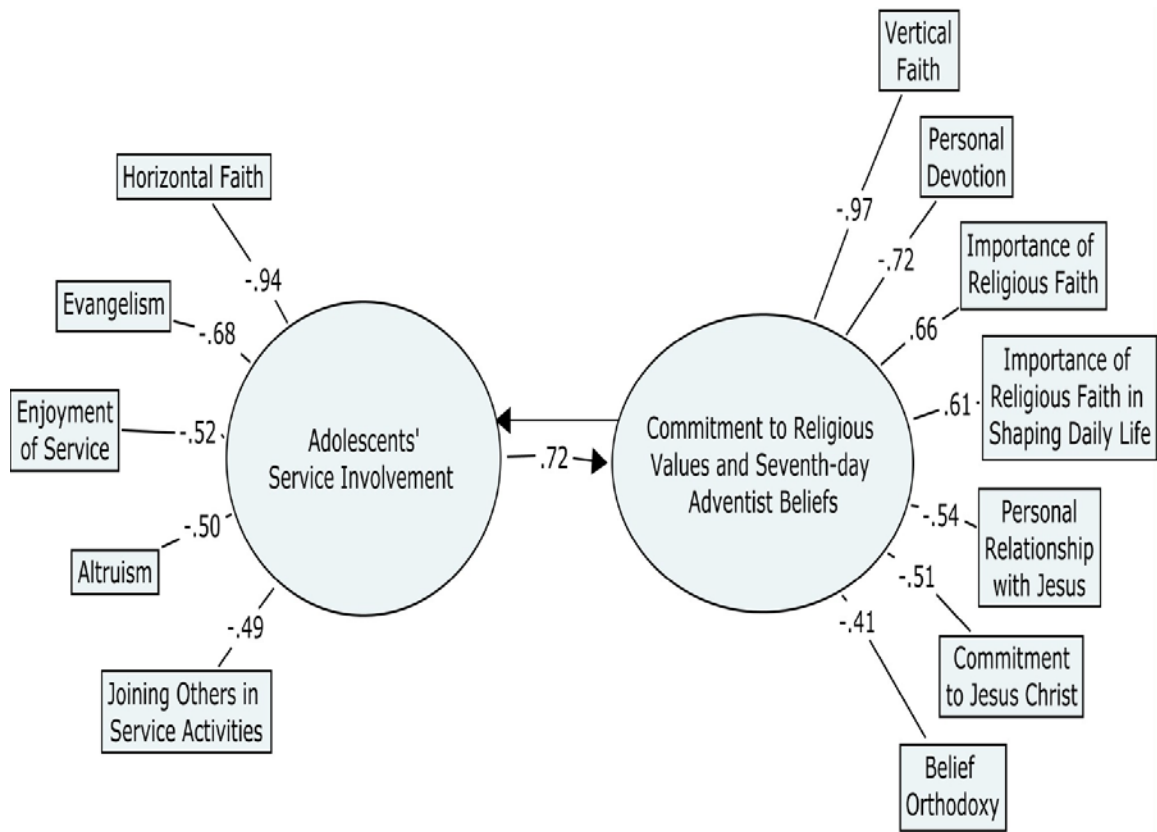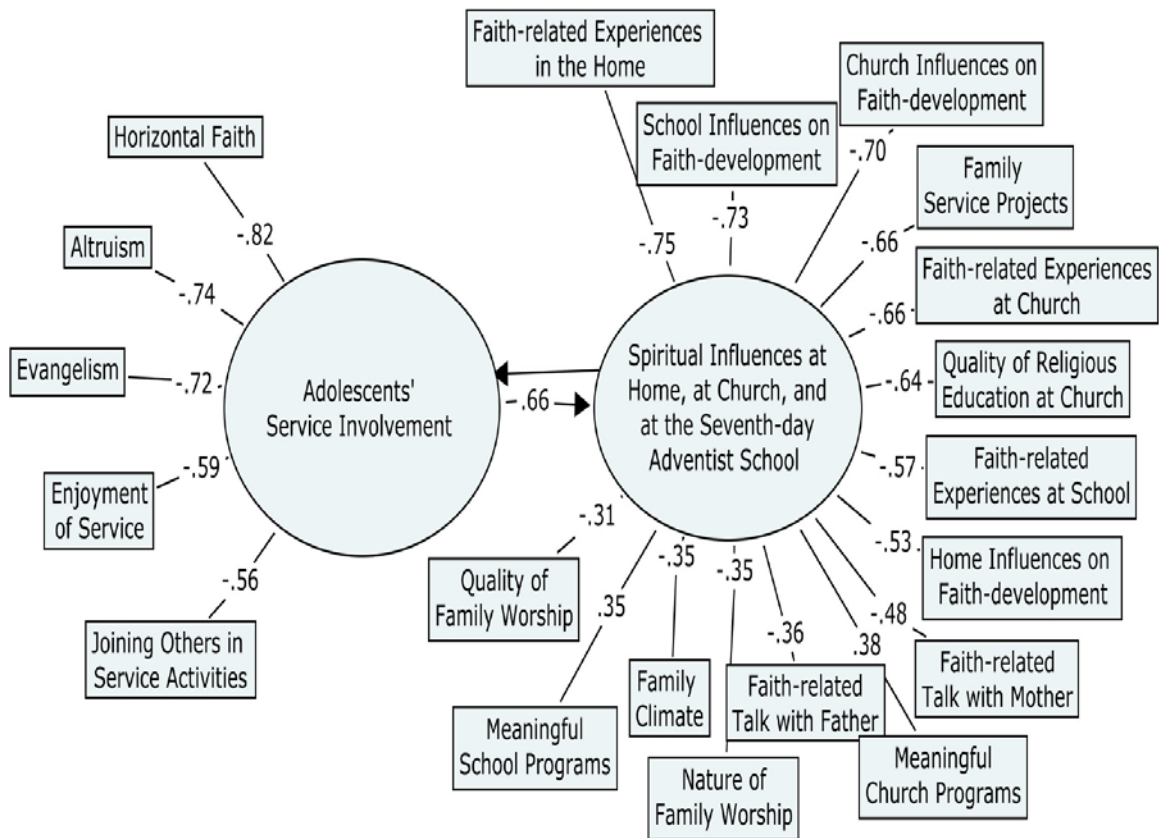
Figure 3. Illustration of the canonical correlation between indices of adolescents' service involvement and indices of the spiritual influences at home, at church, and at the Seventh-day Adventist church. **Adolescents' Involvement in Service (Dependent Variable)** described as Horizontal Faith, Altruism, Evangelism, Enjoyment of Service, and Joining Others in Service Activities is correlated with **Spiritual Influences at Home, at Church, and at the Seventh-day Adventist School (Independent Variables)** described as Faith-related Experiences in the Home, School Influences on Faith-development, Church Influences on Faith-development, Family Service Projects, Faith-related Experiences at Church, Quality of Religious Education at Church, Faith-related Experiences at School, Home Influences on Faith-development, Faith-related Talk with Mother, Meaningful Youth Programs at Church, Faith-related Talk with Father, Nature of Family Worship, Family Climate, Meaningful Youth Programs at School, and Quality of Family Worship.

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enterprise. The experiential learning theory explains the relationship between the variables in this study. In this sense, Kolb's experiential learning theory lends support to: (a) the link between the cognitive and the practical domains; (b) the role of the affective domain in decision making; (c) the role of teaching by personal example through modeling; and (d) the role of applying in practice knowledge and beliefs acquired cognitively (Kolb, 1984).

Since the research questions and hypotheses advanced in this study were formulated with the understanding that spiritual growth, like meaningful learning, is rooted in the practical application of the values, beliefs, and principles one has acquired cognitively, the experiential-learning theory helps provide a suitable theoretical basis for this study. If spiritual growth is viewed as a holistic endeavor, like learning, where there is an interaction between perception, feeling, cognition, and application (see Kolb, 1984, p. 31), then Kolb's theory helps elucidate how the independent variables (indicators of spiritual growth and spiritual influences at home, at school, and at church) are related to and contribute to the dependent variable (the active involvement in service of adolescents attending Seventh-day Adventist schools).

