**Attachment to God: Exploring its Impact on the Teaching and Learning Orientations of Christian Adult Educators**

by

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Abstract

Attachment to God is a missing dimension of our current understanding of Christian adult education. Joung (2011) agreed that looking at individuals religious representations (i.e. attachment-related experiences) has crucial implications for Christian adult educators in any setting: formal or informal, academic or not, within the church or not. Furthermore, investigating the relationship between attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators is significant because it initiates an interdisciplinary dialogue between the psychology of religion and adult education. To date, researchers interested in phenomenon related to attachment and adult learning have extrapolated from research findings in other disciplines to increase their understanding in this area.

The purpose of the study was to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. There are no studies that examine attachment to God and Christian adult education orientation. Therefore this inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process. The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

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Based on the findings of this study, the data suggests that no statistically significant relationship exists between the two dimensions of attachment to God, as measured by the *Attachment to God Inventory* (AGI); and the two teaching and learning orientations of Christian adult educators, as measured by a modified version of the *Teaching Methodology Instrument* (TMI).  The data also concluded that there is no statistical relationship between the two dimensions of attachment to God, as measured by the *Attachment to God Inventory* (AGI); and the two teaching and learning orientations of Christian adult educators, as measured by a modified version of the *Teaching Methodology Instrument* (TMI) based on denominational affiliation and race/ethnicity.

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List of Abbreviations

AGI         Attachment to God Inventory

ESV         English Standard Version

IWM         Internal Working Models

TMI         Teaching Methodology Instrument

CHAPTER 1. INTRODUCTION

"Why do human beings have the attachment disposition? Because they are created by God, who is love."
— Robert C. Roberts

Go to people, live among them,
Learn from them, love them,
Serve them, plan with them,
Start with what they have,
Build on what they have.
— Chinese proverb (Author unknown)

**Introduction**

The term "andragogy" – the art and science of helping adults learn – has been used to

describe a model of ideas, concepts, and approaches to adult learning (Knowles, 1967, 1973;

Merriam, 2001). As the field of adult education has come of age, it has integrated with several

disciplines (e.g., theology, developmental psychology, educational psychology, history,

philosophy, and sociology) making it even more thorough and complex (Atkinson, 2006). The

integration of Interdisciplinary Studies within Christian education was the impetus behind

curriculum paralleling developmental stages (i.e., childhood, adolescence, and adulthood)

whereas in the late 1800s and early 1900s educational efforts for children were the primary focus

(Atkinson, 2006).

Since the beginning of the Christian Church, adult education has been of paramount

importance. However, over the last three decades, adult Christian educators have worked

diligently to develop a biblical foundation for a modern philosophy of adult Christian education

(Gangel, 1998). To date, andragogy continues to provide a foundation for the formulation of

learning experiences in the Church and Christian organizations. Eckert and Kimble (2003) wrote

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that Christian educators play a unique role in how learners relate to God, develop their

perceptions of God, and how they believe God sees them, not to mention enhancing their

effectiveness in fulfilling their roles as believers.  Educators have to maintain a grasp on

theological foundations and many other disciplines while communicating their understanding of

unchanging biblical principles to an ever-changing culture.  In addition to andragogy, self-

directed learning, experiential learning, and transformative learning theories have emerged from

research and practice as influential theories of adult learning.  Self-directed learning is defined as

> A process in which individuals take the initiative, with or without the help of others, in
>
> diagnosing their learning needs, formulating learning goals, identifying human and
>
> material resources for learning, choosing and implementing appropriate learning
>
> strategies, and evaluating learning outcomes.  (Knowles, 1975, p. 18)

Goddu (2012) emphasized experiential learning involves providing adult learners with

opportunities to bring real life experiences to the learning table (e.g., role playing or stimulated

problems).  The premise of transformative learning is that beliefs and assumptions are formed

early in life and then combined with new learning and actions in adulthood.  In an effort to

understand one's worldview, adult learners reflect critically to transform previously held ideas

into more complex and discriminating schemata (Fleischer, 2006).

Jarvis and Hirji (2006) suggested that in order to understand learning related to religious

experience, one must reach beyond cognitive learning to tap into an amalgamation of

experiential and existential learning.  Similarly, Gardner (1983) alluded to existential aptitude in

the conceptualization of intrapersonal intelligence in his initial work entitled *Frames of Mind:*

*The Theory of Multiple Intelligences*.  According to Gardner, intrapersonal intelligence involves

the ability to understand oneself.  Later, he examined existential and spiritual intelligence and the

similarities between the two concepts (Gardner, 2006).  Existential intelligence is described as the capacity to wonder and consider oneself in relation to the universe.  McCoog (2010) pointed out that Gardner decided not to add an existential or spiritual related category because brain research has yet to identify a specific part of the brain that supports existential thought.  So for now, Gardner indicated that the list of multiple intelligences stands at eight-and-a half intelligences (McCoog, 2010).

Still these advances have not always been received in Christian education.  Knowles (1962) argued, "The Protestant and Roman Catholic Churches ... continued to lag behind many other institutions in the expansion and differentiation of adult education well into the modern era" (p. 145).  In some instances, the traditional "teacher centered" pedagogical orientation still looms over the adult teaching and learning process.  Consequently, in many churches and Christian organizations offering educational opportunities for children and youth is considered the top priority.  Still in other cases, the practice of educating adults in the church is neglected or simply left to chance, with no real strategy.  This process of trial and error, band-aiding, and maintaining the status quo has proven to be frustrating, giving limited satisfaction, if any, for the planners and participants of adult education ministry (Johnson & Strobert, 1997).  Nonetheless, the culture has begun to change in the view of adult education and in response to the expressed needs of adult learners.  As a result, educators integrate biblical curriculum and programming with real world living that is dynamic, interactive and more andragogical in nature (Hestenes, Hendricks, & Palmer, 1991).

Similarly, Jesus used an adult-centered approach to teaching during his earthly ministry. In the Scriptures, he expressed his love for children, but there are no instances recorded where he taught them.  However, there are many instances recorded where Jesus taught adults (Hestenes,

et al., 1991).  Jesus called adults to be his disciples and he encouraged them by these words: "Take my yoke upon you.  Let me teach you, because I am humble and gentle at heart, and you will find rest for your souls" (Matthew 11:29, English Standard Version).  Spear (2010) agreed that Jesus used adult-centered techniques (e.g., questioning technique, dialogue, and parables) to engage his adult listeners in the learning process.

As Christian adult educators come to understand the basic principles of learning, they select the appropriate teaching methods for their students (Issler & Habermas, 1994). Notwithstanding, practitioners also wrestle with defining the goal orientations of their educational endeavors (Driesen, Hermans, & Jong, 2008).  As contemporary forms of self-directed, experiential, and transformational goal orientations are established, educators also grapple with the importance of inter-personal relationships on adult development and learning (Driesen et al., 2005; Merriam, 2001).  As a result, the following categories of adult ministries have gained momentum: single adult ministries, senior adult ministries, small group ministries, and men's ministries (Atkinson, 2006); leaving the commitment to Christian adult learning intact, despite the impact of technology on the access of learning today.

Attachment theory is a hypothesis regarding social and personality development across the lifespan that combines concepts from ethology, evolution, systems theory, cognitive psychology, and object relations (Sable, 2007).  Bowlby (1969) asserted that attachment behavior is characteristic of human beings from the cradle to the grave.  A child's attachment to their primary caregiver provides the security they need to explore their world with assurance; however, in the absence of a responsive caregiver the child experiences an exorbitant amount of anxiety and his sensori-motor development is adversely affected (Bowlby, 1969, 1982).  The

scope of attachment research has extended from infant-caregiver bonds to the dynamics of adult relationships (Simpson & Rholes, 1998).

Over the last twenty years, there has been growing interest in attachment theory within the psychology of religion research literature. Reinert, Edwards, and Hendrix (2009) suggested that attachment theory offers a promising framework for understanding the dynamics of religion. Much of the study has been devoted to understanding God as an attachment figure (Beck, 2006; Cicirelli, 2004; Kaufman, 1981; Kirkpatrick, 1992, 2005; McDonald, Beck, Allison, & Norsworthy, 2005; Proctor, Miner, McLean, Devenish, & Bonab, 2009; Sim & Loh, 2003). That is, researchers investigated participant's attachment relationship experienced with God, an intangible entity (Cicirelli, 2004). Since God is not an object (in a material sense) that can be seen or touched, the attachment relationship is described as a symbolic attachment between the individual and God the unseen caregiver (Cooper, Bruce, Harmon, & Boccaccini, 2009). Researchers have also focused on the relationship between attachment with God and attachment styles, God imagery or religious variables (e.g., belief, commitment, conversion, involvement, etc.) (Beck, 2006; Beck & McDonald, 2004; Kirkpatrick & Shaver, 1990, 1992; Moriarty, Hoffman, & Grimes, 2006).

## Statement of the Problem

The existing literature on adult attachment representations suggests that one's attachment style can enhance or hinder, liberate or constrain the desire to learn (Fleming, 2008). These investigations have made significant contributions to attachment theory and psychology of religion research, while expanding the clinical application to counseling and counselor education (Greggo & Becker, 2010; Reinert et al., 2009; Starky, 1999; White, 2004). But there is a gap in the literature; little attention has been paid to adult education and the concept of attachment.

Fleming (2008) asserted that attachment theory is of profound and neglected importance for understanding adult teaching and learning.  He also acknowledged that the attachment paradigm could be used to reframe our current understanding of adult learning.  In particular, that attachment style plays a significant role in the interpersonal engagements between adult learners and teachers (Fleming, 2008).  While contending for the applicability of the principles of andragogy to religious education, Peterson (1980) raised questions about the effect of interpersonal relationships on educational orientations in adult learning. He found that in the experimental group that was andragogically oriented, participants became more focused on adults in their teaching and learning orientation, and their feelings of wanting affection from other people increased. Subsequently, the adult Christian educator's perceived relationship with God and its effect on their teaching and learning orientations would provide an interesting line of inquiry since attachment to God in the Christian adult education process can be measured via survey research.

## Purpose of the Research

The purpose of the study was to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. There are no known studies that examine attachment to God and Christian adult education. Therefore this inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process.  The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs.

In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

Little has been written about the ways that adult attachment influences the bio-psycho-social-spiritual domains of behavior related to adult learning and teaching in communities of faith. Francis (1997) investigated the relationship between the personality profiles and preferred learning styles among adult Christians. The existing literature on adult attachment representations suggests that one's attachment style can enhance or hinder, liberate or constrain the desire to learn (Fleming, 2008). However, these ideas are often extrapolated from research findings in areas outside of adult education. Conducting this investigation among Christian adult educators will broaden the application of attachment theory and encourage further research in this area. This study could be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers). It could also benefit any persons who administrate or facilitate Christian adult education training programs. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

## Research Questions

The following research questions were used in this study:

1.      What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

2.      Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

3.      Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

## Significance of the Study

According to Eckert and Kimble (2003), Christian educators play a unique role in teaching adults how they relate to God; how they develop their perceptions of God, and how they believe God sees them. It has also been suggested that human teaching that describes God as loving and relational serves to motivate attachment behaviors toward God (Miner, 2007). Of similar importance are the manifestations of these dynamics in the Christian educator's own life. An extrapolation of these findings suggests that adult Christian educator's perception of their relational bond with God may influence how they learn and teach about God.

## Assumptions of the Study

The study contained the following assumptions:

1. The researcher proceeded in a manner that did not bias the results of the study.

2. Beck and McDonald's (2004) *Attachment to God Inventory* (AGI) is a valid instrument for assessing relationship with God from an attachment perspective.

3. *Teaching Methodology Instrument* (TMI) developed by Taylor and Kroth (2009) is a valid instrument for examining whether a teaching methodology used in a learning environment is more pedagogical or andragogical.

4. The participants have some self-insight.

5. Research participants answered the questions honestly.

## Limitations of the Study

This study contained the following limitations:

1. The study was limited to faculty, group facilitators, administrators, counselors, or any person who works with adults in teaching/learning relationships in a Christian organization in the Southeastern United States who were ages 19 or older. This limits

the generalizability of the findings of this study to Christian adult educators in the Southeastern United States; therefore, generalization beyond this region should be done with caution.

2. The measures used in the study were self-reported measures, and subject to the effects of social desirability or the possibility of participants responding in ways that portray themselves in a positive light.

3. This study was exploratory and might be subject to certain weaknesses not found in experimental designs, where the researcher can control relevant variables, manipulate an independent variable, and observe if the hypothesized change has occurred (Ary, Jacobs, & Razavieh, 2002).

**Definition of Terms**

**Andragogical Teaching and Learning Orientation** – The andragogical instructor (teacher, facilitator, consultant, and change agent) involves the learner in a process that is concerned with providing procedures and resources to help learners acquire information and skills (Knowles, Holton, & Swanson, 2011).

**Attachment Bond** – A relatively long-lived relationship with an irreplaceable attachment figure that is characterized by proximity seeking or a desire for closeness, perceived as a secure base from which to explore, providing a safe haven when in distress, and separation causes anxiety or grief if the relationship is lost (Ainsworth, 1985).

**Attachment Patterns or Styles** – Attachment patterns and attachment styles are used interchangeably throughout this study to describe the two-dimensional framework (Avoidance or Anxiety) used to conceptualize individual differences in the way adults think, feel, and act in intimate relationships (Fraley & Waller, 1998).

**Attachment to God** – The affectional bond that exists between a believer and God (the attachment figure) in which God is experienced as "personal" in nature and the relationship meets the criteria of an attachment bond (Beck & McDonald, 2004).

**Christian Adult Educator** – Anyone administrating or facilitating teaching/learning opportunities for adults ages 19 or older.

**Christian Adult Learners** – Any student who is 19 years old and older who is participating in a learning opportunity within a ministry or church setting.

**God** – Relationship with God will be investigated from a Judeo-Christian tradition, in particular Christianity, where God is revealed in the Trinity ─ three "persons," Father, Son (Jesus), and Holy Spirit. "Hear, O Israel: The Lord our God, the Lord is one" (Deuteronomy 6: 4). The doctrine of the Trinity is a theoretical representation aimed at organizing various expressions of God found in the Bible.

**Internal Working Models** – Mental schemas, mediated through active involvement with other people that when applied to subsequent relationships either support or realign one's belief about self and others. "On the basis of repeated interactions with the caregiver, infants learn what to expect, and they adjust their behavior accordingly" (Hazen & Shaver, 1994, p. 5).

**Pedagogical Teaching and Learning Orientation** – The pedagogical instructor (teacher, trainer or curriculum committee) decides in advance the knowledge or skills that need to be transmitted and present the content in units to the learner (Knowles et al., 2011).

## Organization of the Study

Chapter 1 introduces the study, statement of the problem, research questions, significance of the study, definitions of terms and limitations of the study. Chapter 2 provides a review of related literature and research associated with Christian adult education and attachment to God.

The methodological and procedural guidelines used to gather data are described in Chapter 3. In Chapter 4, the results of analyses are provided and findings of the study are presented. Chapter 5 includes a summary of the study, conclusions, and recommendations for further study.

CHAPTER 2. REVIEW OF THE LITERATURE

"When I look back on my seminary education I think I can work out a balance sheet somewhat like this:
- Told what to do                90%
- Told how to do it                9%
- Shown how to do it             1%"

—— Peter Lourdes, SDB

"Where am I? Who am I? How did I come to be here? What is this thing called the world? How did I come into the world? Why was I not consulted? And if I am compelled to take part in it, where is the director? I want to see him."

—— Søren Kierkegaard

## Introduction

The purpose of the study was to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. There are no known studies that examine the relationship between attachment to God and Christian adult education orientation. Therefore this inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process. The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

This chapter provides a review of the literature related to adult education and attachment theory respectively. To begin with, it presents an overview of adult education. Then, Christian adult education is defined and the researcher conducts an investigation of its history. Next, attachment theory in childhood and adulthood are covered. Attachment patterns in relationship with God are considered in the next section. Finally, literature related to education and attachment theory will be discussed.

## Research Questions

The following research questions were used in this study:

1.      What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

2.      Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

3.      Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

## Historical Overview and Background of Adult Education

Knowles (1978) pointed out that all the great teachers of ancient history (e.g., Lao Tse and Confucius of China, the Hebrew prophets, Jesus, Socrates, Plato, Aristotle, Euclid, Cicero, Quintilian) were mainly teachers of adults. However, adult education was not established as a professional field of practice until the 1920s. In 1928, Edward L. Thorndike (a renowned psychologist) and his colleagues complained that psychology and general educational science had neglected to conduct an extensive and systematic inquiry of adult learning, accepting conventional wisdom that suggested "it is especially important to train up the child in the way he should go, and that it is hard to teach an old dog new tricks" (Thorndike, Bregman, Tilton, &

Woodyard, 1928, p. 3). In response to the lack of research, he and his colleagues conducted their landmark study that investigated whether infants, children, and adolescents had an advantage over 20–40 year-olds with respect to their ability to learn. Their findings suggested that, in general, no one under 45 years of age should refrain from trying to learn anything because they believe they are too old to learn (Thorndike et al., 1928). Thus, the advent of adult education began to dispel the myth that adults simply could not learn.

Darkenwald and Merriam (1982) referred to adult education as "a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about changes in knowledge, attitudes, values, or skills" (p. 9). Adults have been learning in formal, informal, and non-formal settings for thousands of years. Formal adult learning is purposeful and intentional with the assistance of an instructor, and guided by objectives and assessments (Duggan, 2009). Johnson and Strobert (1997) suggested that planning for learning in a formal setting should take into account the learners life experiences, offer options when planning activities, clearly layout the learning objectives, and be open to changing them if necessary. Conversely, informal learning includes those events that aren't publicized, planned, or intentional; but nonetheless have to do with learning (Johnson & Strobert, 1997).

Gibbons, Bailey, Comeau, Schmuck, Seymour and Wallace (1980) conducted a qualitative study analyzing the biographies of twenty-five acknowledged experts that did not engage in formal learning beyond high school (e.g., actors, inventors, artists, etc.), and they identified 154 characteristics of informal or self-directed learning. The researchers went on to develop the 40 characteristics with the highest ratings into fourteen principles or strategies for

the self-educated.  The top 20 traits identified in self-educated learners by Gibbons et al. (1980) were as follows:

- Primary experience in the area

- Industriousness

- Perseverance

- Self-disciplined study

- Curiosity

- Single-minded pursuit

- Creativity

- Ingenuity

- Self-confidence

- Natural ability

- Assertiveness

- Intelligence

- Independent exploration

- Observation

- Conformational support from others

- Integrity

- Nonconformity

- Ambition

- Effect of economic environment

- Effect of personal major achievements

Finally, Duggan (2009) reported non-formal learning is organized; but it becomes apparent as a result of social, political, and cultural issues and takes place outside of a formal setting (e.g., church-sponsored adult literacy programs).

Initially, adult educators looked to research in the fields of psychology and educational psychology to develop their understanding of adult learning (Merriam, 2001). Since the beginning, the field of adult education has struggled to find its identity. Learning theorists identified scientific and artistic streams of thought as being two approaches used to establish the field of adult education. The scientific inquiries sought to strengthen the theoretical framework of adult education through research, while the artistic stream was more interested in how adults learn. Differences in the type of approach ascribed to by practitioners contributed to diversity within the field of adult education.

Griffith (2009) indicated that from the nation's inception through today, our educational society has been shaped by religious principles and reason. It wasn't until the 1920s that adult educators began studying how religious adults learn as a professional field of practice. In 1925, Basil Yeaxlee wrote *Spiritual Values in Adult Education*, the first book to examine the relationship between adult education and religion (English & Tisdell, 2010). A year later, the American Association for Adult Education was established. Simultaneously, the Carnegie Corporation of New York provided a generous amount of funding to conduct scientific and artistic or intuitive/reflective research that would provide a scientific foundation for adult learning theory (Knowles et al., 2011).

Religion was an integral part of the pioneers of adult education. Many of the movements associated with adult education history were connected to religious institutions; for example, Chautauqua, Catholic Worker movements, Highlander, Antigonish, and the civil rights

movement (English & Tisdell, 2010).  Prior to the 1970s the field of adult education, in general, was focused on teaching and program planning by professionals (Wickett, 2005).  New theories began to emerge that caused a need to shift the focus of adult education to the experience of the adult learner.  Over the last few decades, the field of education has become increasingly reliant upon the tools and methods of other disciplines, in particular psychology (Hess, 2001).  In the mid-twentieth century, proponents of adult education sought to differentiate adult education from other forms of education. Thus, efforts to formulate a theory of adult education have been underway for over 50 years.  At present, the realization of a unified theory remains elusive (Knowles et al., 2011).

Today, adult education can be found in business and industry, higher education, cooperative extension services, proprietary or career schools, religious institutions, correctional facilities, and the military (Duggan, 2009).  Congress approved the Adult Education Act of 1966 and allocated funds to offer basic adult education as a distinct program in various settings (Imel, 1991).  Since then, adult education has become so much more than basic adult education.  It has a mass appeal because of the ease with which participants can access it.  People can access different sources of adult education in the same community because there are many other organizations offering adult learning opportunities.  Today, continued education occurs in classrooms throughout the community.  In addition, educating adults refers to the age and status of the participants, as well as the notion of participatory learning for its own sake and not for credit (Tight, 1996).

Houle (1961) proposed that adults participate in different types of continuing education for various reasons.  The goal-oriented learners have a need to learn many things and with no clear-cut agenda.  Activity-oriented learners participate in adult education for the social contact.

Learning-oriented learners are the proverbial lifelong learners. Notwithstanding, the notion of considering one's life in relation to socio-politico forces is a recurring theme in adult education. Today, the notion of globalization has impacted adult education now that the issues (e.g., social, political, technological, economic, and environmental) affect humans worldwide.

The reasons adults participate in adult education are emblematic of the practice of mutual involvement between the adult learner and adult educator. This mutuality is a defining characteristic of the adult education process. However, there are other significant qualifications of adult learning and teaching that are embodied in the adult education process. A comparison of adult learning to the principles of teaching compiled by Knowles (1980) is introduced in Table 1.

Table 1

*Comparison Chart of the Conditions of Adult Learning to the Principles of Teaching*

| Conditions of Learning | Principles of Teaching |
| --- | --- |
| The learners feel a need to learn. | – The teacher exposes learners to new possibilities for self–fulfillment.<br>– The teacher helps the learners clarify their own aspirations for improved behavior.<br>– The teacher helps each learners diagnose the gap between their aspirations and their present level of performance.<br>– The teacher helps the learners identify the life problems they experience because of the gaps in their personal equipment. |
| The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences. | – The teacher provides physical conditions that are comfortable (as to seating, smoking, temperature, ventilation, lighting, decoration) and conducive to interaction (preferably, no person sitting behind another person).<br>– The teacher accepts the learners as persons of worth and respects his feelings and ideas.<br>– The teacher seeks to build relationships of mutual trust and helpfulness among the learners by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness.<br>– The teacher exposes his or her own feelings and contributes resources as a co-learner in the spirit of mutual inquiry. |

Table 1 (continued)

| Conditions of Learning | Principles of Teaching |
|---|---|
| The learners perceive the goals of a learning experience to be their goals | – The teacher involves the students in a mutual process of formulating learning objectives in which the needs of the learners, of the institution, of the teacher, of the subject manner, and of the society are taken into account. |
| The learners accept a share of the responsibility for planning and operating a learning experience, and therefore have a feeling of commitment toward it. | – The teacher shares his or her thinking about options available in the designing of learning experiences and the selection of materials and methods and involves the learners in deciding among these options jointly. |
| The learners participate actively in the learning process. | – The teacher helps the learners to organize themselves (project groups, learning–teaching teams, independent study, etc.) to share responsibility in the process of mutual inquiry. |
| The learning process is related to and makes use of the experience of the learners. | –The teacher helps the learners exploit their own experiences as resources for learning through the use of such techniques as discussion, role-playing, case method, etc.<br>– The teacher gears the presentation of his own resources to the levels of experience of his particular learners.<br>–The teacher helps the learners to apply new learnings to their experience, and thus to make the learnings more meaningful and integrated. |
| The learners have a sense of progress toward their goals | – The teacher involves the students in developing mutually acceptable criteria and methods for measuring progress toward the learning objectives.<br>– The teacher helps the students develop and apply procedures for self–evaluation according to these criteria. |

Note.  From Knowles, M. S. (1980). *The modern practice of adult education* (p. 57). Chicago:

Follett.


Adult education is a dynamic enterprise, created in response to adult's need to learn.  It

exists everywhere adults go to access learning opportunities.  Jarvis (1990) defined adult

education as the planned processes of learning for adult participants.  Adult education programs

are typically designed for adult learners that are attending college as non-traditional students or

not regularly enrolled in college classes (Olds, 2009).  Adult education is a global force,

representing every race, ethnicity, religion, and culture.  The impact of a lifelong learning

initiative has generated an international adult education initiative.  In 1997, the Governing Board

of the United Nations Educational, Scientific and Cultural Organization (UNESCO) at the 5th

International Conference on Adult Education (CONFINTEA V), affirmed the Hamburg

Declaration on Adult Learning.  The governing body described adult education as:

> The entire body of ongoing learning processes, formal or otherwise, whereby people
>
> regarded as adults by the society to which they belong develop their abilities, enrich their
>
> knowledge, and improve their technical or professional qualifications or turn them in a
>
> new direction to meet their own needs and those of their society. (p. 1)

As the influence of adult education grows, some have suggested that it has the potential to

change the world.  However, critics of adult education claim it is no different from educating

children (Kerka, 2002).

Differentiating between pedagogy and andragogy became essential, as adult educators

sought to establish adult education from other forms of education.  The terms andragogy and

pedagogy were used to describe the theoretical framework for adult and youth learning.  In 1833,

Alexander Kapp coined the term andragogy that Malcolm Knowles used to describe emerging

comprehensive theory and technology based assumptions about adults as learners (Knowles,

1978).  The term andragogy' originated from the Greek word "aner" which means man and is

defined as "the art and science of helping adults learn"; pedagogy derives from the Greek word

"paid" meaning child and "agogus" meaning leader, so it literally means "the art and science of

teaching children" (Knowles, 1978).  In the 1970s and 1980s, the stark contrasts made between

both models helped distinguish the andragogical model assumptions.  At the same time, a debate

was taking place concerning whether differences between pedagogy and andragogy really exist.

According to Elias (1979), the debate surrounding andragogy and pedagogy was not concerned

with establishing educational theory, but it was a mistaken attempt to improve the status of the field of adult education.  A comparison of the assumptions of pedagogy and andragogy by Knowles (1980) are presented in Table 2.

Table 2

*A Comparison of the Assumptions of Pedagogy and Andragogy*

| Regarding | Pedagogy | Andragogy |
|---|---|---|
| Concept of the learner | Role of the learner is a dependent one. | The role of the learner is more self-directed, but the movement from dependency to self-directedness occurs at different rates for different persons. |
| Role of the teacher | The teacher is expected to take full responsibility for determining what is learned, when it is to be learned, how it is to be learned, and if it has been learned. | The teacher has a responsibility to encourage and nurture this movement towards self-directedness. |
| Role of the learner's experience | The experience learners bring to a learning situation is of little worth. The experience from which learners will gain the most is that of the teacher, the textbook writer, the audiovisual aid producer, and other experts. | As people grow and develop they accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning. People attach more meaning to learnings they gain from experience than those they acquire passively. |
| Primary technique of delivery | Transmittal techniques – lecture, assigned reading, AV presentations. | Experiential techniques – laboratory experiments, discussion, problem-solving cases, simulation exercises, field experience, and the like. |
| Readiness to learn | People are ready to learn whatever society says they ought to learn. Most people of the same age are ready to learn the same things. | People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems. |
| How learning should be organized | Learning should be organized into a fairly standardized curriculum with a uniform step-by-step progression for all learners. | Learning should be organized around life-application categories and sequenced according to the learners' readiness to learn. |

Table 2 (continued)

| Regarding | Pedagogy | Andragogy |
|---|---|---|
| Orientation to learning | Learners see education as a process of acquiring subject-matter content, most of which they understand will be useful only at a later time in life. | Learners see education as a process of developing increased competence to achieve their full potential in life. Learners want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. People are performance-centered in their orientation to learning. |
| Organization of curriculum | Organized into subject matter units which follow the logic of the subject from simple to complex. | Should be organized around competence/development categories. |

Note. From Knowles, M. S. (1980). *The modern practice of adult education* (p. 43). Chicago: Follett.

Malcolm Knowles (known as the Father of Adult Education) asserted that the dialogue regarding andragogy and pedagogy was necessary because educators had been reluctant to abandon the traditional educational model that treated adults like children.  In response to critics, he admitted that he should have presented the assumptions about learners on a continuum, instead of as a dichotomy (Knowles, 1979).  The softening of his stance garnered additional support of andragogy, and suggested that there are times when adults need a pedagogical method of teaching, and times when children need an andragogical method of teaching.  He formulated an andragogical model that lists six key principles that apply to adult learners.  The following assumptions describe the adult learner.

1.  the need to know why they need to learn something, before they learn it;

2.  the learners' self-concept being perceived by the self and others as self-directed;

3.  the role of the learners' experiences operating as the richest resource or greatest hindrance to learning;

4. their readiness to learn in the context of real-life;

5. their orientation to learning task-centered or problem-centered tasks in the context of real life; and

6. their response to intrinsic and extrinsic motivators and internal and external barriers that block motivation. (Knowles, Holton, & Swanson, 2005, p. 64)

Principles such as these have helped adult educators work with adult learners. However, in some instances educators have used these principles without taking into account the heterogeneity of adult learners. Merriam and Brockett (2007) suggested that although members of the same race, religion, language, or ethnicity will share certain values, beliefs, and practices, educators should be aware of within group differences. Jarvis (2005) characterized learning as the following:

The combination of processes whereby the whole person – body (genetic, biological, and physical) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses) – is in a social situation and constructs an experience which is then transformed cognitively, emotively, and practically (or through any combination) and integrate into the individual's own biography. (p. 51)

This description of learning is similar to the dynamics found when internal working models and the activation of the attachment behavioral system. The added dimension is the sociocultural context, for which attachment theory has been criticized for neglecting. McKenzie (1982) used systems thinking to describe the effect that religious education can have on each aspect of the adult personality in his approach to religious-human development. Any change in one part of the system introduces a corresponding change in the remaining parts of the system and thus, the system as a whole. There is a relationship of mutuality that exists within the system

amongst the social, religious, moral, psychological, and intellectual components.  McKenzie

(1982) further showed that gaining religious insight can change the religious system and

influence ones feelings (psychological component), affect interpersonal relationships (social

component), initiate critical thinking (intellectual component), and enhance moral growth (moral

component).  He also pointed out that some individuals gain insight in a particular area, but still

remain arrested in their development.  The model depicted in Figure 1 is a pictorial description

of the adult as a system.
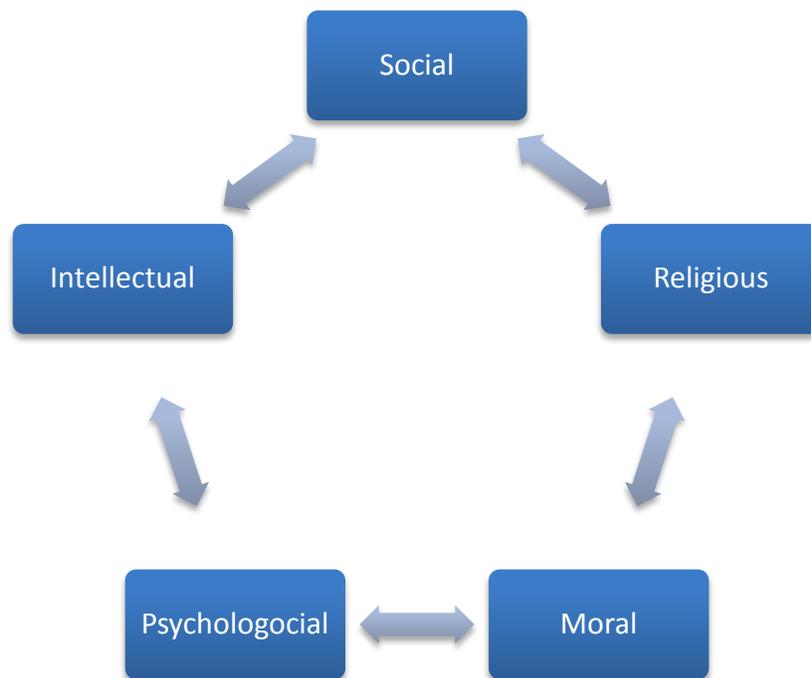


*Figure 1*. The Adult as a System

Note. From McKenzie, L. (1982). *The religious education of adults* (p. 23). Birmingham, AL:

Religious Education Press.

## Church History and Theological Education

The writer of the Acts of the Apostles provides an initial glimpse of theological education

in the church, as he described daily the life of Christians: "And they devoted themselves to the

apostles' teaching and the fellowship, to the breaking of bread and the prayers" (Acts 2:42). As time progressed, Harris (1989) showed that the church began to live and learn together in the following ways:

Kerygma – proclaiming the news of Christ's resurrection

Didache – teaching and learning the faith

Leitourgia – gathering to pray and share in the eucharisitic feast

Koinonia – gathering for mutual support and fellowship

Diakonia – service and outreach to the community

Early in church history a model for learning, called the catechumenate, was used to begin the process for converts to bond with the Christian community (McKenzie, 1982). The catechumenate was developed to introduce believers in the fundamentals of the faith. In essence, new converts would worship God through liturgical celebrations, with an ancillary purpose of learning Christian values, standards, and norms via living in Christian community (McKenzie, 1982).

However, early Christian education was strongly influenced by both Jewish and Greco-Roman culture, creating the dilemma of whether learning should be explicitly religious — sacred or humanistic — or secular (McKenzie, 1982). In the third century, the early African church father Tertullian captured the debate with this rhetorical question, 'What does Athens have to do with Jerusalem?' Reportedly, he was the greatest proponent in early Christianity of the Christ-against-culture ethos, suggesting that pagan Athens had little or nothing to do with sacred Jerusalem (Helland, 2007). McKenzie (1982) contended that when religious educators ascribe to this notion, the idea might be traced back to the false dichotomy between the sacred and the profane.

In his classic text "*Christ and Culture*" theologian Richard Niebuhr (1951) describes five movements in Christian history that influenced Christianity and thus adult education in the Church: Christ against culture (Christians renounced their cultures; e.g., monks), the Christ of Culture (Christians identified with their culture; e.g., the Bible belt's association with socially conservative Evangelical Protestantism), Christ above culture (the church exerted authority over the culture; e.g., the church in the middle ages), Christ and culture in paradox (believers claimed dual citizenship in the kingdom of God and the kingdom of the world), and Christ the transformer of culture (Christians encouraged transformation of the culture). As time progressed, the dualistic paradigm was replaced with a more holistic paradigm. By the fourth century, church leaders met for a few Councils to establish official Christian doctrine. The Nicene Creed, named after the city Nicea, was one of the most influential creeds in the history of the Christian church.

> We believe in one God, the Father Almighty, Maker of heaven and earth, and of all things visible and invisible.
>
> And in one Lord Jesus Christ, the only-begotten Son of God, Begotten by the Father before all ages,
>
> Light of Light, True God of True God, begotten not made, of one substance with the Father, through whom all things were made;
>
> Who for us men and for our salvation came down from the heavens, and was made flesh of the Holy Spirit, and of the Virgin Mary, and became man;
>
> And was crucified for us under Pontius Pilate, and suffered and was buried, and rose again on the third day according to the Scriptures;
>
> And ascended into the heavens, and sits on the right hand of the Father;

And comes again with glory to judge the living and the dead, of whose Kingdom there

shall be no end.

And in the Holy Spirit, the Lord and the Life-Giver, that proceeds from the Father, who

with Father and Son is worshipped together and glorified together, who spoke

through the Prophets;

In one Holy Catholic and Apostolic Church;

We acknowledge one baptism unto the remission of sins.

We look for a resurrection of the dead, and the life of the age to come. (Catherwood,

2007)

Christian leaders began to integrate the sacred and profane as a means to convert non-Christians. Contemporary inquiry into Christianized medieval Europe reveals that it was friendly toward scientific learning, and the birthplace of scientific endeavor (Pearcey & Thaxton, 1994). In the Middle Ages the study of God became a science, in that the scholarly use of sacred texts established a distinction between lay Christians and the education of monks and clergy (Elias, 2006). In 1517, Martin Luther, a German professor of biblical theology at the University of Wittenberg, posted his treatise "*Ninety Five Theses*" to expose the practice of selling indulgences and its ill effects in the Catholic Church. In the document, he exhorted the learned clergy to teach their congregations instead that graces conferred in the indulgences were small, compared to the grace of God and the piety of the Cross (Luther, 1517). The document spread like wild fire, and is credited for starting the Protestant Reformation.

Simultaneously, the Age of Enlightenment began a shift in the landscape of education in general, and adult Christian education in particular. Clergy members began to advocate that the masses learn to read and understand the Bible, while lay Christians were invited to be actively

involved in the theological learning process.  Catherwood (2007) wrote that the Church went astray doctrinally from the fourth to the sixteenth century, and the following events paved the way for the Reformation: the invention of the printing press, the rise of German nationalism, and the splitting of Christendom.  However, this monumental period in church history is discredited by the fact that over the 1,200 year period leading up to and during the Reformation, many people were put to death or oppressed because they held differing beliefs.  Church history records indicate that the period between 1517 and 1787 led to the creation of a family tree of Protestant denominational groups (i.e., AnaBaptist, Anglican, Baptist, Lutheran, Methodist, Presbyterian, and Reformed) and the many theological issues that influenced each church's teachings (Walton, 1986).  The outcome of these events launched the establishment of schools, social reform, and revivals that subsequently changed the landscape of the world.  For example, Walton (1986) made the distinction that the main reason settlers in six of the thirteen colonies went to the new world was a desire for religious freedom.