The first goal of this study was to investigate, using *Valuegenesis* data, the changes in the service involvement patterns over the span of 20 years of adolescents attending Seventh-day Adventist schools. Results from the data analysis confirm that changes occurred in adolescents' involvement in service from the first (1990) to the second (2000) and third administration (2010) of *Valuegenesis*.
Findings revealed a decrease on the Horizontal Faith scale, which measured adolescents' attitudes toward service involvement. This decrease in students' involvement in service to

others is unexpected in light of the fact that schools are now promoting more service-oriented activities for students than ever before. Therefore the findings lead to the assumption that while students may be doing more service-type activities than in the past, many of them may just be going through the motions without necessarily seeing the value and meaningfulness of serving others. These findings are in harmony with other research that revealed changes over time in adolescents' service involvement patterns (Dudley & Gillespie, 1992; Gillespie et al., 2004; Planty et al., 2006). Although results for the Evangelism scale were slightly higher in *Valuegenesis[1]* ($M = 2.46$, $SD = 1.25$) than in *Valuegenesis[2]* ($M = 2.17$, $SD = 1.12$) and *Valuegenesis[3]* ($M = 2.23$, $SD = 1.22$), the mean scores in all three studies indicated the same frequency of students' involvement in mission-oriented service. Likewise, though a slight increase was shown for the Altruism scale from *Valuegenesis[1]* ($M = 2.10$, $SD = .89$) to *Valuegenesis[2]* ($M = 2.28$, $SD = .94$), the mean scores indicated the same frequency of voluntary service involvement among adolescents participating in the studies.

In harmony with experiential learning theory, if practical application of knowledge and values is an integral component of holistic development, then adolescents not only help others when they perform acts of service but they also benefit in the process as they grow and mature. Therefore it is crucial to observe and recognize changes that surface over time in adolescents' service involvement patterns. This information could potentially encourage parents and educators to foster in students the desire to engage more intentionally in service to others.

Another aim of this study was to explore the connections between adolescents' commitment to religious values and beliefs and their participation in service. Results

from data analysis show significant relationship between indices of adolescents'

commitment to religious values and beliefs, and indices of active participation in service.

The connection between a person's system of beliefs and values and his/her involvement

in Christian service has been recognized by numerous scholars and has been extensively

documented in the literature (Allport, 1957; Bell, 2003; Donahue & Nielsen, 2005;

Howard, 2008; Knight, 2010; Strommen & Hardel, 2000; Zinnbauer & Pargament, 2005;

Zustiak et al., 2003).

The theory base undergirding this study supports these findings because it

highlights the essential interaction that needs to exist between the conceptual and the

practical domains in order for meaningful spiritual growth to occur. Therefore the

spiritual values and religious beliefs adolescents adopt on a cognitive and affective level

need to find reflection through practical application of those principles. In harmony with

the teaching of the Bible, a person's love for God needs to find reflection in one's love

for others (see Deut 6:5; Lev 19:18; Matt 22:37, 39, 40; 25:31–46; Rom 13:9; Jas 2:14–

17, 24, 26). Thus, Christian service is the outward manifestation, or the living out in

practice, of one's professed faith in God. In this light adolescents' service involvement

not only promotes their holistic development, but also helps reinforce their faith in God

as well as their commitment to the spiritual and religious values they have embraced.

The third goal of this study was to investigate the relationship between home,

church, and school variables and adolescents' involvement in service. Findings from this

research confirm the significant relationship that exists between spiritual influences in the

home and adolescents' engagement in service. This relationship that exists between

parental influences and adolescents' service involvement receives wide recognition in the

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literature (Bunge, 2008; Collier & Dowson, 2008; Dudley & Walshe, 2009; Furrow et al., 2004; Gillespie et al., 2004; King, 2003; Knight, 2010; Lee et al., 1997; Markstrom et al., 2010; Myers et al., 2008; Regnerus et al., 2004; C. Smith & Denton, 2005; Strommen & Hardel, 2000). The significant role of Christian education in guiding adolescents' values and actions has also been confirmed by a number of studies (Collier & Dowson, 2008; Feenstra, 2011; Gillespie et al., 2004; Hopkins et al., 2009; Howard, 2008; Hugen et al., 2006; Myers & Jackson, 2008; Regnerus et al., 2004). Finally findings from this study are consistent with the literature in regard to the significant relationship that exists between indices of spiritual influences at church and indices of adolescents' involvement in service (Dudley, 2000; Dudley & Walshe, 2009; Furrow et al., 2004; Gane, 2005; Gillespie et al., 2004; C. Smith, 2003; C. Smith & Denton, 2005).

These results that support the connection between spiritual influences in the home, at church, and at the Seventh-day Adventist school and adolescents' involvement in service are also in line with the thoretical basis that informs the present study. The spiritual influences to which a person is exposed pertain to the affective domain and Kolb's (1984) learning theory accounts for the crucial role that the relational elements play in the learning and developmental processes. Thus through modeling of desired Christian values and active involvement in service, parents, teachers, and religious educators could positively influence adolescents' spiritual growth and holistic development while nurturing in them the spirit of practical Christianity.

Conclusions and Recommendations

Stemming from the results of this study several conclusions emerge. Findings indicated that there are significant differences between the first, the second, and the third

administrations of *Valuegenesis*, in connection with the service involvement variables

selected for this study: Horizontal Faith, Evangelism, Altruism. Meanwhile results from

this study support the hypothesis that there is a significant relationship between

adolescents' commitment to religious values and Seventh-day Adventist beliefs, and their

involvement in service. Findings also revealed a significant relationship between home,

church, and school variables and adolescents' involvement in service to others. These

conclusions lead to a number of recommendations for practice (parents and religious

educators), for curriculum design, and for further research.

For Practice

In the Home

Results from this study show that the more frequent and positive the family

worship, the faith-related experiences at home, the quality of family worship, the family

climate, and overall the parental influences on faith-development, the stronger is the

willingness of adolescents to participate actively in service to others. However, the results

also present some reasons for concern. While on average students rated their family

climate to be loving ($M = 5.00$, $SD = 1.01$) and their family worship as meaningful ($M =$

1.57, $SD = .20$), they also reported the frequency of their family worship very low, where

the average student experiences family worship only twice or three times a month ($M =$

4.00, $SD = 2.41$). They also indicated that usually the person leading out in family

worship was their mother ($M = 2.41$, $SD = 1.13$). Meanwhile students indicated that they

do not see how religiousness affects their parents' daily lives (Father's religiousness: $M =$

4.68, $SD = 1.61$; Mother's religiousness: $M = 5.24$, $SD = 1.21$). Furthermore students

reported that their conversations on spiritual matters with the father occur approximately

once a month (*M* = 3.98, *SD* = 2.20) and with the mother about twice or three times a month (*M* = 4.66, *SD* = 2.14).

Looking at these results it is not surprising that while on average students attending Seventh-day Adventist schools accept the doctrines of the Adventist Church (*M* = 4.44, *SD* = .48), they are less strongly committed when it comes to their personal devotional life. While the participants reported having a sound understanding of the Bible (*M* = 3.89, *SD* = .92) and the writings of Ellen G. White (*M* = 4.42, *SD* = 1.34), they only engage in personal devotional practices 1–3 times a month (*M* = 3.40, *SD* = 1.10). Meanwhile they seldom participate in family service projects (*M* = 2.40, *SD* = .93).

Stemming from the results of this study, there are several recommendations that will prove beneficial to parents who take to heart the spiritual development of their children.