## Overview of Christian Adult Education

Christian adult education has been in existence for more than two millennia.  Palmer et al. (1991) defined adult Christian education as "a dynamic, interactive process where both teacher and learners have a meaningful and ongoing relationship with each other and with biblical truth" (p. 91).  Moreover, it has been influenced by over two thousand years of church history, and has an extensive record in the Christian Church.  Notwithstanding, Christianity's precepts, moral codes, and teachings have made an indelible mark on human history, and its followers propose that it's above all about a redeemed relationship between God and man (Catherwood, 2007). Christianity purports a different worldview from the other two major monotheistic religions, in that it has been referred to as being more teleological than aesthetic in

nature (Conyers, 1988).  Clemmons (1958) conceived of this when he described the dynamic

approach to Christian adult education:

> This dynamic theory of learning acknowledges the relatedness of the universe and of man
>
> to God and of man to man.  This relatedness is not based on fixed, static, materialistic
>
> objects which control what is to be learned and how much can be learned, but on the
>
> dynamic view of the universe as a spiritual force and of man as a spiritual being in
>
> motion. When this relatedness is perceived and understood, persons do not relate
>
> themselves to God as an *object* nor to their fellow men as *things*.  The establishment of a
>
> personal relationship is basic in dynamic Christian adult education. (p. 26)

In this approach, the Christian is active in a relationship with God where all pains and

joys are experienced as a means to the end of knowing God and knowing his fellow man.

Similarly, the Westminster Larger Catechism explains the Christian's goal in life is to glorify

and enjoy God, while taking delight in him and in one's relationship to him (Grudem, 1994).  In

the same way, this ultimate purpose is reflected in the words of Jesus:

> You shall love the Lord your God with all your heart and with all your soul and with all
>
> your mind.  This is the great and first commandment. And a second is like it: You shall
>
> love your neighbor as yourself. (Matthew 22: 37–38, ESV)

If the Christian's ultimate purpose in life is to know and love God, and to rightly relate to one

another, then the Christian adult educator's main focus for all learning should inevitably

contribute toward this basic aim (Issler & Habermas, 1994).

Driesen et al. (2005) described the general aims of Christian adult education in a

pluralistic, de-institutionalized society as two-fold: a formal dimension that addresses the goals

or educational orientations, and the material dimension that speaks to the religious identity

formed as a result of the educative process.  The researchers presented a theoretical framework

that examined the differences between conformity, self-direction and transformity as educational

orientations related to religious identity development.  In their study, the authors proposed a

typology with nine goals for religious adult education.  Data were gathered from questionnaires

administered to 151 Christian adult educators within the Roman Catholic Church in the

Netherlands.

According to Driesen et al. (2005), the participant's responses on the survey identified

the nine approaches to religious adult education as: kerygmatic, hermeneutic, neo-scholastic,

mystagogical, existential, worldview, critical, participatory, and multi-religious.  A factor

analysis revealed that the mystagogical and participatory approach correlations were moderately

strong, while the other correlations were reported to be strong to very strong.  A summary of the

general aims of religious adult education by Driesen et al. is presented in Table 3.

Table 3

*Indicators of the General Aims of Christian Adult Education*

|  | Orientation | Identity |
| --- | --- | --- |
| **Conformity** | | |
| Kerygmatic | appropriate | experience of personal surrender to Christ |
| Hermeneutic | learn to interpret | meaning of Bible and tradition for life |
| Neo-scholastic | adopt | church dogma |
| **Self-direction** | | |
| Mystagogical | develop | sensitivity to internal religious symbols |
| Existential | become aware | experience of faith |
| Worldview | realize | loss of function of religious institutions |
| **Transformation** | | |
| Critical | form | personal vision based on critical theological insights |
| Participatory | develop | personal identity through collectively giving meaning to religious practices |
| Multi-religious | learn about | Plurality of religions and worldviews |

Note. From: Driesen, I., Hermans, C., & Jong, A. de (2005). Towards a typology of general aims

of Christian adult education. *Journal of Empirical Theology*, *18*(2), 235–263.

The nature of adult learners is to find a consensus between their perceived needs and the

goals of the educational program (Knowles et al., 2011). For this reason, identifying a typology

of the goals of Christian adult education is an essential task. Additionally, establishing

objectives provides direction for Christian education programs for adults. Palmer et al. (1991)

compiled the following keys for connecting with adults through Bible-centered teaching:

1.      Treat adults as adults.

2.      Diagnose needs.

3.      Involve the learners in planning their own learning.

4.      Make adults responsible for their learning.

5.      Help adults see learning as a lifelong endeavor.

Besides identifying and selecting differing goal orientations and objectives, adult Christian

educators are mindful that they deal with the transcendent and believe that the teaching and

learning process begins with God, the Creator and Sustainer of all things. Issler and Habermas

(1994) further showed that both natural and supernatural realities are related to the learning

process.

Christian adult education is multi-faceted, making it difficult to determine where a

fruitful evaluation would begin. Johnson and Strobert (1997) suggested that focusing on theory,

formal and informal learning, motivation, and learning styles are foundational for designing a

solid adult Christian education program. In the Driesen et al. (2005) exploratory study, they

sought to determine the relationship between goal orientation and educational methodology, and

how they relate to the educators' religious characteristics. However, the structural model derived

from their analysis didn't include a variable regarding relationship with God. Does Christian

adult educator's perception of their relationship with God influence educational thinking? This

is certainly another area of research for Christian adult educators to consider. Notwithstanding,

Issler and Habermas (1994) suggested that one of the primary roles of Christian leaders is to help

believers develop secure and mature relationships with God.

Just and Kreider (1997) proposed that the field of Christian adult education is essential in

assisting believers with the task of understanding the Bible, church history, theology, and ethics.

However, that challenge is even more daunting in light of the recent decline in adult education

participation.  In their landmark research entitled *Effective Christian Education: A National*

*Study of Protestant Congregations*, the Search Institute found that on average, 28% of adults

were actively involved in Christian education (Benson & Elkin, 1990).  More recently, a study

by the Barna Group (2009) substantiates the waning interest in educative offerings, reporting that

Adult Sunday school participation has declined by 17%, since 1998.

Adults in the Christian Church are a diverse group.  Aside from ethnicity, race, and

gender, generational diversity is another significant factor to consider when educating adults.

Learners born prior to 1945 are known as the Silent Generation.  Three subsequent generations

also access adult Christian education; they include: the Baby Boomers, born between 1943 and

1960; Generation-X, born between 1960 and 1980; and the latest generation, Millennia or

Generation-Y, born between 1981 and 2002 (Holyoke & Larson, 2009).  Presently, the net

generation or Millennial learners are the newest participants of adult education and the first

generation to grow up with access to digital and cyber technologies (Barnes, Marateo, & Ferris,

2007).

Across the landscape of education, new learning models are being developed to address

the impact of information technologies.  Barna (2001) warned that recent developments in

technology would present challenges to churches and faith communities.  Reportedly, the net-

generation was more apt to take advantage of cyberfaith activities (e.g., listening to religious

teachings, reading on-line devotionals, and purchasing religious products and resources on-line).

Each generation has experienced socio-cultural changes (e.g., political, economic, or

technological) in their formative years and that particular cultural milieu influences their

learning.  While the church has a long history of providing worshippers with programs to meet

their varied social and religious needs (Rowland, 2007), very little empirical research exists to substantiate program effectiveness or contribution (English & Tisdell, 2010).  With the advent of scientific advancements, the synthesis of religious knowledge into day-to-day lives is a requirement for a vibrant faith and balanced mental health (Trester, 1984).

## Attachment

Over seventy years ago, John Bowlby (1969/1982, 1973, 1980) began to formulate attachment theory to describe the way humans have been hard-wired to make lasting affectional bonds or attachments to familiar and irreplaceable individuals.  Clinton and Straub (2010) further showed that the beliefs we have regarding relationships are wired into the physical/biological part of our brain known as the limbic system.  Once these bonds are established, an individual's emotional health and wellbeing throughout life are related to the quality, security and stability of the aforementioned attachments (Sable, 2007).  The preliminary theoretical underpinnings of attachment research stemmed from Bowlby's education in psychoanalysis, evolutionary biology, ethology, and systems theory (Ainsworth & Bowlby, 1991).  He became convinced that human beings, like many other primates, have an innate orientation to social life (Rholes & Simpson, 2004).

Bowlby (1969) believed that at birth human beings are equipped with behavioral systems structured to facilitate relationships.  The attachment behavioral system functions to maintain proximity between the mother and infant, thus increasing the chances that the infant will survive, reproduce, and transfer attachment and proximity-seeking propensities to their offspring (Daniels, 1996).  Signaling behaviors (e.g., crying, cooing, smiling, or reaching) are some of the components of the attachment system that serve to attract the caregiver to move toward the child, or to remain once closeness is achieved (Ainsworth et al., 1978).  This attachment behavioral

system operates within the central nervous system, similar to the way physiological control systems regulate body temperature and blood pressure.  In general, Bowlby believed that being alone is one of the greatest fears in human life, and that the young child's need for a continuous relationship with mother or a permanent mother-substitute is essential for mental health.  In addition, he identified the intergenerational transmission of one's attachment relations very early in his career.

His interest in attachment research developed as he observed children's responses to temporary separations from their mother's as a result of hospitalizations or receiving care in residential nurseries (Bowlby, 1982).  Bowlby used the data from observations of children fifteen- to thirty-months-old to describe patterns of behavior during separations from mothers or permanent mother figures.  Bowlby (1982) asserted that separation occurred in stages, and that the stages or phases could overlap.  Upon separation from the mother figure, the child's behavior could be divided into three phases: Protest, Despair, and Detachment.

The initial phase might begin immediately or be delayed, lasting a few hours or several weeks.  During the Protest phase, the child appears distressed at losing his mother, and uses every resource at her or his disposal to bring her back.  A child may cry uncontrollably, throw a tantrum, and/or guard the door in anticipation for her return.  In this phase, the attachment behavioral system is activated when the child's protests prove ineffectual, and the child experiences separation anxiety.  At the onset of the Despair phase, the child appears to give up the fight and enters into a state mourning the loss of his mother.  At this time, the child may begin to attach to other mother figures.  However, if these mother figures continue to abandon the child, he or she will eventually stop attaching altogether.  In the final phase, the child ceases to express feelings toward the parents when they visit him or her.  The child may appear to be

happy to receive the gifts the parents bring, but lack a genuine interest in being with them. Seemingly, the positive or negative interactions between a mother and her infant served to establish certain rules about relationships. These rules determine his or her relationship style or internal working models. Clinton and Sibcy (2006) agreed and suggested that we can distinguish our core beliefs about others and ourselves by using the following questions:

Dimension of self

1) Am I worthy of being loved?

2) Am I able to do what I need to do to get the love I need?

Dimension of other

1) Are other people reliable and trustworthy?

2) Are people accessible and willing to respond to me when I need them?

Over time, the child's answers to these critical questions help to shape his or her expectations about future relationships.

Bowlby's work was monumental in that while psychoanalysts up until that point, in Freudian tradition, gathered data from adults regarding their childhoods, he observed young children in real life situations to forecast personality patterns in adulthood that were testable. Bowlby (1969) proposed that attachment occurred in four phases. In Phase 1 — "non-focused orienting" (birth–3 months), infants don't focus attachment behaviors on any one person. In Phase 2 — "one or more specific" (3–6 months), infants begin to focus attachment behaviors such as crying increasingly toward the mother figure than others. In Phase 3 — "safe base behavior" (6 months), infants begin to focus attachment behaviors on a specific parent or caregiver. That person also serves as the safe base from which the infant explores the world.

During Phase 4 Bowlby argued that those attachments formed early in life, affect the way attachments are formed and future social relationships.

**Infant Attachment**

Mary Ainsworth was guided by Bowlby's attachment theory and William Blatz's theory of security as she applied techniques from ethology and experimental psychology to expand attachment theory research and its application to human infants (Ainsworth & Bowlby, 1991). The "Strange Situation" procedure was used to elicit exploratory and attachment behaviors, and to highlight the individual differences amongst the four samples. The study consisted of 106 infants from White, middle-class families from Baltimore that participated in a structured laboratory experiment involving the infant, caregiver, and strange adult in order to distinguish infant's attachment type (Ainsworth, Blehar, Waters, & Wall, 1978). From the data collected, Ainsworth et al. (1978) summarized results of a discriminant analysis to predict the quality of later relationships and psychopathology based on the children's reactions to reunions with their caregivers after a series of brief (i.e., 1 to 3 minute) separations. This categorical system used the following names to describe their observations: insecure (avoidant) – type A, secure – type B, and insecure (anxious/ambivalent) – type C (Ainsworth et al., 1978). Later, insecure (disorganized/disoriented) – type D was added (Main & Soloman, 1986). Main and Cassidy (1988) added that in type D, if the attachment figure were the source of the infant's fear it would make sense that the infant might respond with conflicting behaviors.

Ainsworth et al (1978) also coined the phrase "proximity and contact-seeking behavior" to describe behaviors such as crying that infants used to get their needs met or to bring people closer. Her system became universally recognized as a way to distinguish infant attachment. Bowlby's theory, and Ainsworth's expansion of it has been the impetus for a large amount of

research over the years. Bowlby posited that attachments formed in the first two years of life influence future social relationships. Early attachments also influence children's model of self (how they see themselves) and model of others (how they see themselves in relation to others). These mental models of self and others develop "on the basis of repeated interactions with the caregiver, infants learn what to expect" (Hazen & Shaver, 1994 p. 5). When these patterns of relating with the child become internalized, they establish internal representations or working models that influence behavior in future close relationships. Starky (1999) further espoused that "The cumulative experiences of the child, arising out of these dynamics, lead to the ability to 'forecast' the responses of attachment figures" (p. 16). The experiences are internalized in implicit (unconscious and nonverbally symbolized) and explicit (subsequently symbolized) of these experiences. In this regard, Bowlby's attachment theory begins to resemble Erik Erikson's Psychosocial Theory Stage 1 Trust vs. Mistrust, where developing trust from birth to age 1 is crucial to completing other developmental tasks in life. Adolescence is an opportune time for attachment to influence behavior. During this stage, teens are trying to figure out who they are in relation to other people. Ainsworth (1985) pointed out that a child's relationship with a parent surrogate could also serve as an attachment. Some examples of parent surrogates include:

- Older siblings

- Other relatives

- Youth leaders

- Athletic coaches

- Special teachers

- Mentors

- Priests

- Pastors

- Therapists (p.799)

When these potential attachment figures are placed in the parental role, they can help the child reevaluate his or her mental models or internalized representations of the self and others (Ainsworth, 1985).

Attachment theory continues to guide our understanding of mental health problems and emotional distress among children worldwide. In 2003, the Commission on Children at Risk presented a report of their findings regarding the deteriorating mental and behavioral health of U.S. children. The project's executive summary highlights the efforts of an interdisciplinary team (33 children's doctors, research scientists, and mental health and youth service professionals) that sought to integrate the "hard science" of infant attachment and child and adolescent brain development with sociological evidence of how civil society shapes outcomes for children (p. 3). They also reported that research shows that from the time the baby is born, his or her brain is biologically already formed to connect in relationships. In the same way, the study warned that a lack of connectedness to other people and to moral and spiritual meaning is causing this crisis of American childhood.

The findings regarding infant, childhood, and adolescent attachment, further substantiate the role of research involving attachment styles in adulthood. Clinton and Straub (2010) wrote that early life experiences stored in the limbic system (also known as the emotional brain) as implicit memories influence how healthy or not the connection of attachment behaviors. These implicit memories are emotionally charged and influence children's behavior, pre-verbally and outside of their consciousness. Kaufmann (1981) added that attachment theory describes how the long-term effects of early attachment experiences or "internal working models" remain

relatively stable across time, but they can be altered with significant changes in social and emotional life circumstance.

**Adult Attachment**

Bowlby (1969, 1973, 1980) formulated the theory of attachment to describe the way human beings have a natural inclination to make lasting affectional bonds or attachments to familiar and irreplaceable individuals. Once these bonds are established, one's emotional health and well-being is related to the quality, security and stability of these attachments (Sable, 2007). While Bowlby's initial research in attachment theory examined the infant-caregiver bond, it has grown to be recognized as a lifespan development theory. Bowlby (1969/1982) wrote that attachment behavior was relevant in adulthood and plays a role across the human life cycle from the cradle to the grave.

As a result, many attachment theorists began to focus on adolescents and adults, building upon the foundation of Bowlby's research in the areas of personality and social psychology. Bowlby's research related to grief and mourning in infancy and early childhood, helped Colin Murray Parkes increase his understanding of grief in adult life and the psycho-social transitions required after bereavement (Parkes, 1972). Bretherton (2004) described Parkes as co-founder of the modern hospice movement, and credits his use of attachment theory and research for developing programs for emotional care of the dying and bereaved. Bretherton also asserted that research on attachment theory in adulthood originated with the seminal work of John Bowlby and Colin Murray Parkes in 1970.

In the mid-1980s, researchers began to make serious inquiries with regard to attachment in adulthood. The literature began to shift from infant and childhood attachment to romantic love in adults. Shaver, Hazan, and Bradshaw (1988) hypothesized that attachment, along with

sexuality and caregiving were the three behavioral systems that combine to form romantic love. The function of adult attachment is to establish and maintain close and reliable relationships that ensure psychological and physical safety, affect regulation and felt security. Kirkpatrick (1992) agreed that an attachment relationship includes feelings of security and comfort, experiencing the attachment figure as both a safe haven (in the face of a real or perceived threat) and a secure base for exploration (when a threat doesn't exist), and distress and/or protest in the face of potential or actual separation. A central tenet of attachment theory is that people's internal representations or working models of relationships developed in their family of origin predispose them toward certain attachment styles in adulthood (Bartholomew & Horowitz, 1991).

Main, Kaplan and Cassidy (1985) conducted a longitudinal study of forty mothers, fathers, and their children at 12 months of age, 18 months of age, and 6 years old. The research presented seven analyses of attachment-related behavior including the Strange Situation, the Child Separation Interview, and the Adult Attachment Interview. The researchers examined the relationship between individual differences in attachment relationships and individual differences in internal working models or states of mind. Internal working models were defined as a set of conscious and unconscious rules that organize attachment experiences and act as filters through which human beings interpret relational experiences (Main et al., 1985). Their reconceptualization of the internal working model of the self in relation to attachment broadened the scope of attachment research. The study found that the parent's security of attachment was significantly related to the security of the infant's attachment to the parent at outset of the study. Eventually their findings led to the study of the intergenerational transmission of attachment patterns.

Hazan and Shaver (1987) initially conducted their systematic inquiry of romantic love as an attachment process. The authors designed a 95-item self-report questionnaire, divided into three sections to assess attachment related variables in love relationships. Data was collected from 620 respondents to a "love quiz" in a Colorado newspaper. The data were analyzed to measure the respondent's attachment style by assessing their feelings and behavioral tendencies in adult romantic relationships. In the final portion of the survey participants were asked to read three brief descriptions, and then to select the type that best describes their feelings and behavioral tendencies in romantic relationships. The three narratives were expected to be the adult romantic forms of the three infant attachment styles identified by Ainsworth et al. (1978). The three attachment style categories were examined along with the following question: Which of the following best describes your feelings?

1. *Secure*: "I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't worry about being abandoned or about someone getting too close to me."

2. *Avoidant*: "I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close and others often want me to be more intimate than I feel comfortable being."