1. First of all, parents need to take their personal relationship with God seriously and to have a consistent Christian daily devotional life that translates in their daily interactions and practices. Only when the spiritual practices are modeled and lived out in practice can parents expect their children to follow their example and to grow spiritually.

2. Secondly, it is of vital importance that parents invest time and effort in daily family worship. When family worship is carried out consistently and with the right attitudes and motives it promises to be one of the most favorable grounds for the spiritual growth of children/adolescents. It is there that parents and children could engage in conversation on spiritual matters while receiving guidance from the Word of God.

3. Fathers need to take seriously their responsibility as spiritual leaders of their families in leading out in family worship and conversing with their children on spiritual,

faith-building topics. Meanwhile mothers are strongly encouraged to take their role, parental responsibilities, and spiritual influence most seriously, knowing that these will go a long way in determining the outcome of their children's character and direction in life.

4. Parents who are passionate about practicing their faith by serving others can potentially leave a legacy of service involvement to their children. Again, modeling is of key importance in encouraging children and youth to practice what they believe.

5. Intentional effort on the part of parents in creating opportunities for adolescents to help others and be involved in community service initiatives will go a long way in leading them to adopt a service-oriented mind-set, enabling them to participate in voluntary service that makes a difference in the lives of others.

At Church

This study also revealed the significant relationship that exists between the influences to which adolescents are exposed at church and their commitment to service. Thus high scores on faith-related experiences at church, on the quality of religious education at church, and on meaningfulness of youth programing at church, were related to high scores on involvement in service. However some facts pose questions and represent reason for deep reflection concerning the approaches of the church towards the children and youth.

While adolescents see their church community as occasionally having a good impact on them ($M = 3.06$, $SD = .49$) and the young adult programs as being important ($M = 1.24$, $SD = .43$), they do not feel that the various church activities and influences have much of an impact on their spiritual growth ($M = 3.29$, $SD = .92$). Also, they view

the adults and youth at their church as individuals who occasionally care about them ($M =$ 2.65, $SD = .75$), and the church leaders as open and friendly at times ($M = 4.19$, $SD =$ 1.17).

Although these results are not very negative, they speak volumes about the current needs in our churches. Hence the following recommendations may be helpful:

1. First of all, religious educators at church as well as church leaders and members need to build positive relationships with the youth. According to May et al. (2005),

> Personal, meaningful relationships are crucial for nurture in the faith community. We might think of relationships as the nerves that carry messages of love, understanding, insight, and pleasure from person to person in the body of Christ. Without relationships, few messages reach their intended receiver. (p. 144)

2. Church leaders need to accept, care for, and love unconditionally the young. Adolescents need to sense that they are welcome as useful and valued participants in the congregational experience of the church. In fact the church truly needs the youthful energies, enthusiasm, and creativity that youth can offer and, if rightly channeled, their gifts will prove to be of immense value to the community of believers.

3. Leaders, educators, and members at church need to make efforts to learn the names of the children and youth and to consistently express their care and concern for their well-being.

4. Next, the church needs to build partnerships with the parents of the children and youth. Since adolescence is an age of great changes where values, practices, and beliefs are frequently analyzed, questioned, and tested, it will be of great comfort for parents if the church walks alongside and encourages them by taking an active role in their children's guidance.

5. Parents will themselves find the church to be a larger family where their parenting efforts will be matched with the supportive efforts of church leaders and members in helping the adolescents on their spiritual journey. Garber (2007) argues, based on research, that young adults remain faithful Christians in college thanks to three major spiritual forces: (a) established worldview, (b) supportive community, and (c) a mentor of significance. In this light, with parental approval, church members could become mentors for adolescents who appreciate the guidance of the more mature and experienced adults.

6. As with any other skill and area of development, spiritual values and practices find expression through practice. The church can do a lot to contribute to and facilitate adolescents' spiritual development by engaging them actively in the life of the faith community. Ways this can be done are by enlisting the contribution of the young in church programing, taking into consideration their talents and aptitudes.

7. Serving at church in any capacity helps adolescents discover their gifts and provides future direction to improve and utilize their God-given talents to bless others and to develop personally. Therefore church leaders and religious educators need to create opportunities for adolescents to engage actively in service, preparing them to lead productive lives.

In the Seventh-day Adventist Schools

The strong relationship between school influences and students' engagement in voluntary service is also supported through the results of this study. In this sense, positive faith-related experiences at school, positive school influences on faith-development, and

meaningfulness attributed to school programs were significantly related to adolescents' service to others.

However findings also show that only occasionally did students talk to their teachers about God and faith-related matters during the previous years ($M = 2.57$, $SD = 1.03$). Considering that adolescents talk even more rarely to their pastor about spiritual matters, these results may seem somewhat encouraging in support of the importance of the teachers' role in spiritually guiding the young. However, there is definitely room for improvement. Although students in Seventh-day Adventist schools rated spiritual programming at school as meaningful ($M = 1.28$, $SD = .45$), and considered that their school occasionally exerted a positive influence on them ($M = 3.14$, $SD = .46$), they did not view the religious programing and the school staff as having a great impact on their spiritual growth ($M = 3.47$, $SD = .82$).

Considering these findings, here is a set of recommendations for schools:

1. There is need for the Seventh-day Adventist schools to reflect on God's original plan for the church school and to rise to the challenge of fulfilling their calling.

2. Seventh-day Adventist schools should aim at further enhancing adolescents' spiritual development that was begun in the home and at church.

3. The metaphor of the three-legged stool is often used as a trademark of Adventist education to represent the partnership that needs to exist between the home, the church school, and the church in order to support the consistent spiritual development of the young.

4. Many a child may not receive much support or spiritual fulfillment at home or in the church. For these and other reasons it is the school's mandate to provide the

spiritual nourishment that children and adolescents need in order to grow and thrive spiritually.

5. Consistent with findings by Gillespie et al. (2004) that a positive school climate contributes significantly to adolescents' "intrinsic faith experiences" (p. 82), teachers and school administrators need to think seriously about their influence, which could help adolescents to embrace a life of service to others.

6. School administrators can do a lot to ensure that their school is an inclusive, warm, and welcoming environment. Their role is to cast a vision that the school staff and students may embrace and follow.

7. Administrators need to strive for greater accountability on the side of teachers and students where spiritual matters and school programing are concerned.

8. There is need for closer monitoring of meaningful faith-based interactions in relational venues where students are encouraged to voice spiritual needs and are guided by committed Christian staff to follow Christ.

9. However teachers play an especially significant role in guiding adolescent students toward maturation on many levels. Their aim should be not only to promote students' academic development but also to facilitate their overall progress, including their spiritual, physical, intellectual, and social development.

10. Teachers need to enlist the help and support of the parents in order to get to know and properly instruct the students in their care. Positive partnerships between the home and the school can potentially secure trust-based and meaningful relationships between teacher and student.

11. Since, particularly in adolescence, students need to have positive relationships with their teachers and peers in order to thrive in school, teachers will be more effective in reaching their young audience cognitively, spiritually, and emotionally if they maintain positive rapport with their students.

12. The effective teacher will strive to maintain integrity and consistency in what he/she teaches and how he/she lives. Especially when imparting religious knowledge and spiritual values, teachers need to show in daily interactions how cognitively acquired knowledge and truths apply in practice.

13. Consistent with the literature (Billig, 2000; Feenstra, 2011; Hopkins et al., 2009; Howard, 2008; Hugen et al., 2006; Myers & Jackson, 2008; Planty et al., 2006), service-learning appears to be one of the most effective ways for schools to build partnerships with the community through service. In light of the mission of the Seventh-day Adventist school system, service learning could function as an effective tool that would benefit both the community and the students.

14. By promoting voluntary-service initiatives, schools will not only support the communities but also help the students to discover and develop their skills and talents while serving others.

15. Adventist schools can do a lot to add a spiritual element to every service project and service initiative in order to highlight the strong connection that exists between loving God and serving people.