3. *Anxious-ambivalent*: "I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get close to my partner, and this sometimes scares people away." (p. 515)

The results of the study provided mixed feelings for their examination of love as an attachment process. However, the research revealed that compared with the secure category, the

two insecure categories described their childhood relationships with their parents unfavorably, had a shorter history of romantic relationships and endorsed more negative experiences and beliefs about love in general.  Hazan and Shaver's (1987) findings indicated that the attachment styles approach to understanding attachment process in infancy was the same as adulthood with 56% of participants classifying themselves as secure, 25% characterizing themselves as avoidant, and 19% described themselves as anxious-ambivalent.  Levy and Davis (1988) conducted a study using Hazan and Shaver's (1987) three category model and suggested that the findings revealed a two-dimensional structure of adult attachment.

Bartholomew and Horowitz (1991) developed a four-category or two-dimensional model to describe adult attachment styles.  Their work expounded on Bowlby's conceptualization of two dimensions of self and others.  According to Bartholomew and Horowitz, the basis for adult attachment is established in infancy, via a combination of the internal working model of the self as positive or negative and the internal model of others as positive or negative.  The individual differences in adult attachment yield four types of attachment styles that include:

- Secure (positive self and other)

- Preoccupied (negative self, positive other)

- Dismissing (positive self, negative other)

- Fearful (negative self and other)

Bartholomew and Horowitz (1991) showed adult attachment could be assessed using either a coded interview or self and friend reports.  Subsequently, the researchers adapted the measure developed by Hazan and Shaver (1987) and referred to it as the Relationship Questionnaire, adding the following description category to the prototype:

Fearful: I am somewhat uncomfortable getting close to others. I want emotionally close

relationships, but I find it difficult to trust others completely, or to depend on them. I

sometimes worry that I will be hurt if I allow myself to become too close to others.

(p. 244)

The authors included the Fearful attachment style to conceptualize Anxiety and Avoidance in

dimensional terms with a Model of Self and a Model of Other (or Partner). However, theorists

continued to question whether a complicated phenomenon like attachment could be classified as

categorical.

A study conducted by Brennan, Clark, and Shaver (1998) endorsed the notion that two

dimensions (Avoidance of Intimacy and Anxiety about Abandonment) exist in almost every

attachment classification model. Their research supported Bartholomew and Horowitz's (1991)

findings that suggest people that obtain low scores on both dimensions have a secure attachment

style; in contrast, individuals that achieved high scores on both dimensions were believed to be

insecure or labeled fearful avoidant. They proposed that since humans vary along the two

continuous dimensions of attachment style, researchers can use the two dimensional model to

generate the fourfold classification if needed. In their attempt to create an all-purpose

attachment measure, Brennan et al. (1998) gathered data from every existing adult attachment

instruments and surveyed related literature and conference papers. Their inquiry yielded 323

items that were used to assess 60 attachment-related constructs identified during an exhaustive

literature review. The resulting instrument became known as the Experiences in Close

Relationship (ECR) inventory, a 36-item questionnaire with two 18-item scales.

The researchers administered the ECR along with four other measures to a large sample

of 1,086 (682 women and 403 men) undergraduate students enrolled in a Psychology course. It

took participants nearly two hours to complete the instrument.  Their findings produced 12 facets

of Avoidance and Anxiety: (a) Partner is a Good Attachment, (b) Separation Anxiety, (c) Self-

Reliance, (d) Discomfort with Closeness, (e) Attachment-Related Anger at Partners, (f)

Uncertainty About Feelings for Partners, (g) Discomfort with Dependence, (h) Trust, (i)

Lovability/Relational Self-Esteem, (j) Desire to Merge with Partner, (k) Tough-Minded

Independence, and (l) Fear of Abandonment.  However, they concluded that the 12 constructs

can be reduced to the two dimensions of Avoidance and Anxiety.

While attachment theory has garnered a lot of support, it has its critics.  Duck (1994)

complained that the field of close personal relationships is more complicated than attachment

theorists have acknowledged.  He argued that a lack of an interdisciplinary approach to

understanding attachment ignores the following: sociology, communications, family systems

theory, childhood rejection theory, parent intervention, and gender effects thus perpetuating

theoretical problems with social and personal relationships (Duck, 1994).  Nonetheless, Wulff

(2006) argued that the multidisciplinary roots of attachment theory make it the most promising

framework for understanding relationship with God within the psychology of religion.

**Attachment in Relationship with God**

Despite the many changes in its landscape, belief in God continues to be prevalent and

significant within American society.  In 2011, Gallup conducted telephone interviews with a

random sample of 1,018 adults, ages 18 or older and found that 92 percent answered yes.  Half of

the sample was asked the question "Do you believe in God?" while the other respondents were

asked, "Do you believe in God or a universal spirit?"  Since such a high percentage of the

American population say they believe in God, researchers continue to examine the many facets

of people's belief.  The Judeo-Christian tradition is dynamic and deserves a closer look because

the Deity is thought of as "personal", and desirous of a relationship with those he created (Beck & McDonald, 2004). Grudem (1994) listed four types of arguments presented throughout history by Christian and non-Christian philosophers as traditional "proofs" for the existence of God. They included:

1. The *cosmological argument* reflects on the fact that the universe, and every known object in it, has a beginning that can only be God.

2. The *teleological argument* expounds on the cosmological argument and highlights the design, order, and harmony revealed in the intelligent and purposive way God created the universe to function.

3. The *ontological argument* starts with the notion of God as an incomparable being, to which an equal is unimaginable.

4. The *moral argument* touts man's innate sense of right and wrong as proof of the existence of God.

Roberts (1997) referred to Christian psychologist's belief that human beings possess an indispensable Godward predisposition, and classified human attachments as second rate at best.

Does God serve as an attachment figure for believers? Roberts argued that in order to understand the intensely personal nature of relationship with God and others, attachment has been reduced to a mere survival function. His stance was in stark contrast to the Darwinian explanations promulgated by Bowlby. Instead, he viewed attachment processes (e.g., safety-regulating behavior) as having a rich and deeper purpose of not only trusting that human beings will more often than not be there for us, but also equipping us to trust God. Grudem (1994) proposed that all people possess a deep, inner sense of the reality of God and that evidence for

the existence of God can be found in Scripture and nature.  The Apostle Paul spoke regarding proof God's existence when he declared:

> For what can be known about God is plain to them, because God has shown it to them. For his invisible attributes, namely, his eternal power and divine nature have been clearly perceived, ever since the creation of the world, in the things that have been made.  So they are without excuse. (Romans 1:19–20)

Research on attachment to God is burgeoning, with most of the empirical evidence devoted to understanding God as an attachment figure (Kirkpatrick, 1990; Proctor et al., 2009; Sim & Loh, 2003).  Psychology of religion theorists hypothesize that attachment to God is mediated, or formed by early relationships (Miner, 2007) similar to that of attachment theory research involving a child and his or her principal attachment-figure.  A body of research related to adult attachment and the psychology of religion has emerged to weigh in on the idea of God as an attachment figure.

Theologian Gordon Kaufman made the initial attempt to connect Bowlby's attachment theory with human beings and their image or idea of God.  Kaufman (1981) acknowledged that it is unthinkable for us to rely solely on a secure human attachment, with our knowledge of finite human existence, failure, sin and death.  He argued that relationship to God is established and maintained principally through idea or symbol in our consciousness, in response to the shortcomings of human attachments and the presence of ontological anxiety (Kaufman, 1981). In light of this, he declared God is an absolutely adequate attachment figure in the Christian tradition (Kaufman, 1981).  However, Miner (2007) complained that Kaufman's constructionist theology denies the relationality of God as expressed via the objectivity or otherness of God; and

his emphasis on transcendence fails to capture the subjectivity or emotion in attachment relationship with God.

Social psychologist Lee Kirkpatrick, a pioneer of research in this area approached religion and the deep, inner sense of the reality of God from an evolutionary perspective. His cognitive-affective model of attachment to God holds that representations of God are based on experiences in relationship with primary caregivers (Miner, 2007).

He suggested that religious belief and behavior is a by-product of various adaptations that evolved in primitive humans (Kirkpatrick, 2005). Kirkpatrick believed that the attachment system is an example of several different psychological adaptations that over time have promoted attachment behaviors and feelings to a non-corporeal being such as God or gods.

A vast array of relationship partners can serve as attachment figures, including God. Kirkpatrick and Shaver (1992) conducted an empirical study of newspaper respondents, to examine the relationship between adult attachment and religious belief and behavior. Their study conceptualized relationship with God, like romantic love, in the context of attachment theory. The participants were asked to complete a questionnaire that contained items constructed to examine various religious variables and attachment relationship with God. As part of the study, Kirkpatrick and Shaver (1992) constructed three multisentence statements, similar to the Hazen-Shaver parental attachment instrument, as a measure of attachment to God. The following narratives were expected to be the adult romantic forms of the three infant attachment styles identified by Ainsworth et al. (1978), and participants were asked to respond to the following question by choosing one of the responses:

"Which of the following statements best describes your belief about God and your relationship with God?"

1. Secure: "God is generally warm and responsive to me; He always seems to know when to be supportive and protective of me, and when to let me make my own mistakes. My relationship with God is always comfortable, and I am very happy and satisfied with it."

2. Avoidant: "God is generally impersonal, distant, and often seems to have little or no interest in my personal affairs and problems. I frequently have the feeling that He doesn't care very much about me, or that he might not like me."

3. Anxious/ambivalent: "God seems to be consistent in His reactions to me; He sometimes seems very warm and responsive to my need, but sometimes not. I'm sure that He loves me and cares about me, but sometimes He seems to show it in ways I don't really understand." (p. 270)

The exploratory measure of attachment to God described above revealed that 70.1% of participants classified themselves as secure; 7.1% characterized themselves as avoidant, and about 22.7% described themselves as anxious and was weakly related to adult attachment (Kirkpatrick & Shaver, 1992). The authors reported very few significant correlations between several religious variables and mental health outcome measures. Notwithstanding, respondents that reported a secure relationship with God indicated greater life satisfaction and less anxiety, physical illness, loneliness and depression than other participants. These findings closely resembled results measuring security of attachment in human love relationship and suggested people's mental models of attachment relationships may influence their attachment relationships with a significant person or with God.

Kirkpatrick and Shaver (1992) suggested that after surveying participant's perception of their relationship with God, they noticed an uncanny resemblance to attachment in human

relationships. A relationship is considered an adult attachment relationship if it meets the following criteria: (a) the attached person seeks proximity particularly when distressed; (b) the caregiver provides a safe haven; (c) the caregiver provides a secure base; (d) the risk of separation creates anxiety in the attached person; and (e) the attached person experiences a sense of grief and loss if they lose the attachment figure (Kirkpatrick, 1994). According to Kirkpatrick, the worshipper-God relationship like the infant-mother relationship includes the previously mentioned characteristics. However, contrary to childhood, proximity seeking in the attached adult is to an external or internalized attachment figure. This decreases dependence on physical contact and lends itself to the possibility of attachment to a non-corporal attachment figure (Kirkpatrick 1992).

A review of the psychology of religion literature, revealed two different ideas concerning the conceptualization of attachment with God. Some research supported the compensation model of religious behavior; and suggested that belief in a loving, present, and personal God may be a substitute for the lack of secure attachments in a parental attachment figure (Granqvist, 1998; Kirkpatrick, 1999; Kirkpatrick & Shaver, 1990). While other studies endorsed the correspondence hypothesis that suggested attachment patterns in human relationships are evinced in attachment with God (Beck & McDonald, 2004; Cassibba, Granqvist, Costantini & Gatto; Rowatt & Kirkpatrick, 2002; Ten ElShof & Furrow, 2000). Although the models appear to contradict one another, Kirkpatrick (2005) made the following observation:

> To the extent that the correspondence and the compensation hypotheses lead to contradictory predictions and, of course, they cannot both be true – at least within the same people under the same conditions. Moreover, it may seem troubling that the same theory can lead to such mutually exclusive prediction simultaneously, which would seem

to suggest that the theory is unfalsifiable because it would not be supported by any set of empirical results (Granqvist & Hagekull, 1999). On the other hand, it is entirely possible that the two hypotheses are both correct, but for different people and/or under different sets of circumstances. Our task is then not one of deciding between them, but rather of identifying which process is responsible when, or for whom. (p.151)

This line of research supports the notion that human attachment styles influence how people view God and how they perceive that relationship with God.

Beck and McDonald (2004) argued that while the literature regarding relationship with God was growing, the inquiries lacked a psychometrically sound scale to operationalize the attachment to God construct. To that end, they developed the Attachment to God Inventory (AGI) to test the aforementioned correspondence and compensation hypotheses. Their investigation also included identifying faith group differences regarding attachment with God in an adult community sample. The investigators modeled their instrument after the ECR by Brennan et al. (1998), to assess the attachment dimensions of Avoidance and Anxiety as they pertain to relationship with God. Beck and McDonald (2004) concluded that relationship with God can be described as an attachment bond. In addition, they suggested that attachment to God may proceed in a developmental fashion as participants grow and interact with other believers.

Miner (2007) scrutinized psychological theories of attachment to God, calling for a more theologically informed paradigm. She argued that neither the cognitive-affective approach nor the relational model present a clearly articulated theological framework. According to Miner, viewing attachment to God through the lens of Colin Gunton's Trinitarian theology would allow for a completely inter-subjective attachment experience with circular and reciprocal relationships

between the attached person and God, and the attached person and their parents, partners, the Christian community and the Trinity.

In an attempt to tap into the developmental aspect of attachment to God, psychology of religion researchers began to see the benefit of using interviews instead of totally relying on self-report measures to assess attachment to God. In response, Proctor et al. (2006) developed the God Attachment Interview Schedule (GAIS), to address issues associated with self-report measures. For example, interviews do not limit individuals' response options, thus providing researchers a chance to investigate the complexity of relationship with God. The template was used to assess Christians' relationship with God from narratives obtained by interview. Independent raters analyzed narrative data to identify participants' attachment patterns with God; and based on the GAIS scoring protocol participants were assigned an overall attachment to God profile.

Proctor et al. (2009) reported findings from a study with thirty-one participants, using the GAIS to identify participant's specific relationship with God experiences. Researchers conducted semi-structured interviews to gather autobiographic narrative regarding the participants past and present experiences with God. Analysis of the narratives revealed evidence that supported both secure and insecure Attachment to God (ATG) profile markers (i.e. Secure-Autonomous, Insecure-Preoccupied, and Insecure-Dismissing). The findings were used to operationally define the three ATG profile markers; and to differentiate participant's representational models of self and of God. Proctor (2009) clarified that attachment to God profiles (secure, preoccupied and dismissing) remain potential profiles, pending further research. While attachment to God proved to be an intriguing research area in the psychology of religion arena, it has been neglected in the educational realm.

**Adult Education and Attachment**

According to Fleming (2008), "attachment theory is of profound and neglected importance for understanding adult learning and teaching" (p. 6). In lieu of this, he challenged adult educators to use attachment theory to reframe their ideas about issues related to teaching and learning. First, attachment styles influence how students react to the interpersonal dynamics in the adult learning situation. This may explain some of the barriers and resistance to learning opportunities. Next, adult education produces strange situations or perplexities that disorient or make the learner curious (Fleming, 2008). Notwithstanding, when working with adult learners, educators will think, feel, act and have expectations based on their own internal working models or basic assumptions about relationships (Fleming, 2007). Finally, the adult learners internal working model affects how information is evaluated, experienced, accepted, rejected or ignored, making it difficult for high avoidant or anxious attachment styles to maximize their learning potential. Fortunately, for adult educators attachment is a lifelong learning project and remains open for revision throughout the lifespan. Attachment research suggests that regardless of the intergenerational transmission of attachment style, it can change as via adult education, mentoring, and counseling. Be that as it may, Ecclestone, Hayes and Furedi (2005) cautioned that as adult educators perform a wider range of emotional roles related to mentoring, guidance and teaching the lines between professional and private life become vague. The authors suggested that in adult education, a therapeutic ethos reduces the field of vision from the local community to the individual.

In a study examining attachment and God representations, Cassibba et al. (2008) administered the Adult Attachment Interview (AAI) to two groups, Catholic priests and religious professionals and lay Catholics that attended church at least once a week to test the

correspondence and compensation hypotheses of attachment. The researchers found that priests and religious professionals reported a significantly higher proportion of secure classifications and a significantly lower proportion of unresolved-disorganized classifications as compared with the worldwide normal sample. In addition, results showed that the priest and religious professionals showed a higher score on the maternal Loving scale than the lay respondents. This suggests that their mothers were good enough to foster secure attachment, and supports the correspondence hypothesis. Ten Elshof (2000) investigated the relationship between spiritual and relational maturity and attachment theory in seminary students. She hypothesized that secure, intimate bonds with God and others provide the attached person with a safe haven as well as freedom to explore the aspects of vertical and horizontal spiritual maturity. Ten Elshof (2000) surveyed 216 seminary students and found that a statistically significant relationship exists between secure adult attachment and faith maturity. A correlation analysis revealed statistically significant relationships exist between secure adult attachment and total faith maturity ($r = .46$, $p < .01$), vertical faith maturity ($r = .50$, $p < .01$), and horizontal faith maturity ($r = .19$, $p < .01$) respectively. According to Ten Elshof, seminary education provides the professor with a unique opportunity to serve as an adult attachment figure to the student developing faith maturity. Kennedy (2008) agreed that student-teacher relationships could stimulate the growth of integrative fibers of the brain; providing a new structure for transforming insecure attachment strategies into secure attachment strategies. However, for professors or students struggling to establish secure attachments she advocates for a biblically nurtured Christian education community. Finally, Ten Elshof (2000) warned that pastors and teachers cannot model and teach what they have not experienced themselves. In order for the adult educator to create a safe environment for their students to learn and grow, they will have to address their own avoidance

and anxiety in relating with God.  Perhaps the most powerful way educators can model a real

relationship with God is to discuss the joys, as well as disappointments that they experience in

relationship with God (Eckert & Kimball, 2003).

## Summary

The literature review addressed Christian adult education and attachment to God.  An

overview of research by Malcolm Knowles, John Bowlby, Mary Ainsworth, Lee Kirkpatrick,

and Richard Beck was included.  A comparison of the characteristics of andragogy and pedagogy

was also provided.  In addition, church history and theological education were explored.  The

different types of attachment were defined with significant others and God.  Findings related to

attachment theory and adult education were presented to provide a bridge between social

psychology and education.  Finally, literature related to Christian adult education and attachment

with God was explored.

CHAPTER 3.  METHODS

"To my shame, I admit that one of the strongest reasons I stay in the fold is the lack of good alternatives, many of which I have tried. Lord, to whom shall I go? The only thing more difficult than having a relationship with an invisible God is having no such relationship. "

— Philip Yancey

"I've always felt that the heartbeat of the church is adults. Jesus loved children, but he did not call children. He called adults."

— Roberta Hestenes

## Introduction

Chapter 1 introduced the study, stated the problem, the research questions, significance of the study, definitions of terms and limitations of the study.  Chapter 2 provided a review of related literature associated with Christian adult education and attachment to God.  In general, Chapter 2 highlighted the following topics: adult education, adult Christian education, attachment theory, attachment to God theory, and the relationship between attachment to God and adult education.  The current chapter contains five sections, and will cover the methodological and procedural guidelines used to gather data for this study.

The initial section illustrates the purpose of the research, and the design of the study.  The second section will break down the demographics of the sample population.  The third section explains the data collection procedures, while the fourth portion describes the instrumentation and data collection strategies used in the study.  The fifth section discusses how the data were analyzed.