16. When religious educators, teachers, and administrators take their responsibility towards the students seriously, knowing that their influence through words

and actions has lasting impact on the learners, they will potentially contribute to the spiritual growth and service involvement of the adolescents in their care.

For Curriculum Designers

Numerous research studies in recent decades have highlighted the positive impact of student involvement in voluntary service (Carlo et al., 2010; Deeley, 2010; Dudley, 2000; Feenstra, 2011; Gillespie et al., 2004; Howard, 2008; Koliba et al., 2006; Myers et al., 2008).

1. For this reason planned educational curricula and church programming are needed that will advance service initiatives for children, adolescents, and young adults.

2. Educational models such as "service learning" build on students' cognitive, affective, and practical strengths and are in line with a holistic approach to education (Deeley, 2010). Therefore school curricula and religious education programing that aim at incorporating voluntary service initiatives contribute potentially to students' well-rounded development.

For Further Research

1. This study has also provided background information on adolescent development, learning theory, and current philosophical and theological ideologies that impact on adolescents' worldview formation. These are areas that could be explored in detail in subsequent research.

2. It would be beneficial if future studies on *Valuegenesis* could investigate a number of other factors that potentially contribute to, or facilitate adolescents' involvement in service.

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3. It would also be useful if further research on *Valuegenesis* would explore the implications of adolescents' service involvement to other areas of their lives and to their overall development.

Final Thoughts

In conclusion, religious educators whether in the home, at church, or at school play a key role in providing to adolescents spiritual lessons that are broader than cognitive in focus. Spiritual guidance offered through personal example and modeling could potentially lead adolescents to choose a life that is consistent with the Christian principles of serving and loving God and others wholeheartedly (Luke 10:27). Results from this study will be beneficial to parents, church leaders, and teachers who are directly involved in the spiritual nurture of students.

Meanwhile, given that findings from this research are consistent with literature in the field, the present study has the potential to inform researchers and spark further interest in exploring factors that contribute to and relate to adolescents' willingness to participate in service activities. The link between the commitment to spiritual values and beliefs, and service involvement could be further examined employing additional indices that describe the variables. Similarly research studies based on *Valuegenesis* could further explore the relationship between spiritual influences at home, at school, and at church, in relationship to other variables that describe adolescents' spiritual values and practices. Meanwhile research that draws extensively on the three *Valuegenesis* studies could offer many more insights into the changes that have surfaced over the years in regard to adolescents' values, beliefs, and behaviors.

APPENDIX

TABLES LISTING THE VARIABLES USED IN THIS STUDY

Table 13

Service-Involvement Items in Valuegenesis[1], Valuegenesis[2], and Valuegenesis[3]

Survey #, Item #, item	Valuegenesis[1]			Valuegenesis[2]			Valuegenesis[3]		
	N	M	SD	N	M	SD	N	M	SD
How true are each of the following statements for you? 1 = Never, 2 = Rarely, 3 = Once in a while, 4 = Sometimes, 5 = Often	13,266	3.91	1.11	11,481	3.07	0.76	11,586	3.15	0.76

V[1], 4; V[2], 1; V[3], 1
    I help others with their religious questions and struggles.

V[1], 18; V[2], 3; V[3], 3
    I feel a deep sense of responsibility for reducing pain
    and suffering in the world.

V[1], 21; V[2], 4; V[3], 4
    I give significant portions of time and money to help other people.

V[1], 23; V[2], 5; V[3], 5
    I feel God's presence in my relationships with other people.

V[1], 28; V[2], 7; V[3], 7
    I care a great deal about reducing poverty in my country
    and throughout the world.

V[1], 29; V[2], 8; V[3], 8
    I try to apply my faith to political and social issues.

Table 13—*Continued*.

Survey #, Item #, item	Valuegenesis[1]			Valuegenesis[2]			Valuegenesis[3]		
	N	M	SD	N	M	SD	N	M	SD
How often have you done each of the following during the last year? 1 = 1–2 times, 2 = 3–5 times, 3 = 6–9 times, 4 = 10–19 times, 5 = 20–39 times, 6 = 40 or more times	13,261	2.46	1.25	11,450	2.17	1.12	11,503	2.23	1.22

V[1], 46; V[2], 18; V[3], 59
 Tried directly to encourage someone to believe in Jesus Christ.

V[1], 47; V[2], 19; V[3], 60
 Told others about the work of God in your life.

V[1], 48; V[2], 20; V[3], 61
 Tried directly to encourage someone to join the Adventist
 Church.

How many volunteer hours do you spend on each of the following during the typical month? 1 = 0 hours, 2 = 1–2 hours, 3 = 3–5 hours, 4 = 6–10 hours, 5 = 11–20 hours, 6 = more than 20 hours	13,264	2.10	0.89	11,480	2.28	0.94			

V[1], 49; V[2], 21
 Helping people who are poor, hungry, sick, or unable to care
 for themselves.

V[1], 50; V[2], 22
 Helping friends or neighbors with problems they have.

V[1], 51; V[2], 23
 Promoting social equality (for example, racial equality,
 women's rights, economic reform or world peace.)

V[1], 52; V[2], 24
 Making your own town or city a better place to live

Table 13—*Continued.*

Survey #, Item #, item	Valuegenesis[1]			Valuegenesis[2]			Valuegenesis[3]		
	N	M	SD	N	M	SD	N	M	SD
Here are a few questions about how many times each week you voluntarily engage in helpful activities for other people. 1 = Never, 2 = less than once per week, 3 = 1–2 times per week, 4 = 3–5 times per week, 5 = 5 or more times per week.							10,220	2.08	0.65
V[3], 324 Tutoring students									
V[3], 325 Volunteer work with community agencies									
V[3], 326 Volunteer work in hospitals									
V[3], 327 Volunteer work in a religious organization									
V[3], 328 Volunteer work with youth groups									
V[3], 329 Helping neighbors with yard work									
V[3], 330 Other types of volunteer work									
V[3], 331 How much do you enjoy helping other people? 1 = I don't enjoy it at all, 2 = I don't enjoy it much, 3 = I feel neutral, 4 = I enjoy it, 5 = I enjoy it very much							9,984	3.97	0.87
V[3], 332 How interested are you in joining other students in activities every week designed to be helpful to people in need? 1 = Not at all interested, 2 = Interested, 3 = A bit interested, 4 = Very interested							9,995	2.69	0.92

∗ V[1], V[2], and V[3] are abbreviations for Valuegenesis[1], Valuegenesis[2], and Valuegenesis[3]

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Table 14

Items and Scales Associated with Adolescents' Commitment to Religious Values and Beliefs of the Seventh-day Adventist Church Based on Valuegenesis[3]

Scales/single items	Questions	*N*	*M*	*SD*
Faith Maturity (Vertical Faith)	How true are each of the following statements for you? 1 = Never, 2 = Rarely, 3 = Once in a while, 4 = Sometimes, 5 = Often 2. I seek out opportunities that help me grow spiritually. 6. I feel my life is filled with meaning and purpose. 9. The things I do reflect a commitment to Jesus Christ. 10. I talk with other people about my faith. 11. I have a real sense that God is guiding me. 12. I am spiritually moved by the beauty of God's creation.	11,586	3.73	0.77
Commitment to Jesus Christ	13. Which of the following best describes your commitment to Jesus Christ? 1 = I am not committed to Christ, 2 = I am not sure if I am committed to Christ, 3 = I committed my life to Christ at a specific moment in my life, but it didn't last, 4 = My commitment to Christ has developed gradually over a period of time, 5 = I've been committed to Christ since I was a young child, and continue to be committed to Christ.	11,543	3.97	0.99
Importance of Religious Faith	14. How important is religious faith in your life? 1 = It is the most important influence in my life, 2 = It is a very important influence in my life, 3 = It is an important influence, but other things are also important in my life, 4 = It has some influence in my life, 5 = It is not an important influence in my life.	11,522	2.36	0.99