**Purpose of the Study**

The purpose of the study was to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. Specifically, the study examined whether adult Christian educators' perception of their relational bond with God influences how they learn and teach about God. In addition, the factors that were examined to address the research questions were related to participant's ethnicity and denominational affiliation. There are no known studies that examine attachment to God and Christian adult education orientation. Therefore this inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process. The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, Bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

An understanding of attachment theory and attachment to God may help Christian adult educators participate in and provide learning experiences for adults learners, and themselves if necessary, that enhance their education ministry. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

## Research Questions

The following research questions were used in this study:

1.      What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

2.      Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

3.      Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

## Participants

A total of 123 participants accessed the online survey.  However, one participant did not complete the survey.  Therefore, data is reported for 122 participants.  Data was collected from October 29, 2011 through April 15, 2012.  There were 8 items on the survey that collected demographic data from the respondents.  A total of 11 participants did not provide any information in this portion of the survey.  Consequently, demographic data is presented for 111 participants.  The requirement for participation in the study was met if the individual was involved in organizing and administering teaching and learning activities for adults within a Christian institution.  The sample for this study included 122 Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, Bible study teachers) from the southeastern region of the United States.  Each participant was at least 19-years-old and involved in organizing and administering learning activities for adult learners within Christian organizations.  Demographic information was obtained in this study by using a demographic questionnaire developed by the researcher (see Appendix A).  The questionnaire inquired about participant's

denominational affiliation, gender, age, and level of education, current relationship status, denominational affiliation, ethnicity, and primary role in adult Christian education.

## Data Collection Procedures

Data collection began with approval by the researcher's doctoral committee, and then the research protocol was submitted and approved by the Auburn University Institutional Review Board for Research Involving Human Subjects (IRB) (see Appendix B).  The researcher obtained e-mail addresses of Christian adult educators affiliated with Christian organizations in the southeastern region of the United States.  An invitation to participate in the survey was e-mailed to participants (see Appendix C).  The e-mail provided a link to an electronic Informed Consent letter (see Appendix D) for participants to obtain additional information about the study.  The Informed Consent letter contained the following information: a description of the research study, detailed information regarding privacy and consent, and the approximate time it would take to complete the survey.  A link to the survey was provided within the electronic Informed Consent letter for individuals that consented to participate in the study.  The survey included the following:  a demographic survey, the *Attachment to God Inventory*, and the *Teaching Methodology Instrument* (see Appendix A).

The data were collected through Survey Monkey, an online survey website with Secure Sockets Layer (SSL) technology to ensure that participants' data was safe, secure, and available only to authorized personnel. The researcher followed a protocol developed for transmitting private documents or information via the Internet.  The settings were adjusted not to collect IP addresses or e-mail addresses for survey participants.  The sample included Christian adult educators within Christian organizations in the southeastern region of the United States.

## Analysis

The two statistical procedures used in this study were Pearson Product Moment Correlation and MANOVA, both of which require that the variables of interest be continuous variables measured on the interval or ratio scales (Stevens, 2009). Quantitative data were collected in SPSS. The dependent variables in the study were subscale scores obtained from the Attachment to God Inventory (AGI) and from the Teaching Methodology Instrument (TMI). Subscale scores obtained on the AGI could range from 12 to 98. Subscale scores on the TMI could vary from 0 to 16. Scores from both instruments were measured on the ratio level of measurement. The Statistical Package for the Social Sciences (SPSS) was used to conduct the analyses. The study used the Pearson Product Moment Correlation to measure the relationship between the two dependent variables. The MANOVA procedure was used to examine relationship among the dependent variables and the independent variables. The independent variables were ethnicity and denomination, and the dependent variables were attachment style with God and teaching and learning orientation.

## Instrumentation

### Attachment to God Inventory

Two instruments and a demographic questionnaire were used in this study: the Attachment to God Inventory (AGI) developed by Dr. Richard Beck and Dr. Angie McDonald in 2004, and a modified version of the Teaching Methodology Instrument (TMI), designed in 2009 by Dr. Bryan Taylor and Dr. Michael Kroth. The demographic questionnaire was designed by the researcher to obtain pertinent information about Christian adult orientation from the sample.

The researcher obtained permission from Dr. Richard Beck to use the AGI in this study (see Appendix E). Participants completed the AGI (Beck & McDonald, 2004) as a measure of

attachment to God. The instrument was based on the Experiences in Close Relationships Scale, developed by Brennan, Clark, and Shaver (1998). The AGI originally consisted of 28 items with 14 items measuring Anxiety over lovability (e.g., "I worry a lot about my relationship with God," "I am jealous at how God seems to care more for others than for me," and "I often worry about whether God is pleased with me") and 14 items measuring Avoidance of intimacy in relationship to God (e.g., "I just don't feel a deep need to be close to God", "I am uncomfortable being emotional in my communication with God," and "I believe people should not depend on God for things they should do for themselves"). However, the authors suggested researchers consider deleting Avoidance items 14 and 16, as they correlated more strongly with the Anxiety factor. As a result, this researcher chose to omit items 14 and 16 from this study. For the purpose of this study, the researcher used the 26 items that showed strong cross-factor loadings on both the Anxiety and Avoidance subscales. The 26 questions used a 7-point Likert scale format with 1 (Disagree strongly), 4 (Neutral/Mixed), and 7 (Agree strongly). The Likert scale configuration allows the participant to choose from a range of responses. The AGI (Beck & McDonald, 2004) was used to measure attachment anxiety with God and attachment avoidance with God, in which higher scores on either dimension reflect higher levels of each concept.

Beck and McDonald (2004) reported good internal consistency coefficients for both the AGI-Anxiety subscale (14 items) and the AGI-Avoidance subscale (14 items). The researchers conducted three studies in their initial exploration of the Attachment to God Inventory. The three samples revealed the following Cronbach's alpha coefficients: Study 1 (college sample) — .84 for AGI-Anxiety subscale and .86 for AGI-Avoidant subscale; Study 2 (college sample) — yielded an .80 on the AGI-Anxiety subscale and .84 on the AGI-Avoidance subscale; Study 3 (community sample from Christian adult education programs) — .87 for AGI-Anxiety subscale

and .86 AGI-Avoidance (Beck & McDonald, 2004). In the present study, the Cronbach's alpha coefficient for AGI-Anxiety subscale was .70, and the Cronbach's alpha coefficient for the AGI-Avoidance subscale was .82. The results revealed that the scores from the two subscales from the AGI produced acceptable levels of reliability.

**Teaching Methodology Instrument**

The researcher obtained permission from Dr. Michael Kroth to use the TMI in this study (see Appendix F). Participants completed a modified version of the Teaching Methodology Instrument (TMI) designed by Dr. Bryan Taylor and Dr. Michael Kroth in 2009. There are no known instruments that measure the use of andragogical and pedagogical principles in Christian adult education. Taylor and Kroth (2009) proposed the TMI as an instrument to test whether educators' teaching styles are more learner-centered or teacher-centered. The authors adapted Malcolm Knowles' eight categories of adult learning principles from the book, *The Modern Practice of Adult Education* (1980, pp. 43–44). The authors referred to the questionnaire as a template for developing future research tests (Taylor & Kroth, 2009). When appropriate, items from the modified Teaching Methodology Instrument (TMI) items closely followed the wording of items from the original scale.

The modified version of the TMI compiled eight categories or concepts that differentiate andragogy and pedagogy: (a) Concept of the learner, (b) role of the teacher, (c) role of the learner's experience, (d) primary technique of delivery, (e) readiness to learn, (f) how learning should be organized, (g) orientation of learning, and (h) organization of curriculum. The 16 items from the TMI allow three possible selections from the respondent: yes, no, or somewhat. The TMI assigns value to the odd questions with 0 (yes), 2 (no), and 1 (somewhat), and the even questions 2 (yes), 0 (no), and 1 (somewhat). The researcher adds the responses to each question

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for a total score. The scores on the subscales range from 0 to 16. Scores approaching 16 indicate a stronger presence of andragogical principles, and the scores closer to 0 evince stronger pedagogical principles.

Prior to this study, no known reliability or validity information had been reported on the TMI. The researcher used the 16-question instrument and suggested scoring system to design a measure of andragogical and pedagogical principles in Christian adult education. In the current study, the Cronbach's alpha coefficient for the Pedagogical Orientation Subscale was reported as .39 and an alpha of .20 was provided for the Andragogy Subscale on the TMI. Both scores failed to meet the test value of .70. Therefore, the data obtained from this instrument produced indicated low reliability.

### Summary

The present study used a quantitative research design to assess the data collected in the study. The researcher used the AGI, a modified version of the TMI, and a demographic questionnaire to design the survey. The data were collected through an online survey website with Secure Sockets Layer (SSL) technology to ensure that participants' data was safe, secure, and available only to authorized personnel. The sample included 122 Christian adult educators within Christian organizations. The researcher obtained e-mail addresses of Christian adult educators affiliated with Christian organizations in the southeastern region of the United States. An invitation to participate in the survey was e-mailed to those potential participants. The independent variables were ethnicity and denomination, and the dependent variables were attachment style with God and teaching and learning orientation.

This chapter presented the purpose of the study, research questions, demographics, data collection procedures, analysis, and instrumentation. The sample and population were identified.

The reliability estimates were discussed with regard to the Attachment to God Inventory (AGI) and the Teaching Methodology Instrument (TMI). Data were collected according to the Auburn University Institutional Review Board's specifications. The statistical procedures used to conduct this study were descriptive statistics, Pearson Product Moment Correlation and MANOVA to ascertain whether or not a relationship exists between the teaching and learning orientation and the dimensions of attachment with God among Christian adult educators, as well as possible correlations between teaching and learning orientation and attachment with God based on denominational affiliation and race/ethnicity.

CHAPTER 4: RESULTS

"Teaching, like any truly human activity, emerges from one's inwardness, for better or worse. As I teach, I project the condition of my soul onto my students, my subject, and our way of being together."
—— Parker J. Palmer

"Nevertheless, I am continually with you; you hold my right hand. You guide me with your counsel, and afterward you will receive me to glory. Whom have I in heaven but you? And there is nothing on earth that I desire besides you. My flesh and heart may fail, but God is the strength of my heart and my portion forever."
—— Psalm 73:23-26

## Introduction

In this study, attachment to God is presented as a missing dimension of our current understanding of Christian adult education. Joung (2011) agreed that refining elements of the attachment to God framework is a significant task for Christian adult education. This exploratory quantitative study examined attachment in relationship with God and the teaching and learning orientation of Christian adult educators.

The purpose of the study was to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. There are no studies that examine attachment to God and Christian adult education orientation. Therefore this inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process. The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs.

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In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

The study also investigated the relationship among the following factors: degree of Avoidance of Intimacy with God, Anxiety about Abandonment by God, and level of teaching and learning orientation i.e., Andragogical Orientation or Pedagogical Orientation, varied according to ethnicity or denominational affiliation in Christian adult educators. The dependent variables in the study were Avoidance of Intimacy with God and Anxiety about Abandonment as indicated by subscale scores of the AGI, as well as the Andragogical Orientation and Pedagogical Orientation Subscale Scores as evinced by subscale scores of the TMI.

A total of 123 participants accessed the on-line survey. However, one participant did not complete the survey. Therefore, data is reported for 122 participants. Data was collected from October 29, 2011 through April 15, 2012. There were eight items on the survey that collected demographic data from the respondents. A total of 11 participants did not provide any information in this portion of the survey. Consequently, demographic data is presented for 111 participants. This next section summarizes the results for the demographic variables, highlighting the independent variables of race/ethnicity and denominational affiliation.

## Research Questions

The investigation was guided by the following research questions:

1.      What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

2.      Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

3.     Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

<div align="center">**Instrumentation**</div>

**Attachment to God Inventory**

The Attachment to God Inventory is a 28-item self-report measure developed by Beck and McDonald (2004). The instrument consists of two subscales designed to assess the basic dimensions of attachment with God: Avoidance (evasion of intimacy and compulsive self-reliance) and Anxiety (pertaining to possible abandonment and lack of intrinsic lovability). The two dimensions could be dichotomized into the classic four-fold attachment typology: Secure (low anxiety-low avoidance), Preoccupied (high anxiety-low avoidance), Dismissing (low anxiety-high avoidance), and Fearful (high anxiety-high avoidance) with higher scores on either dimension reflecting higher levels of each concept.

For the purpose of this study, the researcher used the 26 items that showed good simple structure with regards to their respective factors (i.e., Anxiety and Avoidance). Items 14 and 16 originally drafted as Avoidance items correlated strongly with the Anxiety factor, and as a result were omitted from this study as suggested by Beck and McDonald (2004). The remaining 26 items were scored on a 7-point Likert scale with 1 (Disagree strongly), 4 (Neutral/Mixed), and 7 (Agree strongly). The Avoidance subscale contained 12-items, and 14-items were included in the Anxiety subscale. Items 4, 8, 13, 16, 24, and 26 were reverse scored. Subscale scores obtained range from 12 to 98.

**Teaching Methodology Instrument (TMI)**

Taylor and Kroth (2009) proposed the TMI as an instrument to examine whether educators teaching styles are more learner-centered or teacher-centered. The authors adapted

Malcolm Knowles' eight categories of adult learning principles in the book *The Modern Practice of Adult Education* (1980), and referred to the questionnaire as a template for developing future research instruments (Taylor & Kroth, 2009). When appropriate, items from the modified Teaching Methodology Instrument (TMI) closely resembled the wording of items from the original scale. The two scales of the TMI contain a total of 16 items that allow three possible selections from the respondent: Yes, No, or Somewhat. The odd Questions of Assumptions are based on pedagogical principles, while the even questions are andragogically oriented. The TMI assigns value to the odd questions with 0 (yes), 2 (no), and 1 (somewhat), and the even questions 2 (yes), 0 (no), and 1 (somewhat). The researcher obtained a sum of the responses to each question for a total score. The scores on each scale range from 0 to 16. Scores approaching 32 indicate a stronger presence of andragogical principles, and the scores closer to 0 evince stronger pedagogical principles.

## Participants' Demographics

### Denominational Affiliation of Participants

Information regarding the denominational affiliation of the participants is provided in Table 4 which includes the frequency count and percentage for each group. The data revealed that the majority of participants chose Methodist (33.6%) as their denominational affiliation. The second largest group indicated they were Baptist (26.2%). The third largest percentage consisted of participants that selected the Non-Denominational affiliation (19.7%).

Table 4

*Summary of Participants Denominational Affiliation*

| Denominational Affiliation | Frequency | Percent |
|---|---|---|
| Baptist | 32 | 26.2 |
| Catholic | 2 | 1.6 |
| Lutheran | 1 | .8 |
| Methodist | 41 | 33.6 |
| Non-Denominational | 24 | 19.7 |
| Other | 6 | 4.9 |
| Presbyterian | 5 | 4.1 |
| Total completed responses for item | 111 | 91.0 |
| Missing responses | 11 | 9.0 |
| Total number of participants | 122 | 100.0 |

The data in Table 4 indicates that Catholic, Lutheran, and Presbyterians were not significantly represented within the sample. Since conducting the MANOVA statistical procedure with small groups would skew the results, the researcher elected to collapse the four categories (Catholic, Lutheran, Presbyterian, and Other) into one group labeled Other. Table 5 presents a summary of the participants in the four denominational categories that were used in the MANOVA procedure.

Table 5

*Collapsed Groups Across Denominational Affiliation*

| Category | Frequency | Percent |
|---|---|---|
| Baptist | 32 | 26.2 |
| Methodist | 41 | 33.6 |
| Nondenominational | 24 | 19.7 |
| Other | 25 | 20.5 |
| Total | 122 | 100.0 |

**Race/Ethnicity of Participants**

Table 6 presents a summary of the participants by racial/ethnic group affiliation. Results show that the majority of participants (90.1%) chose either Black/African American or White as their racial/ethnic group affiliation. That is, results further indicated that 39.3% of participants identified themselves as Black/African American and 50.8% identified themselves as White. One person marked the category of Other.

Table 6

*Summary of Participants by Race/Ethnicity*

| Race/Ethnicity | Frequency | Percent |
|---|---|---|
| Black or African-American | 48 | 39.3 |
| White | 62 | 50.8 |
| Other | 1 | .9 |
| Total completed responses for item | 111 | 91.0 |
| Missing responses | 11 | 9.0 |
| Total | 122 | 100.0 |

**Gender of Participants**

Table 7 illustrates the distribution of participants in this study, by gender. The details below describe the gender composition of the sample. A larger percentage of males (49.2%) participated in the study, compared to females (41.8%). Another 9% of participants did not indicate their gender.

Table 7

*Summary of Participants by Gender*

| Gender | Frequency | Percent |
|---|---|---|
| Male | 60 | 49.2 |
| Female | 51 | 41.8 |
| Total completed responses for item | 111 | 91.0 |
| Missing responses | 11 | 9.0 |
| Total | 122 | 100.0 |

**Age of Participants**

Each participant was at least 19-years-old and involved in organizing and administering learning activities for adult learners within Christian organizations. Table 8 shows the results for the participants according to age category. The largest percentage of participants (36.1%) chose the 51–60 year age category. Among those ages 26–30, the participation percentage rate fell to (4.1%).

Table 8

*Summary of Participants by Age*

| Age | Frequency | Percent |
|---|---|---|
| 26–30 | 5 | 4.1 |
| 31–40 | 21 | 17.2 |
| 41–50 | 21 | 17.2 |
| 51–60 | 44 | 36.1 |
| 61–over | 20 | 16.4 |
| Total completed responses for item | 111 | 91.0 |
| Missing responses | 11 | 9.0 |
| Total | 122 | 100.0 |

**Participants' Level of Education**

Table 9 reveals the results of the respondents' level of education. According to the data, most Christian adult educators (78.6%) indicated they had some college education. The largest percentage of participants (31.1%) held a master's degree. The second highest percentage (26.2%) indicated that they had obtained a bachelor's degree. Nearly 2 % of the participants had a High School/GED level of education.

Table 9

*Summary of Participants' Level of Education*

| Level of Education | Frequency | Percent |
|---|---|---|
| High School/GED | 2 | 1.6 |
| Some College | 9 | 7.4 |
| 2-Year College Degree (Associate's) | 4 | 3.3 |
| 4-Year College Degree (Bachelor's) | 32 | 26.2 |
| Master's Degree | 38 | 31.1 |
| Doctoral Degree | 17 | 13.9 |
| Professional Degree (MD, JD) | 9 | 7.4 |
| Total completed responses for item | 111 | 91.0 |
| Missing responses for item | 11 | 9.0 |
| Total | 122 | 100.0 |

**Participants' Relationship Status**

Table 10 presents a summary of responses related to relationship status. The majority of participants indicated they were married (78.6%). The second largest percentage (9.0%) indicated that they were divorced.

Table 10

*Summary of Participants Relationship Status*

| Relationship Status | Frequency | Percent |
|---|---|---|
| Single | 9 | 7.4 |
| Married | 86 | 70.5 |
| Divorced | 11 | 9.0 |
| Remarried | 4 | 3.3 |
| Widowed | 1 | .8 |
| Total completed responses for item | 111 | 91.0 |
| Missing Responses | 11 | 9.0 |
| Total | 122 | 100.0 |

**Participants' Role in Christian Adult Education**

Table 11 presents a summary the participants' responses with regard to their particular role in Christian adult education.  The majority of participants indicated they were a Minister/Pastor (39.3%).  The second largest group identified themselves as Bible Study Teachers (21.3%).  A small percentage (3.3%) identified themselves as being counselors.