Table 14—*Continued.*

Scales/single items	Questions	*N*	*M*	*SD*
Personal devotion	How often, if ever, do you do each of the following? 1 = Never. 2 = Less than once a month, 3 = 1–3 times a month, 4 = About once a week, 5 = Several times a week, 6 = Once a day, 7 = More than once a day 62. Pray other than at church or before meals. 63. Watch religious programs on television. 64. Listen to religious radio programs. 66. Read my Bible on my own. 67. Read the writings of Ellen G. White on my own.	11,570	3.40	1.10
Belief Orthodoxy	How strongly do you believe each of the following statements? 1 = I have never heard of this, 2 = I definitely do not believe this, 3 = I am uncertain, but lean toward not believing, 4 = I am uncertain, but lean toward believing, 5 = I definitely believe this. 81. God created the world in six 24-hour literal days. 82. Jesus will come back to earth again and take the righteous to heaven. 83. The Ten Commandments still apply to us today. 84. The true Sabbath is the seventh day—Saturday. 85. The investigative or pre-advent judgment in heaven began in 1844. 86. When people die, they remain in the grave until the resurrection. 87. The wicked will not burn forever but will be totally destroyed. 88. Ellen G. White fulfills Bible predictions that God would speak through the gift of prophecy in the last days. 89. The Seventh-day Adventist Church is God's true last-day church with a message to prepare the world for the Second Coming of Christ.	11,568	4.44	0.48

Table 14—*Continued.*

Scales/single items	Questions	N	M	SD
	90. Our bodies are the temple of God, and we are responsible in every area of life for its care.	11,568	4.44	0.48
	91. There is one God: Father, Son, and Spirit, a unity of three eternal Persons.			
	92. God, our Heavenly Father, is the Source, Sustainer, and Ruler of the universe.			
	93. Jesus is truly and eternally God.			
	94. Jesus became truly and fully human.			
	95. God, the Holy Spirit, teaches us how much we need Jesus in our lives, draws us to Jesus, and makes us grow like Him.			
	96. The first man and woman, created as free beings in the image of God, chose to rebel against God. We have inherited their fallen nature along with all its consequences.			
	97. There is a great controversy taking place between God and Satan. It began in heaven with the rebellion of Lucifer and will continue until the end of time.			
	98. The church is God's family on earth, a community of faith in which many members, all equal in Christ, who join for worship, instruction, and service.			
	99. Baptism is a public testimony that we have accepted Jesus and want to be involved in His church.			
	100. Taking part in the Communion Service expresses thanks to Jesus for saving us.			
	101. God has given spiritual gifts to each of us that we can use in ministry.			
	102. We acknowledge God's ownership of earth and all its resources by returning tithes and giving offerings.			
	103. Marriage is a loving union that should be entered into only by people who share a common faith (members of the same denomination/church).			
	104. The end-time millennium (1,000 years) begins with the Second Coming of Jesus when the righteous are taken to heaven and ends with the final destruction of the wicked.			
	105. After the millennium, God will recreate the earth as a perfect, eternal home of the redeemed. Sin will never exist again.			
	106. The Adventist church believes in "present truth" that means beliefs might change over time.			

Table 14—*Continued*.

Scales/single items	Questions	*N*	*M*	*SD*
Understanding Of what the Bible is	119. Mark the statement that is closest to your understanding of what the Bible is. The Bible contains no more truth or wisdom than do the religious books of other world religions. The Bible is the work of people who collected stories that had been created to explain the mysteries of life. It contains a great deal of wisdom about the human experience. The Bible is the work of people who genuinely loved God and who wanted to share their understanding of God's activity in the world. The Bible is the work of people who were inspired by God and who presented God's message in terms of their own place and time. The Bible is the work of people who copied what God told them word for word, and who wrote without being influenced by their own place and time.	11,300	3.89	0.92
Understanding of the Writings of Ellen White	120. Mark the statement that is closest to your understanding of the writings of Ellen G. White: 1 = I don't know what Ellen G. White is. 2 = Ellen G. White's writings contain no more truth or wisdom than do the religious works written by leaders of other denominations. 3 = Ellen G. White was a person who created stories of supernatural guidance in order to explain the mysteries of life. Her writings contain a great deal of wisdom about the human experience. 4 = Ellen G. White genuinely loved God and wrote in order to share her understanding of God's activity in the world. 5 = Ellen G. White was inspired by God and presented God's message in terms of her own place and time. 6 = Ellen G. White copied what God told her word for word, and wrote without being influenced by her own place and time.	11,332	4.42	1.34

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Table 14—*Continued*.

Scales/single items	Questions	*N*	*M*	*SD*
Priority of having A personal relationship With God	How much do you agree or disagree with this statement? 1 = I don't know, 2 = Disagree strongly, 3 = Disagree somewhat, 4 = Agree somewhat, 5 = Agree strongly.			
	367. Having a close, personal relationship with God is a top priority in my life.	9,481	4.17	1.98
Importance of Religious Faith in shaping Daily life	398. How important or unimportant is religious faith in shaping how you live your daily life? 1 = Extremely important, 2 = Very important, 3 = Somewhat important, 4 = Not very important, 5 = Not important at all.	9,001	2.17	0.94

Table 15

Items and Scales Associated With Home, School, and Church Variables Based on Valuegenesis[3]

Scales/single items	Questions	*N*	*M*	*SD*
Home Variables				
Faith-related Experiences at home	In the last few years, how often did you do or experience each of these things? 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often	11,582	2.69	0.77
	52. Participate in family projects to help other people. 57. Talk to my parents about God or faith.			
Frequency of Family worship	184. How often does your family have family worship? 1 = Never, 2 = Less than once a month, 3 = About once a month, 4 = About 2–3 times a month, 5 = About once a week, 6 = Several times a week, 7 = Once a day, 8 = More than once a day.	11,200	4.00	2.41
Nature of Family worship	185. Which of the following best describes the way in which your family most often worships together? 1 = We hardly ever worship together, 2 = Mostly reading together, 3 = Mostly praying together, 4 = Mostly sharing our ideas with each other, 5 = Usually a combination of the above.	8,669	3.42	1.56
Leading Family worship	186. Who is usually in charge of your family's worship experience? 1 = Usually father leads out, 2 = Usually mother leads out, 3 = Usually the whole family shares worship, 4 = Usually a combination of the above.	8,631	2.41	1.13
Quality of Family Worships	When you think about family worship or other religious events in your home, which of these apply? 1 = No, 2 = Yes. Answer Yes or No to each statement: 187. It is interesting. 188. It is meaningful. 189. It is a waste of time.	8,708	1.57	0.20

Table 15—*Continued*.

Scales/single items	Questions	*N*	*M*	*SD*
Family Climate	How much do you agree or disagree with each of the following statements? 1 = No opinion, 2 = I definitely disagree, 3 = I tend to disagree, 4 = I'm not sure, 5 = I tend to agree, 6 = I definitely agree. 196. My family life is happy. 197. There is a lot of love in my family. 198. I get along well with my parents. 199. My parents give me help and support when I need it. 200. My parents often tell me they love me.	11,303	5.00	1.01
Frequency of Participation in Family service projects	208. Do you participate in family projects to help other people? 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often.	11,231	2.40	0.93
Father's religiousness	209. Which of the following best describes, in your opinion, the way your father is religious? 1 = This question does not apply to me, 2 = He is not religious at all, 3 = He is not very religious, 4 = He does religious things, but it doesn't seem to matter much how he leads his life, 5 = Although he is religious, it is not easy to tell how it impacts his life, 6 = He is deeply religious. It is evident that his faith has a big impact on how he lives his life.	11,160	4.68	1.61
Mother's religiousness	210. Which of the following best describes, in your opinion, the way your mother is religious? 1 = This question does not apply to me, 2 = She is not religious at all, 3 = She is not very religious, 4=She does religious things, but it doesn't seem to matter much how she leads her life, 5 = Although she is religious, it is not easy to tell how it impacts her life, 6 = She is deeply religious. It is evident that her faith has a big impact on how she lives her life.	11,124	5.24	1.21