Table 11

*Summary of Participants' Responses for Role in Christian Education*

|  | Frequency | Percent |
|---|---|---|
| Administrator | 6 | 4.9 |
| Bible Study Teacher | 26 | 21.3 |
| Counselor | 4 | 3.3 |
| Group Facilitator | 10 | 8.2 |
| Faculty | 5 | 4.1 |
| Minister/Pastor | 48 | 39.3 |
| Other | 12 | 9.9 |
| Total completed responses for item | 111 | 91.0 |
| Missing Responses | 11 | 9.0 |
| Total | 122 | 100.0 |

**Pre-Analysis Data Screening**

This study was exploratory and might be subject to certain weaknesses not found in experimental designs, where the researcher can control relevant variables, manipulate an independent variable, and observe if the hypothesized change has occurred (Ary, Jacobs, & Razavieh, 2002). Nonetheless, the researcher conducted a series of pre-data analyses to assess the level of accuracy and validity of the data collected for a study (Mertler & Vanatta, 2005); as the quality of the data affects the accuracy of the interpretation of the results derived from the data. In addition, prescreening data allows the researcher to determine whether or not systematic errors have been made; and it helps the investigator to interpret the findings within an

appropriate context (Onwuegbuzie & Daniel, 2003). During the pre-data analysis phase, researchers must address the following: (a) accuracy of data collected, (b) procedures for addressing missing data, (c) level of measurement for dependent variable, (d) adequacy of the sample size for each statistical procedure, and (e) degree to which statistical assumptions have been met for each statistical procedure.

**Accuracy of Data**

The data used in this study consisted of self-reported data that was collected directly from the participants about themselves. Each participant provided responses to an on-line survey hosted by Survey Monkey. Use of the on-line survey allowed the researcher to accurately capture and record the responses of each participant. Therefore, the researcher concluded that the data accurately reflected the participants' responses to the survey items.

**Level of Measurement for Dependent Variable**

The level of measurement for any collected data affects the appropriateness of the statistical procedure conducted on the data. The two statistical procedures used in this study were Pearson Product Moment Correlation and MANOVA, both of which require that the variables of interest be continuous variables measured on the interval or ratio scales (Stevens, 2009). The dependent variables in the study were subscale scores obtained from the AGI and from the TMI. Subscale scores obtained on the AGI could range from 12 to 98. Subscale scores on the TMI could vary from 0 to 16. Scores from both instruments were measured on the ratio level of measurement. Therefore the assumption regarding the level of measurement for the dependent variables was met for this study.

**Missing Data**

When conducting survey research as part of the prescreening data process researchers must address the issue of missing data and how the missing data was handled in the data analysis phase (Stevens, 2009). Missing data creates a problem in survey research because it affects the generalizability of findings, decreases the amount of usable data in a data set, and ultimately decreases the power associated with a statistical test (Mertler & Vanatta, 2005; Stevens, 2009). The first step in the missing data analysis phase of this study consisted of a visual scan of the data to determine which surveys were missing data. If a participant failed to respond to 15% or more of the items, the participant was considered as having too much missing data and the participant was dropped from the statistical analyses (Hertel, 1976). This procedure resulted in one survey being deleted from the data set. For the remaining surveys, the data were considered to be missing at random (Allison & Gorman, 1993). The remaining items of missing data then were replaced through the means imputation procedure. Imputation is defined as "the estimation of a missing value and the subsequent use of that estimate in statistical analyses" (Allison & Gorman, 1993, p. 85). Item means were inserted for cases with missing values. The method of assigning either an item mean or a scale mean for missing data maximizes the amount of data collected and minimizes the effects of missing data. The strategy of replacing missing data with a constant is supported by Cohen and Cohen (1983). They advocated that the practice of filling in missing data with a constant—the mean of an item or a scale—results in losing the smallest amount of information and statistical power. In addition, the mean imputation procedure is a conservative approach to handling the occurrence of missing data (Allison & Gorman, 1993; Mertler & Vanatta, 2005). The approach is conservative because inserting the item mean for a scale does not change the overall mean, but it does reduce the number of cases dropped from

subsequent statistical analyses.  Only 17 cases of the 122 participants had missing data, and of those cases participants were missing three or fewer items.

**Adequacy of Sample Size**

The reliability of results obtained from a statistical analysis is partly a function of the sample size from which the results were computed (Howell, 2004; Mertler & Vanatta, 2004; Stevens, 2009).  There are minimum sample sizes needed for each statistical procedure. Research has suggested that when using statistical procedures to compare scores or means of subjects, the sample in each cell should exceed the number of dependent variables (Hair, Anderson, Tatum, & Black, 1995).  Using this guideline, an adequate sample would consist of at least 2 participants for each the dependent variables.  With four dependent variables, the minimum sample size would be eight.  In reviewing the cross tabs procedure in SPSS, the results revealed that the smallest group size to be used in the statistical comparisons was 14.  Since the smallest group size exceeded the number of dependent variables (which was four in this study), the researcher concluded that the sample size of 122 participants was adequate for this study.

<div align="center">

**Testing Statistical Assumptions**

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Testing statistical assumptions associated with a statistical procedure enables researchers to more accurately interpret their findings (Onwuegbuzie & Daniel, 2003).  Testing whether or not assumptions have been met allows researchers to assess the degree to which errors may impact the interpretation of results.  The Pearson Product Moment Correlation and MANOVA are parametric statistical procedures that are predicated upon the assumptions of linearity, normality, and homoscedasticity (Mertler & Vanatta, 2005; Stevens, 2009).  The assumption of linearity presupposes that there is a straight line relationship between the variables.  Normality refers to the degree to which scores on a given variable are normally distributed.  The

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homoscedasticity assumption presumes that the variance among scores of continuous variables is approximately equal (Mertler & Vanatta, 2005; Stevens, 2009).

When conducting research using multiple variables, researchers must test the assumptions using univariate and multivariate procedures. The univariate procedures address the degree to which the assumptions are met for each of the individual, continuous variables in the study. The multivariate procedures address the degree to which the assumptions are met for the combination of continuous variables in the study (Mertler & Vanatta, 2005). There are both visual and statistical procedures for assessing the statistical assumptions. Both methods were used to test the statistical assumptions that were relevant to this study. Details regarding the results from the tests of statistical assumptions are presented in the next section.

The researcher tested the univariate and multivariate assumptions for linearity using graphs and statistical tests. Linearity and normality can be assessed by observing visual depictions of a distribution of scores on a graph (Mertler & Vanatta, 2005). One such graph is the Normal P-P Plot of the Regression Standardized Residuals, which graphically compares the shape of a distribution of scores to the shape of a normal distribution. The shape of the normal distribution is represented by a $45^{o}$ straight line. When the linearity assumption is upheld, the range of scores cluster closely to the $45^{o}$ straight line.

The univariate assumption of linearity was tested using P-P plots. Figures 2 through Figure 5 shows the P-P plots for each of the dependent variables. The graphs reveal that the shape of the data points for each dependent variable roughly approximated the shape of a straight line, with some points falling above the line and some points falling below the line. Results from the graphs suggest that the univariate assumptions for linearity and normality were upheld.
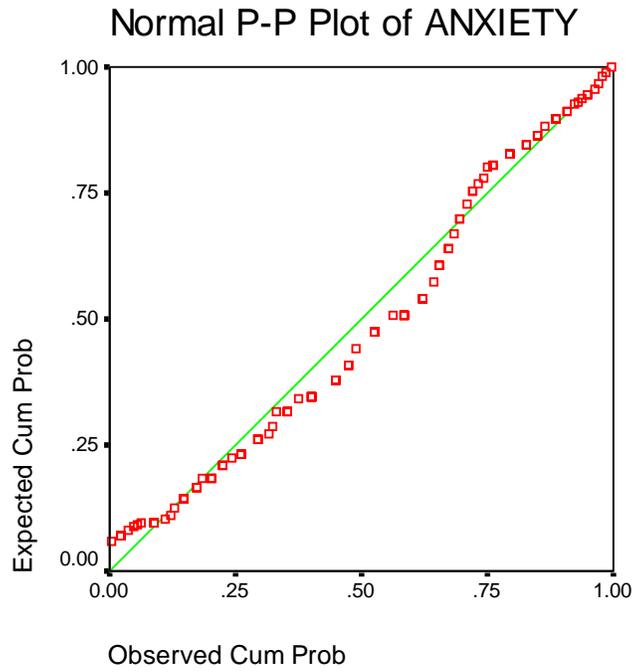
*Figure 2.* Normal P-P Plot for Anxiety
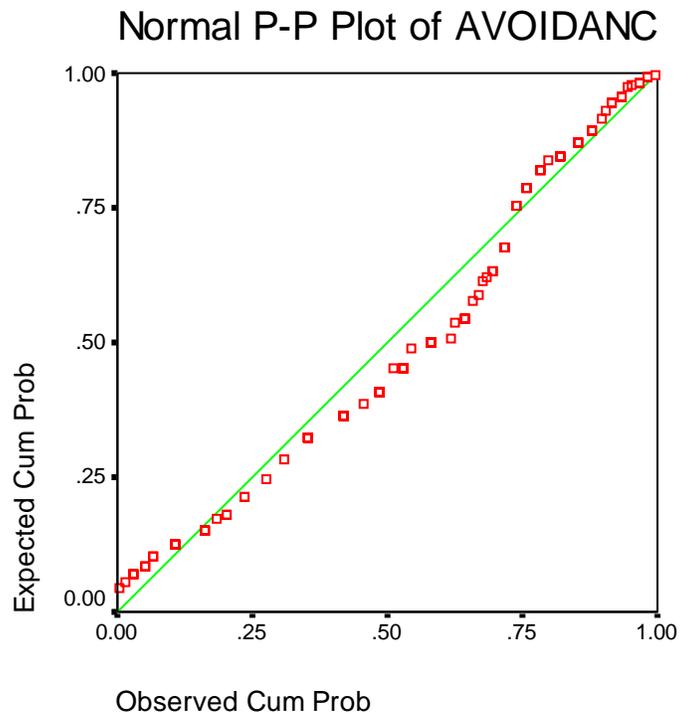


*Figure 3.* Normal P-P Plot for Avoidance
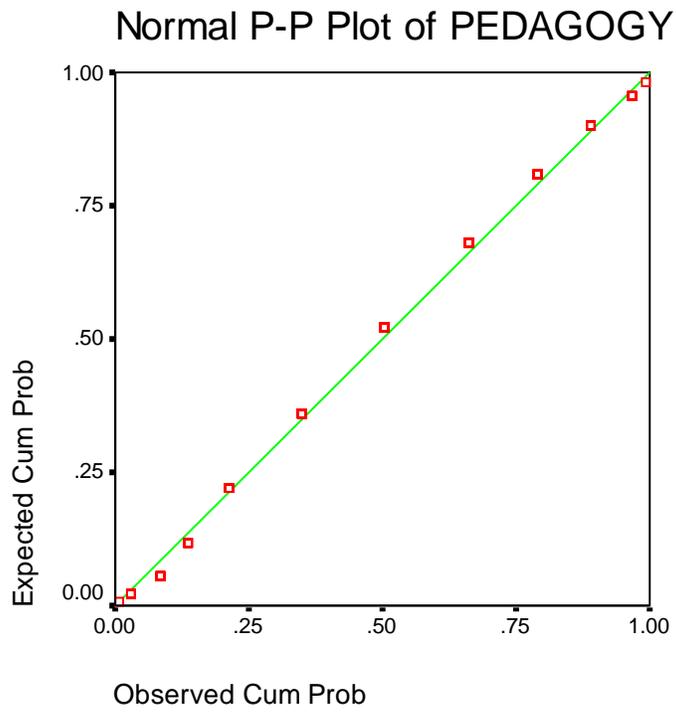
*Figure 4.* Normal P-P Plot for Pedagogy
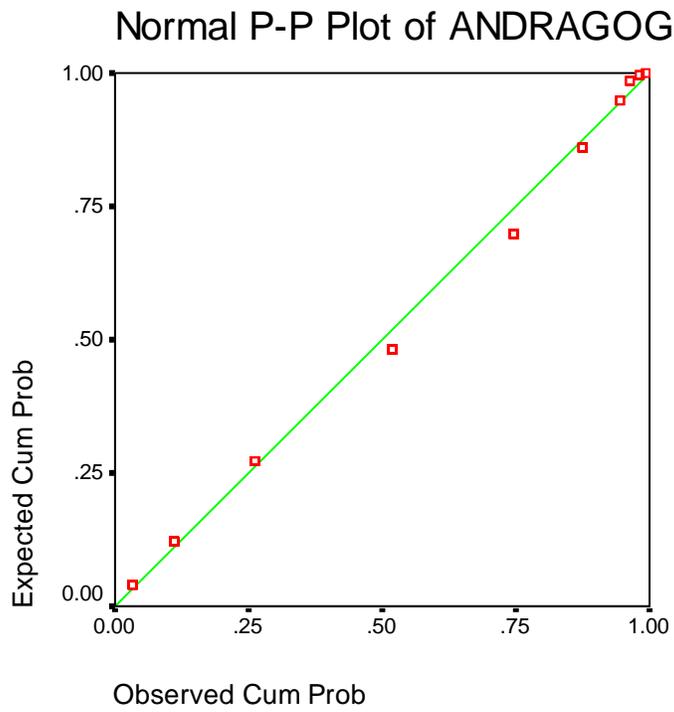


*Figure 5.* Normal P-P Plot for Andragogy

Researchers must also test assumptions for multivariate linearity and normality when conducting the MANOVA procedure, because most of the procedures are predicated upon the presence of linear relationships between variables that are normally distributed (Mertler & Vanatta, 2005). Multivariate linearity and normality can be tested by looking at the bivariate scatterplots for the variables of interest. If the variables have a linear relationship and the scores are normally distributed, then the pattern of scores on the scatterplots should approximate an elliptical shape (Mertler & Vanatta, 2005). Figure 6 shows the bivariate scatterplots for the dependent in the study. A review of the graph reveals that the pattern of scores for each pair of variables did not approximate an elliptical shape. This finding suggests that the assumption of multivariate linearity was not upheld for the data used in this study.
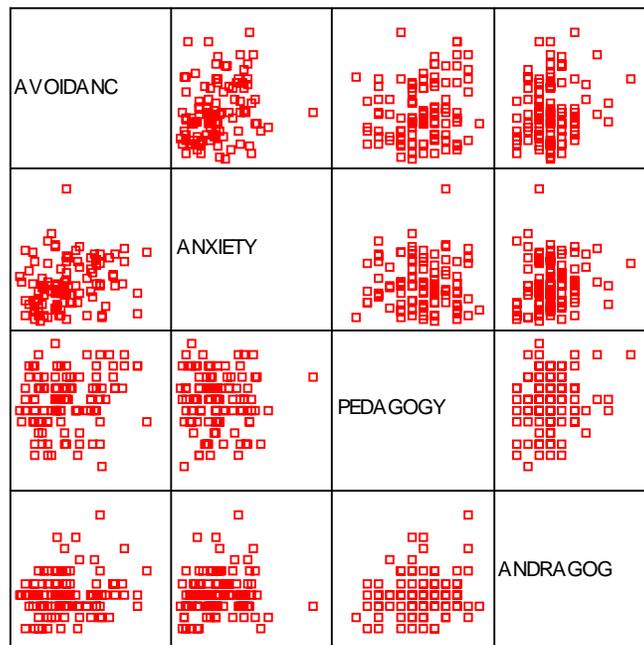


*Figure 6.* Bivariate Scatter Plots

The researcher also used statistical procedures to test the assumptions of linearity and normality. Both univariate and multivariate normality were assessed separately using the Kilmogorov-Smirnov test statistic. Table 12 presents a summary of the results for the test of univariate normality. Data revealed that the p-value is less than .05 therefore the researcher rejected assumption of normality for all four dependent variables.

Table 12

*Summary Results for Univariate Tests of Normality*

|  | Kolmogorov-Smirnov(a) | | |
| --- | --- | --- | --- |
|  | Statistic | df | Sig.* |
| AVOIDANC | .106 | 107 | .005 |
| ANXIETY | .088 | 107 | .039 |
| PEDAGOGY | .098 | 107 | .013 |
| ANDRAGOG | .190 | 107 | .000 |

Note: * $p = .05$

Table 13 presents a summary of tests for multivariate normality for the participants' scores based on denominational affiliation. Results revealed significant departures from multivariate normality for participant scores in the Non-Denominational category on the Avoidance Subscale. There was a significant departure from multivariate normality for participants who identified as Methodist and Non-Denominational on the Pedagogical Orientation Subscale scores. Results further revealed violations of normality for participants identified as Baptist, Methodist, and Other on the Andragogical Orientation Subscale.

Table 13

*Multivariate Normality Tests for Dependent Variables on Denominational Affiliation*

| Dependent Variable | Denominational Affiliation | Kolmogorov-Smirnov(a) | | |
| --- | --- | --- | --- | --- |
| | | Statistic | df | Sig. |
| AVOIDANC | Baptist | .112 | 29 | .200 |
| | Methodist | .116 | 38 | .200 |
| | Non-Denominational | .218 | 23 | .006 |
| | Other | .146 | 17 | .200 |
| ANXIETY | Baptist | .102 | 29 | .200 |
| | Methodist | .100 | 38 | .200 |
| | Non-Denominational | .165 | 23 | .105 |
| | Other | .127 | 17 | .200 |
| PEDAGOGY | Baptist | .115 | 29 | .200 |
| | Methodist | .145 | 38 | .042 |
| | Non-Denominational | .200 | 23 | .018 |
| | Other | .164 | 17 | .200 |
| ANDRAGOG | Baptist | .169 | 29 | .033 |
| | Methodist | .190 | 38 | .001 |
| | Non-Denominational | .147 | 23 | .200 |
| | Other | .277 | 17 | .001 |

Note: * *p* = .05

Table 14 presents a summary of tests for multivariate normality for the participants' scores according to racial/ethnic group membership. Results revealed significant departures from multivariate normality for Caucasian participants on the Pedagogical Orientation Subscale of the TMI. There was a significant departure from multivariate normality for both racial/ethnic groups on the Andragogical Orientation Subscale of the TMI.

Table 14

*Multivariate Normality Tests for Dependent Variables on Race/Ethnicity*

| Dependent Variable | Race/Ethnicity | Kolmogorov-Smirnov(a) | | |
| --- | --- | --- | --- | --- |
| | | Statistic | df | Sig.[a] |
| AVOIDANC | Black or African-American | .093 | 43 | .200 |
| | Caucasian | .108 | 60 | .079 |
| ANXIETY | Black or African-American | .125 | 43 | .088 |
| | Caucasian | .085 | 60 | .200 |
| PEDAGOGY | Black or African-American | .115 | 43 | .182 |
| | Caucasian | .129 | 60 | .014 |
| ANDRAGOG | Black or African-American | .191 | 43 | .000 |
| | Caucasian | .183 | 60 | .000 |

Note: * $p = .05$

## Interpretations of Statistical Assumptions

Results from tests of the statistical assumptions indicated that several assumptions had been violated. Howell (2004) states that the *F*-test is robust and violations of the assumptions of

normality have minimal effect under certain conditions. If the larger group variance is no more than four times the smallest group variance, violations of assumptions will have minimal effect (Howell, 2004). Other researchers also suggest determining which group has largest variance (Hair, Anderson, Tatum, & Black, 1995). If the smaller group has larger variance, alpha level is understated and the alpha level should be increased. These guidelines prompted the researcher to further compare the variances among the groups on the variables in which the normality assumption was violated.