Table 15—*Continued.*

Scales/single items	Questions	*N*	*M*	*SD*
Frequency of Faith-related talk With father	211. How often does your father talk with you about his faith or religious experiences he has had? 1 = This question does not apply to me, 2 = Never, 3 = Less than once a month, 4 = About once a month, 5 = About 2-3 times a month, 6 = About once a week, 7 = Several times a week, 8 = Once a day, 9 = More than once a day.	11,105	3.98	2.20
Frequency of Faith-related talk With mother	212. How often does your mother talk with you about her faith or religious experiences she has had? 1 = This question does not apply to me, 2 = Never, 3 = Less than once a month, 4 = About once a month, 5 = About 2–3 times a month, 6 = About once a week, 7 = Several times a week, 8 = Once a day, 9 = More than once a day.	11,088	4.66	2.14
Parental influences On religious development	How much has each of the following helped you develop your religious faith? 1 = Does not apply to me, 2 = Not at all, 3 = Not too much, 4 = Somewhat, 5 = Very much 246. Family worship. 247. Mother's faith. 248. Father's faith. 249. Grandparent's faith. 252. The family I grew up in.	10,963	3.63	1.01
Faith-related Experiences at church	In the last few years, how often did you do or experience each of these things? 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often 53. Experience the feeling that adults in my local church 54. Experience the feeling that youth in my local church care about me. 56. Talk to my local pastor about God or faith.	11,580	2.65	0.75

Table 15—*Continued*.

Scales/single items	Questions	*N*	*M*	*SD*
Church Variables				
Church influences On religious Development	How much has each of the following helped you develop your religious faith? 1 = Does not apply to me, 2 = Not at all, 3 = Not too much, 4 = Somewhat, 5 = Very much 232. Sabbath School. 234. Church services. 244. Religious youth organizations at church (i.e., AY—Adventist Youth) 254. Conference youth camps. 256. Evangelistic outreach (i.e., giving Bible studies, distributing books) 257. Conference youth rallies. 258. My church youth pastor. 259. My pastor.	11,057	3.29	0.92
Quality of religious Education at church	Think about your experiences with religious education at your church. For each of these statements, tell how true it is for you. 1 = Does not apply, 2 = Not at all true, 3 = Slightly true, 4 = Somewhat true, 5 = True, 6 = Very true 350. Programs at my church are interesting. 351. Programs at my church make me think. 352. My pastors or adult leaders know me well. 353. My adult leaders are warm and friendly. 354. I can be myself when at church. 355. My adult leaders care about me. 356. I go to things at church because I want to.	9,888	4.19	1.17

Table 15—*Continued.*

Scales/single items	Questions	*N*	*M*	*SD*
Meaningfulness of youth Programs at church	357. I find the youth or young adult programs meaningful at my church. 1 = Yes, 2 = No.	9,554	1.24	0.43
Positive church Influences	My home church… Choose from these answers: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Usually.	9,489	3.06	0.49
	395. Inspires thinking. 396. Is boring. 397. Is warm and welcoming.			

School Variables

Scales/single items	Questions	*N*	*M*	*SD*
Faith-related Experiences at school	In the last few years, how often did you do or experience each of these things? 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often			
	55. Talk to a teacher at school about God or faith.	11,553	2.57	1.03
School influences On religious Development	How much has each of the following helped you develop your religious faith? 1 = Does not apply to me, 2 = Not at all, 3 = Not too much, 4 = Somewhat, 5 = Very much	11,039	3.47	0.82
	235. Dormitory or morning worship at school. 236. Weekly chapels at school. 237. Bible classes at school. 238. Week of prayer at school. 239. Student week of prayer at school. 240. Bible/Leadership camps through school. 241. Community outreach at school. 242. My Bible teacher. 243. Short-term mission projects. 251. Teacher's faith. 253. Attending an Adventist school. 255. Campus chaplain.			

Table 15—*Continued*.

Scales/single items	Questions	*N*	*M*	*SD*
Meaningfulness of Youth programs At school	357. I find the youth or young adult programs meaningful at my school. 1 = Yes, 2 = No.	9,562	1.28	0.45
Positive school Influences	My school… Choose from these answers: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Usually. 399. Inspires thinking. 400. Is boring. 401. Is warm and welcoming.	9,483	3.14	0.46

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Allport, G. W. (1950). *The individual and his religion: A psychological interpretation.*
    Oxford, England: Macmillan.

Allport, G. W. (1957). *The individual and his religion.* New York, NY: Macmillan.

Allport, G. W. (1966). The religious context of prejudice. *Journal for the Scientific Study*
    of Religion, 5, 447-457.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice.
    Journal of Personality and Social Psychology, 5, 447-457.

Anderson, A. L. H., & Smith, A. B. (1999). Community building with parents.
    Kappa Delta Pi Record, 35(4), 158-161.

Bacchini, D., & Magliulo, F. (2003). Self-image and perceived self-efficacy during
    adolescence. *Journal of Youth and Adolescence, 32*(5)*,* 337-350.

Bandura, A. (1969). *Principles of behavior modification.* New York, NY: Holt, Rinehart
    and Winston.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.*
    Englewood Cliffs, NJ: Prentice-Hall.

Barna, G. (2003). *Transforming children into spiritual champions: Why children should*
    be your church's #1 priority. Ventura, CA: Regal Books.

Beagles, K. (2009). *The validity of the growing disciples in community model*
    among adolescents in Seventh-day Adventist schools in North-America (Doctoral
    dissertation). Available from ProQuest Dissertations and Theses database. (UMI
    No. 3458391)

Bell, S. (2003). *A time to serve: Church leadership for the 21st century.* Lincoln,
    NE: Advent*Source*.

Benson, P. L., Donahue, M. J., & Erickson, J. A. (1993). The Faith Maturity Scale:
    Conceptualization, measurement, and empirical validation. *Research in the Social*
    Scientific Study of Religion, 5, 1-26.

Benson, P. L., & Roehlkepartain, E. C. (1993). *Beyond leaf raking: Learning to serve/Serving to learn.* Nashville, TN: Abingdon Press.

Benson, P. L., Roehlkepartain, E. C., & Rude, S. P. (2003). Spiritual development in childhood and adolescence: Toward a field of inquiry. *Applied Developmental Science, 7*(3)*,* 205-213.

Berger, E. (1999). *Raising children with character: Parents, trust and the development of personal integrity.* Northvale, NJ: Jason Aronson.

Berger, P. L. (1990). *The sacred canopy: Elements of sociological theory of religion.* Garden City, NY: Anchor Books.

Billig, S. H. (2000). Research on K-12 school-based service learning. *Phi Delta Kappan,* 658-664.

Bunge, M. J. (2008). Biblical and theological perspectives on children, parents, and 'best practices' for faith formation: Resources for child, youth, and family ministry today. *Dialog: A Journal of Theology, 47*(4)*,* 348-360.

Burton, L. (2011). *Handout on curriculum theory*. Unpublished manuscript, Department of Curriculum and Instruction, Andrews University, Berrien Springs, MI.

Büssing A., Föller-Mancini, A., Gidley, J., & Heusser, P. (2010). Aspects of spirituality in adolescents. *International Journal of Children's Spirituality, 15*(1)*,* 25-44.

Caine, R.N., & Caine, G. (1991). *Teaching and the human brain.* Alexandria, VA: ASCD.

Carlo, G., Knight, G. P., McGinley, M., Zamboanga, B. L., & Jarvis, L. H. (2010). The multidimensionality of prosocial behaviors and evidence of measurement equivalence in Mexican American and European American early adolescents. *Journal of Research on Adolescence, 20*(2)*,* 334-358.

Carlson, R. (1996). *A comparison of faith maturity and denominational loyalty in Seventh-day Adventist students at public and parochial high schools in the Mid America Union based on the Valuegenesis study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9700076)

Coles, R. (1993). *The call of service: A witness to idealism.* Thorndike, ME: G.K. Hall.

Coles, R. (1997). *The moral intelligence of children: How to raise a moral child.* New York, NY: Random House.

Collier, J., & Dowson, M. (2008). The Dayton agenda: Beyond transmissional pedagogies in Christian education; One school's recasting of values education. *Journal of Research on Christian Education, 17*(2)*,* 199-216.

Dahl, R. E., & Hariri, A. R. (2005). Lessons from G. Stanley Hall: Connecting new research in biological sciences to the study of adolescent development. *Journal of Research on Adolescence, 15*(4)*,* 367-382.

Deeley, S. J. (2010). Service-learning: Thinking outside the box. *Active Learning in Higher Education, 11*(1)*,* 43-53.

DeHaan, L. G., Yonker, J. E., & Affholter, C. (2011). More than enjoying the sunset: Conceptualization and measurement of religiosity for adolescents and emerging adults and its implications for developmental inquiry. *Journal of Psychology and Christianity, 30*(3)*,* 184-195.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education.* New York, NY: Macmillan.

Dewey, J. (1938). *Education and experience.* New York, NY: Dover.

Donahue, M. (1990). *Documentation of data Valuegenesis procedures and scale calculations.* Unpublished manuscript, Search Institute, Minneapolis, MN.

Donahue, M. (2002). *Valuegenesis codebook: Scales and other indices employed in the reports.* Unpublished manuscript, Search Institute, Minneapolis, MN.

Donahue, M. J., & Nielsen, M. E. (2005). Religion, attitudes, and social behavior. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 274-291). New York, NY: Guilford Press.

Dudley, R. L. (2000). *Why our teenagers leave the church: Personal stories from a 10-year study.* Hagerstown, MD: Review and Herald.

Dudley, R. L. (2007). *The complex religion of teens: A lifetime of research reveals how adolescents relate to spiritual matters.* Hagerstown, MD: Review and Herald.

Dudley, R. L., & Gillespie, B. (1992). *Valuegenesis: Faith in the balance.* Riverside, CA: La Sierra University Press.

Dudley, R. L., & Walshe, A. (Eds.). (2009). *Ministering with millennials: A complete report on the 180˚ symposium.* Lincoln, NE: Advent*Source*.

Easton, M. G. (1897). *Easton's Bible dictionary* (3rd ed.). Nashville, TN: Thomas Nelson.

Eichas, K., Albrecht, R. E., Garcia, A. J., Ritchie, R. A., Varela, A., Garcia, A., Rinaldi, R., Wang, R., Montgomery, M. J., Silverman, W. K., Jaccard, J., & Kurtines, W. M. (2010). Mediators of positive youth development intervention change: Promoting change in positive and problem outcomes. *Child Youth Care Forum, 39,* 211-237.

Ennis, C. D., & McCauley, M. T. (2002). Creating urban classroom communities worthy of trust. *Journal of Curriculum Studies, 34*(2), 149-172.

Erikson, E. H. (1959). *Identity and the life cycle: Selected papers.* New York, NY: International Universities Press.

Erikson, E. H. (1964). *Childhood and society.* New York, NY: Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York, NY: Norton.

Feenstra, J. S. (2011). Vocational exploration through service: The effect of service-learning on student understanding of God's calling. *Journal of Education & Christian Belief, 15*(1)*,* 65-74.

Fowler, J. W. (1981). *Stages of faith: The psychology of human development and the quest for meaning*. New York, NY: Harper & Row.

Furrow, J. L., King, P. E., & White, K. (2004). Religion and positive youth development: Identity, meaning, and prosocial concerns. *Applied Developmental Science, 8,* 17-26.

Gane, B. A. (2005). *Youth ministry and beliefs and values among 10- to 19-year-old students in the Seventh-day Adventist school system in North America* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3182008)

Gane, B. A., & Kijai, J. (2006). The relationship between faith maturity, intrinsic and extrinsic orientations to religion and youth ministry involvement. *The Journal of Youth Ministry*, *4*(2), 49-64.

Garber, S. (2007). *The fabric of faithfulness.* Downers Grove, IL: InterVarsity Press.

General Conference Ministerial Department. (2005). *Seventh-day Adventists believe.* Boise, ID: Pacific Press.

General Conference policy manual. (2003). Silver Spring, MD. Retrieved from http://circle.adventist.org/files/download/PhilStat2003.pdf

General Conference of Seventh-day Adventists. (2013). Retrieved from
http://www.adventist.org/world-church/

Gillespie, B. (2010). *Valuegenesis 3: Team introduction.* Unpublished manuscript
(PowerPoint slide show).

Gillespie, B. (2011). And . . . you did what? *Valuegenesis³ Update: Research
Information Summary*, *1,* 1-6.

Gillespie, B., Donahue, M., Gane, B., & Boyatt, E. (2004). *Valuegenesis ten
years later: A study of two generations.* Riverside, CA: Hancock Center.

Goleman, D. (2006). *Emotional intelligence*. New York, NY: Bantam Books.

Harris, S., Kaplan, J. T., Curiel, A., Bookheimer, S. Y., Iacoboni, M., & Cohen,
M. S. (2009). The neural correlates of religious and nonreligious belief.
PLoS ONE, 4(10)*,* 1-9.

Henson, K. T. (2003). Foundations for learner-centered education: A knowledge base.
Education, *124*(1), 5-16.

Hill, P., Pargament, K., Hood, R., McCullough, M., Swyers, J., & Larson, D. (2000).
Conceptualizing religion and spirituality: Points of commonality, points of
departure. *Journal for the Theory of Social Behavior, 30,* 52-77.

Hoffman, (1984). Interaction of affect and cognition in empathy. In C. E. Izard, J. Kagan,
& R. Zajonc (Eds.), *Emotions, cognitions, and behavior* (pp. 103-131).
Cambridge, England: Cambridge University Press.

Hopkins, G. L., McBride, D., Tyner, S., & Duffy, J. (2009). Three reasons to serve. In
R. L. Dudley & A. Walshe (Eds.), *Ministering with millennials: A complete
report on the 180˚ symposium.* Lincoln, NE: Advent*Source*.

Howard, E. B. (2008). *The Brazos introduction to Christian spirituality*. Grand
Rapids, MI: Brazos Press.

Hugen, B., Wolfer, T., & Renkema, J. U. (2006). Service and faith: The impact on
Christian faith of community ministry participation. *Review of Religious
Research, 47*(4)*,* 409-426.

Hull, R. (2006). *The complete book of discipleship: On being and making followers of
Christ*. Colorado Springs, CO: NavPress.

Jantos, M. (2007). Spirituality. *Adventist Review, 184*(2), 8-11.

Jensen, E. (2005). *Teaching with the brain in mind* (2nd ed.)*.* Alexandria, VA: ASCD.

Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching* (2nd ed.)*.* Thousand-Oaks, CA: Corwin Press.

Ji, C., Pendergraft, L., & Perry, M. (2006). Religiosity, altruism, and altruistic-hypocrisy: Evidence from Protestant adolescents. *Review of Religious Research, 48*(2), 156-178.

Kainer, G. (2011). Worldviews make a world of difference. *Journal of Adventist Education, 73*(2)*,* 11-15.

King, P. E. (2003). Religion and identity: The role of ideological, social and spiritual contexts. *Applied Developmental Science, 7*(3)*,* 197-204.

Kinnaman, D. (2011). *You lost me*. Grand Rapids, MI: Baker Books.

Kliebard, H. (2004). *The struggle for the American Curriculum: 1893-1958* (3rd ed.). New York, NY: Routledge Falmer.