The researcher compared multivariate group variances on the denominational affiliation across the dependent variables in the table in Appendix G. The data revealed that scores for those identified as Methodist were skewed on the AGI Anxiety Subscale. However, the largest group variance (Methodist = 148.53) compared to the smallest group variance (Other = 97.74) did not exceed the 4 to 1 ratio suggested by Howell (2004). Scores for the Baptist denominational affiliation were skewed for the Pedagogical Orientation Subscale score on the AGI. However, the data revealed the largest group variance (Methodist = 5.75) compared to the smallest group variance (Other = 7.65) did not exceed the 4 to 1 ratio suggested by Howell (2004). Scores for the Baptist denominational affiliation and both the Non-Denominational affiliation groups also had skewed scores for the Andragogical Orientation Subscale score on the AGI. Moreover, the data revealed the largest group variance (Methodist = 2.95) compared to the smallest group variance (Other = .58) did not exceed the 4 to 1 ratio suggested by Howell (2004). Consequently, the researcher concluded that the slight departures from normality would have minimum impact on the results.

The homogeneity of variance assumption for MANOVA assumes that there are equal variances across the scores for the continuous variables (Mertler & Vanatta, 2005). Examining

bivariate scatter plots for the continuous variables of interest can test this assumption. The shape of the scatter plot will approximate an elliptical shape when the assumptions of linearity, normality, and homoscedasticity assumptions are upheld (Mertler & Vanatta, 2005). Figure 2 depicts the scatter plots for the dependent variables (anxiety, avoidance, pedagogical orientation, and andragogical orientation) in this study. The figure revealed that the bivariate scatter plots did not show an elliptical shape. For this reason, the researcher concluded that the homoscedasticity assumption was not upheld for each data set.

Next, the researcher compared the variances for the racial/ethnic groups. Appendix H contains a summary of the results. A review of the output showed that in no case did differences between the smaller and larger group variances exceed the 4 to 1 ratio proposed by Howell (2004). As a result, he researcher concluded that that the homoscedasticity assumption was upheld for the group scores used in the racial/ethnic group comparisons.

The researcher also used the Levene's Test for Equality of Variances to address the homoscedasticity assumption. The Levene's test used to test the null hypothesis; assumed the error variance of the dependent variable is equal across groups (Mertler & Vanatta, 2005; Stephens, 2009) but failed to produce significant results. Results from the Levene's test of equality of variances are presented in Table 15. The researcher therefore concluded that that the homoscedasticity assumption was upheld for the group scores on the religious denominational affiliation group comparisons.

Table 15

*Levene's Test for Equality of Variances*

|  | F | df1 | df2 | Sig.* |
|---|---|---|---|---|
| AVOIDANC | 1.784 | 7 | 95 | .099 |
| ANXIETY | 1.323 | 7 | 95 | .248 |
| PEDAGOGY | .720 | 7 | 95 | .655 |
| ANDRAGOG | 1.635 | 7 | 95 | .135 |

Note: * *p* = .05

## Reliability Analysis

When conducting survey research the analyst must report information about the

psychometric properties of the survey for the sample of participants included in the study

(Onwuegbuzie & Daniel; 2003; Trochim & Dunnelly, 2007). Reliability is a cornerstone of the

scientific method that must be reported, because reliability is a function of scores obtained by an

instrument (Thompson & Vacha-Haase, 2000) and scores on an instrument can vary from sample

to sample. Therefore researchers must report the reliability data for the current sample

participants in their survey-based studies even when the focus is not on the psychometric

properties of the instrument (Onwuegbuzie & Daniel; Wilkinson & The Task Force on Statistical

Inference, 1999). The researcher used reliability analysis to assess the psychometric soundness

of the instruments in this study.

The reliability analysis was conducted using SPSS software to compute alpha coefficients

and the corresponding confidence intervals (Fan & Thompson, 2001). Cronbach's alpha was used

to assess the reliability of data collected from the items included in the survey (Cohen & Cohen,

1983; Trochim & Donnelly, 2007). According to Westhuis and Thayer (1989), coefficient alpha is the best measure of internal consistency because it "provides a good estimate of the major source of measurement error, sets the upper limits of reliability, [and] provides the most stable estimate of reliability" (p. 157). The level of the Cronbach alpha coefficient was admissible at a minimum of .70, because prior research indicates that values of .70 or greater suggest that a scale is internally consistent (Fan & Thompson, 2001; Kaplan & Saccuzzo, 2009; Mertler & Vanatta, 2005).

Table 16 presents a summary of results from the reliability analysis. The results revealed Cronbach's alpha of .82 for the Avoidance Subscale score and an alpha of .70 for the Anxiety Subscale score on the AGI. The results also revealed that the two subscale scores from the AGI produced acceptable levels of reliability. The alpha for both scales met or exceeded the test value of .70, which indicates good reliability estimates (Kaplan & Saccuzzo, 2009). In contrast, the results in Table 16 indicate that the subscale scores generated from the TMI had poor reliability estimates. The subscale scores failed to meet the test value of .70. Therefore, the data obtained from this instrument produced subscale scores with low reliability. Low reliability could be due to lack of clarity of the dimensions. Nonetheless, poor reliability could negatively affect interpretations made from the statistical comparisons of the group scores.

Table 16

*Summary of Results from the Reliability Analysis of the AGI and TMI*

| Subscale | α | *F* | *df* | Sig* | 95% confidence interval | |
| --- | --- | --- | --- | --- | --- | --- |
| | | | | | Lower bound | Upper bound |
| Avoidance | .70 | 1.00 | 121, 1331 | .58 | .61 | .77 |
| Anxiety | .82 | 1.65 | 121, 1573 | .000 | .77 | .86 |
| Pedagogical Orientation | .39 | .49 | 109, 763 | 1.00 | .20 | .57 |
| Andragogical Orientation | .20 | .38 | 109, 763 | 1.00 | -.05 | .41 |

Note: * $p = .05$

Table 17 presents a summary of the descriptive statistics for the AGI and TMI Subscales. The data presented in this table was used in the correlations analysis. The data were also used to compare group scores in the MANOVA procedure. In addition, Table 17 further reveals a different sample size for the AGI and TMI. This difference is due to the fact that a total of 122 participants completed enough items to allow those cases to be used for the AGI in the analysis. However, only 110 participants answered enough questions on the TMI for their results to be included in the study.

Table 17

*Summary of Descriptive Statistics for the Dependent Variables*

| Subscale | $n^a$ | $N^b$ | $M^c$ | $SD^d$ |
|---|---|---|---|---|
| Avoidance | 12 | 122 | 28.02 | 8.77 |
| Anxiety | 14 | 122 | 32.74 | 12.00 |
| Pedagogical Orientation | 8 | 110 | 7.86 | 2.42 |
| Andragogical Orientation | 8 | 110 | 11.08 | 1.77 |

Note:   $n^a$ denotes number of items for the subscale. $N^b$ denotes number of cases in the sample for each scale. $M^c$ denotes the mean for the scale. $SD^d$ denotes the typical deviation from the mean.

A separate item analysis was conducted for the TMI Pedagogical and Andragogical Subscales.  Results revealed that none of the corrected item-total correlations for either subscale met the minimum cut value of .25.  This finding suggested that the items assigned the subscales lacked homogeneity, which in turn negatively affected the internal consistency of each scale.

**Research Questions**

Two statistical procedures were used to address the research questions for this study.  The Pearson Product Moment Correlation was used to test the null hypothesis for the first research question.  The MANOVA procedure was used to test the null hypotheses for the second and third research question.  A summary of the results for the data analyses are presented below:

*Research Question 1:* What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

*Null hypotheses 1:* There is no statistically significant relationship between teaching and learning orientation and attachment as measured by scores from the TMI, and God attachment, as measured by scores from the AGI, among Christian adult educators.

*Alternate Hypothesis 1:* There is a statistically significant relationship between teaching and learning orientation, as measured by scores from the TMI, and God attachment, as measured by scores from the AGI, among Christian adult Educators.

A correlation analysis was performed to examine the relationship between teaching and learning orientation and God attachment, using scores from the TMI and the AGI. A summary of the results is provided in Table 18. The only emerging significant relationship was between Avoidance and Anxiety reveal a statistically significant correlation ($r =.224$, $p < .05$). Results suggest the two variables share approximately 5% of common variance. The positive correlation among the Attachment to God subscale scores imply that high scores on one subscale of the AGI tend to be correlated with high scores on the other subscale.

Table 18

*Summary of Results of Bivariate Correlations Among the Dependent Variables*

|  |  | AVOIDANC | ANXIETY | PEDAGOGY | ANDRAGOG |
|---|---|---|---|---|---|
| AVOIDANC | r | 1 |  |  |  |
|  | Sig. (2-tailed) | . |  |  |  |
|  | N | 122 |  |  |  |
| ANXIETY | Pearson Correlation | .224(*) | 1 |  |  |
|  | Sig. (2-tailed) | .013 | . |  |  |
|  | N | 121 | 121 |  |  |
| PEDAGOGY | Pearson Correlation | .178 | -.074 | 1 |  |
|  | Sig. (2-tailed) | .063 | .446 | . |  |
|  | N | 110 | 109 | 110 |  |
| ANDRAGOG | Pearson Correlation | .159 | .173 | .172 | 1 |
|  | Sig. (2-tailed) | .097 | .072 | .075 | . |
|  | N | 110 | 109 | 108 | 110 |

* Correlation is significant at the 0.05 level (2-tailed).

Therefore the null hypothesis for Research Question 1 was accepted. Results reveal that there is no statistically significant relationship between teaching and learning orientation and dimensions of attachment to God.

*Research Question 2:* Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

*Null hypotheses 2*: There is no statistically significant difference in God attachment, as measured by scores from the AGI, and teaching and learning orientation, as measured by scores from the TMI among Christian adult educators from different racial/ethnic groups.

*Alternate Hypothesis 2:* There is a statistically significant difference in teaching and learning orientation, as measured by scores from the TMI, and God attachment, as measured by scores from the AGI among Christian adult educators from different racial/ethnic groups.

*Research Question 3:* Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

*Null hypothesis 3:* There is no statistically significant difference in God attachment, as measured by scores from the AGI, and teaching and learning orientation, as measured by scores from the TMI among Christian adult educators from different denominations.

*Alternate Hypothesis 3:* There is a statistically significant difference in teaching orientation (as measured by scores from the TMI) and attachment to God (as measured by scores from the AGI) among various religious denominations of Christian adult educators.

Research Questions 2 and 3 were tested using the MANOVA statistical procedure. The Omnibus F-test illustrated in Table 19 presents a summary of the results. The null hypotheses for Research questions 2 and 3 were accepted. The data did not reveal any statistically significant differences in subscale scores for participants on the AGI or TMI Subscale Scores based on denominational affiliation. The data also did not reveal any statistically significant

differences in subscale scores for participants on the AGI or TMI Subscale Scores based on racial/ethnic group membership. The omnibus or overall F-test failed to reveal any statistically significant results.

Table 19

*Summary of Omnibus F-test Results*

| Effect | Wilk's Lambda | F | Hypothesis df | Error df | Sig.* | Partial $\eta^2$ | Power |
|---|---|---|---|---|---|---|---|
| Denominational Affiliation | .832 | 1.461 | 12.000 | 243.701 | .140 | .059 | .715 |
| Race/Ethnicity | .897 | 1.286 | 8.000 | 184.000 | .253 | .053 | .581 |
| Denominational Affiliation * Race/Ethnicity | .871 | 1.089 | 12.000 | 243.701 | .370 | .045 | .555 |

Note: * p = .05

**Summary**

The purpose of this exploratory study was to examine the relationship between teaching and learning orientation and attachment with God among Christian adult educators. One hundred twenty two Christian adult educators participated in the study. The researcher collected demographic data that included the participant's denominational affiliation, race/ethnicity, gender, age, and level of education, relationship status, and role in Christian adult education. Data were also collected and analyzed from the two dimensions of attachment with God as

measured by the *Attachment to God Inventory* and the two teaching and learning orientations as measured by the *Teaching Methodology Instrument*. In addition, the two dimensions of attachment with God as measured by the *Attachment to God Inventory*, and the two teaching and learning orientations as measured by the *Teaching Methodology Instrument* were examined based on denominational affiliation and race/ethnicity.

Based on the findings, the data suggests that there is no correlation between the two teaching and learning orientations and the two dimensions of attachment with God. The data also suggested that there is no statistically significant relationship between teaching and learning orientation and attachment to God based on race/ethnicity or denominational affiliation. For the most part, the data collected revealed one significant correlation; however, it was within the same subscale. The findings suggest that the TMI and the AGI are measuring two separate concepts. The *Attachment to God Inventory* is assessing the two dimensions that lie beneath nearly all attachment classifications in childhood and adulthood. However, it's important to note that low internal consistency estimates affected the researchers' ability to interpret the finding from the *Teaching Methodology Instrument*.

Chapter 4 introduced the results, and the data related to the research questions were presented and analyzed. Chapter 5 will provide a summary, implications of the analysis, and recommendations based on the findings.

CHAPTER 5. SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

"Leaders who experience the connection between their own secure adult relationships and their relationship with God will impact the church by having intimate relationships in place of putting on and acting out a leadership role."

—Judy Ten Elshof

"God is a social Trinity who enters into relationship with His creation, humanity. In fact Jesus is referred to as "God with us".  God is a dynamic living entity whose sovereignty does not mitigate His sociability toward His creation. As such, He is the God of Love."

—John C. Thomas & Lisa Sosin

## Introduction

This study was designed to examine the relationship between the attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators. Chapter 1 introduced the study, statement of the problem, research questions, significance of the study, definitions of terms and limitations of the study.  Chapter 2 provided a review of related literature and research associated with Christian adult education and attachment to God.  The methodological and procedural guidelines used to gather data were described in Chapter 3.  In Chapter 4, the results of the analyses were provided and findings of the study were presented. Chapter 5 offers a summary of the study, implications, and recommendations for further study.

## Research Questions

This study addressed the need for empirical research in the area of teaching and learning in Christian adult education in relation to attachment with God.  The purpose of the study was to examine the relationship, if any, that exists between attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators.

The following research questions were used in this study:

1.     What is the relationship between teaching and learning orientation and God attachment among Christian adult educators?

2.     Does the relationship between God attachment and teaching and learning orientation differ according to ethnicity?

3.     Does the relationship between God attachment and teaching and learning orientation differ according to denominational affiliation?

## Limitations of the Study

The study was limited to faculty, group facilitators, administrators, counselors, or any persons who were ages 19 or older and work with adults in teaching/learning relationships in a Christian organization.  This limits the generalizability of the findings of this study to Christian adult educators in the Southeastern United States.  Therefore, speculation regarding the findings should be done with caution beyond this region of the United States.  In addition, the measures used in the study were self-reported measures, and subject to the effects of social desirability or the possibility of participants responding in ways that portray themselves in a positive light.  In addition, the singular focus on Christianity neglected the other major monotheistic world religions Judaism and Islam.  Finally, this study was exploratory and might be subject to certain weaknesses not found in experimental designs, where the researcher can control relevant variables, manipulate an independent variable, and observe if the hypothesized change has occurred (Ary, Jacobs, & Razavieh, 2002).

## Summary

Investigating the relationship between attachment patterns in relationship with God and the teaching and learning orientations of Christian adult educators is significant because it

initiates an interdisciplinary dialogue between the psychology of religion and adult education. To date, researchers interested in phenomenon related to attachment and adult learning have extrapolated from research findings in other disciplines to increase their understanding in this area. The examination of these two concepts, teaching and learning orientation and attachment with God has implications for the adult educator and the adult learner.

This inquiry will add to the body of research on attachment theory in general, and attachment to God in particular; and serve to improve our understanding of the adult teaching and learning process. The results of this study can be useful for Christian adult educators (e.g., faculty, group facilitators, administrators, counselors, bible study teachers) or any persons who administrate or facilitate teaching/learning opportunities for adults to improve training programs. In addition, as we gain more understanding of the adult teaching and learning process, we will be better equipped to meet the unique needs of adult learners.

The participants were 122 Christian adult educators recruited from churches and Christian organizations in the southeastern United States. The survey included the Attachment to God Inventory (Beck & McDonald, 2004) to assess participants level of Avoidance and Anxiety related to relationship with God and the Teaching Methodology Instrument (Taylor & Kroth, 2009) to measure whether participants teaching and learning orientation was more pedagogical or andragogical in nature. The average score on the AGI-Avoidance subscale was 28.02; while the AGI-Anxiety subscale mean was 32.74. Subscale scores obtained on the AGI range from 12 to 98. The AGI was used to measure attachment anxiety with God and attachment avoidance with God, in which higher scores on either dimension reflect higher levels of each concept. The average score on the TMI-Pedagogical Orientation Subscale was 7.86; while the TMI-Andragogical Orientation Subscale mean was 11.08. The TMI subscale scores range from 0 to

16. Scores approaching 16 indicate a stronger presence of andragogical principles, and the scores closer to 0 evince stronger pedagogical principles. A demographic questionnaire was included to obtain information regarding statement of faith, denominational affiliation, race/ethnicity, gender, age, level of education, and role in Christian adult education. The data related to denominational affiliation revealed that the majority of participants were Methodist (33.6%) or Baptist (26.2%). The third largest group was the Non-Denominational category (19.7%). As to race/ethnicity, the study revealed that (50.8%) were White, while (39.3%) were Black/African American and one participant was identified as Other (0.9%). The majority of participants (49.2%) were male and (41.8%) of were female. The majority Christian adult educators that participated in the study (39.6%) were 51–60 years of age. The largest percentage of respondents (34.2%) identified their highest level of education as Master's Degree.

The aim of this study was to determine if attachment with God has any effect on teaching and learning orientation of Christian adult educators in the Southeastern United States. The investigator used a Pearson Product Moment correlation to examine the relationship between teaching and learning orientation and attachment with God among Christian adult educators. There was no statistically significant relationship found between attachment with God, as measured by the two dimensions of the *Attachment to God Inventory* and the two teaching methodologies, as measured by the *Teaching Methodology Instrument*. A MANOVA was conducted to address the remaining two questions that examined the relationship between God attachment and teaching and learning orientation based on denominational affiliation and race/ethnicity. The findings suggest there is no statistically significant relationship between teaching and learning orientation based on denominational affiliation or race/ethnicity. However, there was a statistically significant discovery that emerged between Avoidance and

Race/Ethnicity.  A post hoc comparison of group scores revealed that there was a significant difference between groups on the independent variable of race/ethnicity.  A review of the statistics in Appendix B shows that the White participants had higher mean scores ($M = 29.99$) on the Avoidance Subscale than Blacks or African/Americans ($M = 25.61$).  However, these findings were not reported in Chapter 4 because the Omnibus or F-test failed to reveal any statistically significant results and technically the analysis should cease at this point.  The findings of this study are exploratory and preliminary and should be read with caution.