Knight, G. (1980). *Philosophy and education: An introduction in Christian perspective* (4th ed.). Berrien Springs, MI: Andrews University Press.

Knight, G. (2010). *Myths in Adventism: An interpretive study of Ellen White, education, and related issues.* Hagerstown, MD: Review and Herald.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice-Hall.

Koliba, C. J., Campbell, E. K., & Shapiro, C. (2006). The practice of service-learning in school-community contexts. *Educational Policy, 20*(5)*,* 683-717.

Lee, J., Rice, G., & Gillespie, B. (1997). Family worship patterns and their correlation with adolescent behavior and beliefs. *Journal for the Scientific Study of Religion, 36*(3)*,* 372-381.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*(3)*,* 172-180.

Lewin, K. (1951). *Field theory in social science; selected theoretical papers* (Ed. D. Cartwright). New York, NY: Harper & Row.

Lewin, K. (1970). *A dynamic theory of personality.* New York, NY: McGraw-Hill.

Madden, S. J. (2000). *Service learning across the curriculum: Case applications in higher education.* Lanham, MD: University Press of America.

Marcia, J. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology, 3,* 551-558.

Marcia, J. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology.* New York, NY: Wiley.

Markstrom, C. A., Huey, E., Morris Stiles, B., & Krause, A. L. (2010). Frameworks of caring and helping in adolescence: Are empathy, religiosity, and spirituality related constructs? *Youth and Society, 42*(1)*,* 59-80.

May, S., Posterski, B., Stonehouse, C., & Cannell, L. (2005). *Children matter: Celebrating their place in the church, family, and community.* Grand Rapids, MI: W. B. Eerdmans.

McNamara, K. (2000). Outcomes associated with service involvement among disengaged youth. *Journal of Drug Education, 30*(2)*,* 229-245.

Meeus, W. (2011). The study of adolescent identity formation: A review of longitudinal research. *Journal of Research on Adolescence, 21*(1)*,* 75-94.

Meschke, L. L., Peter, C. R., & Bartholomae, S. (2012). Developmentally appropriate practices to promote healthy adolescent development: Integrating research and practice. *Child Youth Care Forum, 41*(1)*,* 89-108.

Myers, D., Wolfer, T., & Garland, D. (2008). Congregational service-learning characteristics and volunteer faith development. *Religious Education, 103*(3), 369-386.

Myers, J., & Jackson, M. (2008). The freedom of a teenager: Vocation and service-learning as the future of youth ministry. *Dialog: A Journal of Theology*, *47*(4)*,* 327-338.

Newbigin, L. (2001). *The gospel in a pluralist society.* Grand Rapids, MI: W. B. Eerdmans.

Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education.* New York, NY: Teachers' College Press.

North American Division of Seventh-day Adventists. (2011). *NAD mission statement*. Retrieved from http://adventisteducation.org/downloads/pdf/MAU_ETBL_13-14.pdf

Ozmon, H. A. (2011). *Philosophical foundations of education* (9th ed.). Upper Saddle River, NJ: Pearson.

Payne, G., & Payne, J. (2004). Key concepts in social research. In *SAGE research methods encyclopedia*. Retrieved from http://srmo.sagepub.com

Piaget, J. (1970). *Psychology and epistemology: Towards a theory of knowledge.* Middlesex, England: Penguin.

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2008). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses.* New York, NY: Peter Lang.

Planty, M., Bozick, R., & Regnier, M. (2006). Helping because you have to or helping because you want to? Sustaining participation in service work from adolescence through young adulthood. *Youth and Society, 38*(2)*,* 177-202.

Punch, K. F. (2003). *Survey research: The basics.* Thousand Oaks, CA: Sage.

Rasi, H. M. (2008). Adventist education and the challenge of postmodernism. *Journal of Adventist Education, 71*(2)*,* 11-16.

Ratcliff, D. (Ed.). (2004). *Children's spirituality: Christian perspectives, research and applications.* Eugene, OR: Cascade Books.

Regnerus, M. D., Smith, C., & Smith, B. (2004). Social context in the development of adolescent religiosity. *Applied Developmental Science, 8*(1), 27-38.

Rice, G. T., & Gillespie, V. B. (1993). *Valuegenesis* (Report No. 4). Loma Linda University School of Public Health, John Hancock Center for Youth Ministry.

Roehlkepartain, E. C., Benson, P. L., King, P. E., & Wagener, L. M. (2006). Spiritual development in childhood and adolescence. In P. L. Benson, E. C. Roehlkepartain, P. E. King, & L. Wagener (Eds.), *The handbook of spiritual development in childhood and adolescence* (pp. 1-15). Thousand Oaks, CA: Sage.

Rousseau, J. J. (1762). *Emile.* New York, NY: J. M. Dent & Sons.

Schwartz, S. J. (2002). In search of mechanisms of change in identity development: Integrating the constructivist and discovery perspectives on identity. *Identity: An International Journal of Theory and Research, 2*(4)*,* 317-339.

Schwartz, S. J., Pantin, H., Coatsworth, J. D., & Szapocznik, J. (2007). Addressing the challenges and opportunities for today's youth: Toward an integrative model and its implications for research and intervention. *The Journal of Primary Prevention, 28,* 117-144.

Sherr, M. E., Garland, D. R., & Wolfer, T. A. (2007). The role of community service in the faith development of adolescents. *The Journal of Youth Ministry, 6*(1)*,* 43-54.

Sire, J. W. (2009). *The universe next door: A basic worldview catalog* (5th ed.). Downers Grove, IL: InterVarsity Press.

Smith, C. (2003). Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion, 42*(1)*,* 17-30.

Smith, C., & Denton, M. L. (2005). *Soul searching: The religious and spiritual lives of American teenagers.* New York, NY: Oxford University Press.

Smith, C., & Snell, P. (2009). *Souls in transition: The religious and spiritual lives of emerging adults.* New York, NY: Oxford University Press.

Smith, E. (2008). Pitfalls and promises: The use of secondary data analysis in educational research. *British Journal of Educational Studies, 56*(3), 323-339.

Snowman, J., McCown, R., & Biehler, R. (2009). *Psychology applied to teaching.* Boston, MA: Houghton Mifflin.

Strommen, M. P., & Hardel, R. A. (2000). *Passing on the faith: A radical new model for youth and family ministry.* Winona, MN: Saint Mary's Press.

Tabachnick, B. G., & Fidell, L. S. (2001). *Multivariate statistics.* Needham Heights, MA: Allyn.

Thayer, J. (1996). *Assessing participation in the spiritual development modes: Construction and testing of the Christian Spiritual Participation Profile* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9631861)

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. (1986). *Thought and language.* Cambridge, MA: Massachusetts Institute of Technology.

White, E. G. (1898). *The desire of ages.* Mountain View, CA: Pacific Press.

White, E. G. (1913). *Counsels to parents, teachers, and students.* Mountain View, CA: Pacific Press.

White, E. G. (1940). *The desire of ages*. Boise, ID: Pacific Press.

White, E. G. (1954). *Child guidance.* Washington, DC: Review and Herald.

White, E. G. (1999). *Patriarchs and prophets.* Altamont, TN: Harvestime Books.

White, E. G. (2002). *Messages to young people.* Hagerstown, MD: Review and Herald.

White, E. G. (2003). *Education.* Coldwater, MI: Remnant Publications.

Willard, D., & Johnson, J. (2006). *Renovation of the heart in daily practice: Experiments in spiritual transformation.* Colorado Springs, CO: NavPress.

Zinnbauer, B. J., & Pargament, K. I. (2005). Religiousness and spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 21-42). New York, NY: Guilford Press.

Zull, J.E. (2002). *The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning.* Sterling, VA: Stylus.

Zustiak, G., Mouton, J., Greer, K., & Finklea, J. (2003). *Student ministry that leaves a mark.* Joplin, MO: College Press.

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