## Implications

Attachment theory has far reaching implications for increasing our understanding of the teaching and learning process in adult education because it is relevant to adult educators personally and professionally.  Fleming (2008) pointed out it is imperative adult educators understand that one's attachment style can enhance or hinder, free or constrain desire to learn.  He also acknowledged that an adult educators' ability to provide a secure base for learning, is dependent upon their attachment style or interpersonal intelligence required to establish a secure learning environment.  Similarly, ideas regarding attachment theory and adult learning are being considered in the arena of Christian adult education.  Joung (2011) suggested that looking at individuals religious representations, i.e. attachment-related experiences has crucial implications for Christian adult educators in any setting: formal or informal, academic or not, within the church or not.  Following this line of reasoning, the researcher embarked upon the present investigation.  Joung (2006) also suggests that Christian adult educators to take an andragogical approach and encourage adult learners to express their thoughts related to representations of self and God, imagery in the Bible Christian tradition, etc.  Obviously, this would require adult educators to create a safe environment for adult learners to take the risk to explore their faith.

Riley (2008) cautioned that the adult attachment model of reciprocal care-giving and care-seeking is most appropriate when considering attachment and the teacher-student relationship. Reciprocity implies that as Christian adult educators explore and become aware of their attachment styles with God, they can create safe learning environments that model for their students to do the same.

Finally, while there is no apparent relationship between attachment with God and teaching and learning orientation previous studies have validated the separate concepts. Attachment to God (Beck, 2006; Cicirelli, 2004; Kaufman, 1981; Kirkpatrick, 1992; Kirkpatrick, 2005; McDonald, Beck, Allison, & Norsworthy, 2005; Proctor, Miner, McLean, Devenish, & Bonab, 2009; Sim & Loh, 2003) and teaching and learning orientation in Christian adult education (Driesen et al., 2008; Lai, 1995; Isaac, 2005; Joung, 2011; Lourdes, 2006) as the two disciplines have been studied separately.

## Recommendations for Future Research

Future research is needed to increase attention related to the attachment construct and the teaching and learning orientation. There is also a lack of literature in the discourse between attachment theory and adult education in Christianity. Thus, more studies comparing attachment with God and teaching and learning orientation among Christian adult educators is warranted. Future studies should consider the following:

1. Aim for consistently reliable assessment. For example, reword items on the Teaching Methodology Instrument to improve the validity and reliability of the instrument
2. Replication of the study with a wider range of denominational affiliates
3. Examine the role of social correspondence (religiousness of parents

4. Replicate the study with Christian adult educators outside of the southeastern United States

5. Replicate the finding with a more racially/ethnically diverse sample

6. Address attachment to God across longitudinally

7. Increase the sample size

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APPENDIX A

Survey Instrument

## Welcome

We would like to invite you to participate in our research study to investigate the relationship between attachment to God and the teaching and learning orientations of Christian adult educators. You may participate (or may not participate) if you are faculty, group facilitator, administrator, counselor, or any person who works with adults in teaching/learning relationships in a Christian organization.

## The Attachment to God Inventory

The following statements concern how you feel about your relationship with God. I am interested in how you generally experience your relationship with God, not just in what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it. Choose the space provided, using the following rating scale:

### 1. I worry a lot about my relationship with God.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 2. I just don't feel a deep need to be close to God.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 3. If I can't see God working in my life, I get upset or angry.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 4. I am totally dependent upon God for everything in my life.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 5. I am jealous at how God seems to care more for others than for me.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 6. It is uncommon for me to cry when sharing with God.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 7. Sometimes I feel that God loves others more than me.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

### 8. My experiences with God are very intimate and emotional.

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**9. I am jealous at how close some people are to God.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**10. I prefer not to depend too much on God.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**11. I often worry about whether God is pleased with me.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**12. I am uncomfortable being emotional in my communication with God.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**13. Even if I fail, I never question that God is pleased with me.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**14. Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**15. I fear God does not accept me when I do wrong.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**16. Without God I couldn't function at all.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**17. I often feel angry with God for not responding to me when I want.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**18. I believe people should not depend on God for things they should do for themselves.**

|  | Disagree<br>Strongly |  |  | Neutral/Mixed |  |  | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**19. I crave reassurance from God that God loves me.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**20. Daily I discuss all of my problems and concerns with God.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**21. I am jealous when others feel God's presence when I cannot.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**22. I am uncomfortable allowing God to control every aspect of my life.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**23. I worry a lot about damaging my relationship with God.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**24. My prayers to God are very emotional.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**25. I get upset when I feel God helps others, but forgets about me.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

**26. I let God make most of the decisions in my life.**

| | Disagree Strongly | | | Neutral/Mixed | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| ✓ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

## Teaching Methodology Instrument

The following questions concern your teaching style. Your honesty in answering them is extremely important. All of your responses are completely anonymous.

**27. Is the learner dependent?**

◯ yes

◯ somewhat

◯ no

**28. Is the learner self-directed?**

◯ yes

◯ somewhat

◯ no

**29. Do you take full responsibility for determining what is to be learned?**

◯ yes

◯ somewhat

◯ no

**30. Do you have a responsibility to encourage and nurture movement towards self-directedness?**

◯ yes

◯ somewhat

◯ no

**31. Is the experience the learner brings to the learning environment of little worth?**

◯ yes

◯ somewhat

◯ no

**32. Do learners attach more meaning to learning they gain from experience than those they acquire passively?**

◯ yes

◯ somewhat

◯ no

**33. Do you use techniques such as lecture, dialogue, assigned readings, etc.?**

◯ yes

◯ somewhat

◯ no

**34. Do you use experiential techniques, such as discussions, case studies, and role-plays?**

◯ yes

◯ somewhat

◯ no

**35. Do students learn whatever others say they ought to learn?**

◯ yes

◯ somewhat

◯ no

**36. Is the student ready to learn something when they experience a need to learn it?**

◯ yes

◯ somewhat

◯ no

**37. Do you use a standardized curriculum with a uniform step-by-step progression for all learners?**

◯ yes

◯ somewhat

◯ no

**38. Is learning organized around personal application in connection with the learner's readiness to learn?**

◯ yes

◯ somewhat

◯ no

**39. Is the primary objective of the learning process focused on acquiring biblical knowledge?**

◯ yes

◯ somewhat

◯ no

**40. Is the primary objective of the learning process focused on developing closeness to God, achieving closeness to God, and spiritual maturity?**

$\bigcirc$ yes

$\bigcirc$ somewhat

$\bigcirc$ no

**41. Is your curriculum organized into subjects that follow the logic of the subject from simple to complex?**

$\bigcirc$ yes

$\bigcirc$ somewhat

$\bigcirc$ no

**42. Is the curriculum organized around developing skill and competency?**

$\bigcirc$ yes

$\bigcirc$ somewhat

$\bigcirc$ no

## Demographic Survey

**43. Do you consider yourself to be a Christian?**

◯ Yes

◯ No

**44. Are you male or female?**

◯ Male

◯ Female

**45. What is your age?**

[                ]

**46. What is the highest level of education you have completed?**

[                ]

**47. What is your current relationship status?**

◯ Single

◯ Married

◯ Divorced

◯ Remarried

◯ Separated, but not divorced

◯ Widowed

**48. What is your denominational affiliation?**

[                ]

**49. What is your race/ethnicity?**

[                ]

**50. Which best describes your primary role in adult Christian education?**

[                ]

APPENDIX B

Auburn University Institutional Review Board (IRB) Research Protocol Email

Reply   Reply All   Forward   Chat

# Protocol approved, # 11-259 EX 1008

## Human Subjects [hsubjec@auburn.edu]

| | |
|---|---|
| To: | Lakeba Williams |
| Cc: | Sheri Downer;   Maria Witte |
| Attachments: | Investigators Responsibil~1.docx (16 KB) [Open in Browser] |

Tuesday, August 30, 2011 2:44 PM

Dear Ms. Williams,

Your protocol entitled "Attachment to God: Exploring it's Impact on the Teaching and Learning Orientations of Christian Adult Educators" has been reviewed.  Your protocol has now received final approval as "Exempt " under federal regulation 45 CFR 46.101(b)(2).

This e-mail serves as official notice that your protocol has been approved.  A formal approval letter will not be sent unless you notify us that you need one.  By accepting this approval, you also accept your responsibilities associated with this approval.  Details of your responsibilities are attached.  Please print and retain.

Please add the following IRB approval information to your information letter and re-submit -"The Auburn University Institutional Review Board has approved this document for use from August 25, 2011 to August 24, 2012.  Protocol #  11-259 EX 1008"

You must use that updated document  to consent participants.  Once you have made the correction and posted the letter, you may begin your study.  Please forward a copy of the electronic letter with a live link to the survey so that we may print a final copy for our files.

Your protocol will expire on August 24, 2012.  Put that date on your calendar now. About three weeks before that time you will need to submit a final report or renewal request.  (You might send yourself a delayed e-mail reminder for early next August .)

If you have any questions, please let us know.

Best wishes for success with your research!
Susan

Susan Anderson, IRB Administrator
IRB / Office of  Research Compliance
115 Ramsay Hall (basement)  **See map attached***

APPENDIX C

Email Invitation

EMAIL INVITATION TO COMPLETE THE CHRISTIAN ADULT EDUCATORS SURVEY
Dear Christian Adult Educator:
I am a graduate student in the Department of Educational Foundations, Leadership,
& Technology at Auburn University in Auburn, Alabama. We would like to invite you
to participate in our research study to investigate the relationship between
attachment to God and the teaching and learning orientations of Christian adult
educators. You may participate (or may not participate) if you are faculty, group
facilitator, administrator, counselor, or any person who works with adults in
teaching/learning relationships in a Christian organization.
Your participation is voluntary, and the confidentiality of your responses is assured.
Your responses to the online survey indicate that you agree to participate in the
study. You may access the surveys by clicking on the following link: If you agree to
participate in this study, please complete the online survey by September 30, 2011.
If you have any questions, please contact me at 334-663-1312 willilh@auburn.edu
or my advisor, Dr. Maria M. Witte, mmwitte@auburn.edu at 334-844-3078.

APPENDIX D

Informed Consent

EDUCATIONAL
FOUNDATIONS,
LEADERSHIP,
AND TECHNOLOGY

**AUBURN UNIVERSITY**
COLLEGE OF EDUCATION

## INFORMED CONSENT
### for a Research Study entitled
"Attachment to God: Exploring it's Impact on the Teaching and Learning Orientations
of Christian Adult Educators"

**You are invited to participate in a research study** to examine whether there is a relationship
between Christian adult educators attachment to God and their teaching and learning
orientations. This study is being conducted by Lakeba H. Williams, a Doctoral Candidate at
Auburn University. You were selected because you are currently administrating or
facilitating teaching/learning opportunities for adults and are age 19 or older.
**What will be involved if you participate?** Your participation is completely voluntary. If you
decide to participate in this research study, you will be asked to fill out two questionnaires
and a demographic survey. Your total commitment will be approximately 20 minutes.

**Are there any risks or discomforts?** There are no identifiable risks or discomforts associated
with participating in this study. All data collected will be anonymous. Your name will not
appear on any document.

**Are there any benefits to yourself or others?** If you participate in this study, you can expect
to add to the psychology of religion and adult Christian education literature. Your
participation may contribute to improving the training of Christian adult educators.

**Will you receive compensation for participating?** No compensation will be given for
participating in this study.

**Are there any costs?** There are no costs associated with participating in this study.

**If you change your mind about participating,** you can withdraw at any time during the
study. Your participation is completely voluntary. If you choose to, you can withdraw at
anytime by closing your browser window. However, once you've submitted anonymous
data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or
not to participate or to stop participating will not jeopardize your future relations with
Auburn University, the Department of Educational Foundations Leadership and Technology.

**Any data obtained in connection with this study will remain anonymous.**
We will protect your privacy and the data you provide by excluding any identifiable
information and restricting access to only those individuals who are conducting this study.
Information collected through your participation may be used to fulfill an educational
requirement, published in a professional journal, and/or presented at a professional meeting.

**AUBURN UNIVERSITY**

COLLEGE OF EDUCATION

**If you have questions about this study,** contact Lakeba H. Williams at (334) 663-1312 or via email willilh@auburn.edu. You may also contact Dr. Maria M. Witte at (334) 844-3078.
**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

**HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.**
**YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.**
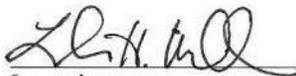
_____     8/25/11
Investigator                                          Date

*The Auburn University Institutional Review Board has approved this document for use from* 8/25/11 *to* 8/24/12 . *Protocol #* 11-259 EX1108

LINK TO SURVEY: https://www.surveymonkey.com/s/CX3RJNG

The Auburn University Institutional
Review Board has approved this
document for use from
8/25/11 to 8/24/12
Protocol # 11-259 EX1108

APPENDIX E

Permission to Use the AGI

Hi Lakeba,

Yes, please feel free to use the AGI. Let me know if I can be of any assistance to you regarding the scale.

And best of luck with your dissertation.

Grace and peace,

Richard

On Fri, Jun 17, 2011 at 1:07 PM, Lakeba Williams <willilh@tigermail.auburn.edu> wrote:

Hi Dr. Beck,

My name is Lakeba Williams, I'm a doctoral candidate in the College of Education at Auburn University in Auburn, Alabama. I'm writing to request permission to use the Attachment to God Inventory that you and Dr. Angie McDonald developed as a survey instrument in my dissertation research. Thanks!

Soli Deo Gloria,

Lakeba Williams, M.Ed., NCC, ALC
Doctoral Candidate, Adult Education
Auburn University

--
Richard Beck, PhD
Chair, Department of Psychology
Abilene Christian University
ACU Box 28011 Abilene, TX 79699
beckr@acu.edu

APPENDIX F

Permission to Use the TMI

Reply    Reply All    Forward    Chat

# RE: Teaching Methodology Instrument

## Kroth, Michael [mkroth@uidaho.edu]

To:          Lakeba Williams

Cc:          Bryan Taylor [btaylor@canyonco.org]

Monday, June 20, 2011 6:00 PM

Lakeba, thanks for your interest in the instrument. I've contacted Dr. Taylor and we both agree that it would be fine if you use the instrument.

I've copied Bryan and suggest that if you have any questions that you contact him as he was the primary architect of the instrument.

Thanks for including our work in your research!

Michael

**From:** Lakeba Williams [mailto:willilh@tigermail.auburn.edu]
**Sent:** Saturday, June 18, 2011 5:31 PM
**To:** Kroth, Michael
**Subject:** Teaching Methodology Instrument

Hi Dr. Kroth

My name is Lakeba Williams, I'm a doctoral candidate in the College of Education at Auburn University in Auburn, Alabama. I'm writing to request permission to use the Teaching Methodology Instrument that you and Dr. Bryan Taylor developed as a survey instrument in my dissertation research. Thanks!

Soli Deo Gloria,

Lakeba Williams, M.Ed., NCC, ALC
Doctoral Candidate, Adult Education
Auburn University

APPENDIX G

Tests of Multivariate Linearity AGI Subscale Scores Across
Denominational Affiliation

| Subscale | Denominational Affiliation | | Statistic | Std. Error |
|---|---|---|---|---|
| AVOIDANC | Baptist | Mean | 27.2528 | 1.54371 |
| | | Variance | 69.108 | |
| | | Std. Deviation | 8.31315 | |
| | Methodist | Mean | 28.9216 | 1.60738 |
| | | Variance | 98.180 | |
| | | Std. Deviation | 9.90858 | |
| | Non-Denominational | Mean | 27.8350 | 1.69334 |
| | | Variance | 63.083 | |
| | | Std. Deviation | 7.94246 | |
| | Other | Mean | 28.4851 | 2.76887 |
| | | Variance | 107.333 | |
| | | Std. Deviation | 10.36018 | |
| ANXIETY | Baptist | Mean | 32.3736 | 1.79638 |
| | | Variance | 93.583 | |
| | | Std. Deviation | 9.67383 | |
| | Methodist | Mean | 35.4621 | 1.97719 |
| | | Variance | 148.553 | |
| | | Std. Deviation | 12.18822 | |
| | Non-Denominational | Mean | 28.9857 | 2.26189 |
| | | Variance | 112.555 | |
| | | Std. Deviation | 10.60918 | |

(table continues)

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Table (continued)

| Subscale | Denominational Affiliation | Statistic | Std. Error | Subscale |
|---|---|---|---|---|
| | Other | Mean | 29.7828 | 2.64221 |
| | | Variance | 97.738 | |
| | | Std. Deviation | 9.88623 | |
| PEDAGOGY | Baptist | Mean | 7.5862 | .40780 |
| | | Variance | 4.823 | |
| | | Std. Deviation | 2.19606 | |
| | Methodist | Mean | 8.2368 | .38910 |
| | | Variance | 5.753 | |
| | | Std. Deviation | 2.39858 | |
| | Non-Denominational | Mean | 7.2727 | .51464 |
| | | Variance | 5.827 | |
| | | Std. Deviation | 2.41388 | |
| | Other | Mean | 8.5000 | .73939 |
| | | Variance | 7.654 | |
| | | Std. Deviation | 2.76656 | |
| ANDRAGOG | Baptist | Mean | 11.4483 | .40498 |
| | | Variance | 4.756 | |
| | | Std. Deviation | 2.18086 | |
| | Methodist | Mean | 11.0263 | .27840 |
| | | Variance | 2.945 | |
| | | Std. Deviation | 1.71617 | |
| | Non-Denominational | Mean | 10.9545 | .38633 |
| | | Variance | 3.284 | |
| | | Std. Deviation | 1.81206 | |
| | Other | Mean | 10.5000 | .20300 |
| | | Variance | .577 | |
| | | Std. Deviation | .75955 | |

# APPENDIX H

## Tests of Multivariate Linearity AGI Subscale Scores Across Race/Ethnicity

|  | Race/Ethnicity |  | Statistic | Std. Error |
|---|---|---|---|---|
| AVOIDANC | Black or African-American | Mean | 25.6124 | 1.11297 |
|  |  | Variance | 53.264 |  |
|  |  | Std. Deviation | 7.29822 |  |
|  | Caucasian | Mean | 29.9864 | 1.26012 |
|  |  | Variance | 95.274 |  |
|  |  | Std. Deviation | 9.76083 |  |
| ANXIETY | Black or African-American | Mean | 32.9177 | 1.85153 |
|  |  | Variance | 147.410 |  |
|  |  | Std. Deviation | 12.14127 |  |
|  | Caucasian | Mean | 32.0929 | 1.32887 |
|  |  | Variance | 105.954 |  |
| PEDAGOGY | Black or African-American | Mean | 7.3256 | .33064 |
|  |  | Variance | 4.701 |  |
|  |  | Std. Deviation | 2.16818 |  |
|  | Caucasian | Mean | 8.2833 | .32338 |
|  |  | Variance | 6.274 |  |
|  |  | Std. Deviation | 2.50485 |  |
| ANDRAGOG | Black or African-American | Mean | 10.7442 | .29029 |
|  |  | Variance | 3.623 |  |
|  |  | Std. Deviation | 1.90354 |  |
|  | Caucasian | Mean | 11.2833 | .21797 |
|  |  | Variance | 2.851 |  |
|  |  | Std. Deviation | 1.68836 |  |