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AN ANALYSIS OF THE IMPACT OF LEARNING ENVIRONMENT FACTORS ON RETENTION AND ATTRITION IN ADULT SUNDAY SCHOOL CLASSES

A Dissertation

Presented to

the Faculty of

The Southern Baptist Theological Seminary

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

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by

Darryl Haskel Wilson

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AN ANALYSIS OF THE IMPACT OF LEARNING ENVIRONMENT FACTORS ON RETENTION AND ATTRITION IN ADULT SUNDAY SCHOOL CLASSES

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To Yvonne, my wife and best friend,

and to my sons, Jonathan and Jordan,

for always believing in me,

and to my Savior, Jesus Christ,

may this work build up the Kingdom

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LIST OF ABBREVIATIONS

ACP	Annual Church Profile
ANOVA	Analysis of Variance
ATT	Attendance
df	Degrees of Freedom
KBC	Kentucky Baptist Convention
GED	General Educational Development (High School Equivalency Diploma)
LRBA	Long Run Baptist Association
M	Mean
NIV	New International Version
Q&A	Question and Answer
SBC	Southern Baptist Convention

PREFACE

A work of this magnitude cannot be completed alone. Many individuals have contributed in one way or another. The support, interest, and prayers of those with whom I have worked at the Kentucky Baptist Convention have given regular encouragement. In particular, Mary Livingston has prepared all the mailings and helped in so many ways. Rick Pryor has been an asset with various types of software and the layout of the research instrument. May God honor each one.

My Dissertation Committee has influenced me beyond these pages. Dennis Williams, my program advisor, was instrumental in encouraging my involvement in this doctoral program. His invitations and conversation made the challenge appear possible and the journey exciting. Hal Pettegrew, my dissertation supervisor, shares the heart of a Minister of Education. These godly men have served to challenge me to attempt something great for God's kingdom. They are friends in the ministry and in life.

My doctoral cohort colleagues have also been a source of great joy. They have served as coaches and cheerleaders during the race. Their empathy, interest, and support have seen me through stretching and stress-filled days. While we live many miles apart, the friendships we have begun will continue despite the distances.

Five individuals made a great contribution to this work by serving as members of the expert panel to help refine the instrumentation. They are Ed Jent, Harold Price,

Chip Miller, P. K. Spratt, and Ken Lupton. Their observations and suggestions strengthened the research instrument and effort immeasurably.

My parents, Haskel and Ruby Wilson, have always believed in me. Their confidence in me has served to stretch me to do my best. They impressed upon my life at an early age a sense of responsibility for keeping my word and for completing what I have begun. Once again, those lessons have borne fruit. In October of last year, Dad went home to be with the Lord. He has been missed, but life lessons he taught remain.

My greatest source of help has been my wife, Yvonne. She has walked through these days alongside me. She has been a listener and encourager. She has read this work more than once and has asked key questions. Her love, prayers, and confidence in me have served as motivation to reach the finish line. She has helped me through the range of emotions that accompanied this program: stress, fear, doubt, hope, and joy. God truly has chosen you for me, Yvonne! Our sons, Jonathan and Jordan, have also inspired me to stay the course in response to their desire to call me, Dr. Dad.

Finally, I would be remiss if I failed to acknowledge the life-changing contribution that God has made upon my life. He loved me and sent His Son, Jesus Christ, to die for me. He called me to serve Him and has supplied my every need. He has given me power though His Holy Spirit and has gifted me to serve Him and His body, the church. His presence has sustained me throughout this great adventure. I look forward to what He will do in the days that lie ahead.

Darryl H. Wilson

Louisville, Kentucky

March 2003

CHAPTER 1

THE RESEARCH CONCERN

Discipleship is important. The Lord Jesus Christ commanded the eleven to "go and make disciples of all nations" (Matt 28:19a, all Scripture quotations are from the New International Version). "Discipleship matters . . . because Jesus modeled it and commanded it, because [it is] necessary for the Church to become healthy and productive, because we do not reach our potential without spiritual growth, and because we cannot influence the world unless we demonstrate faith-based transformation" (Barna 2000, 31). Making disciples is not a one-day training event; it is an ongoing, lifelong process. Christians are encouraged to "continue to work out [their] salvation with fear and trembling" (Phil 2:12b). Jesus clarifies the content and depth of involvement required by the discipling process: "teaching them to *obey* everything I have commanded you" (Matt 28:20a, emphasis added). While teaching disciples to *know* may be able to be accomplished quickly, time is required in order to teach disciples to move beyond *knowing* to *obeying* Jesus' commands, to life transformation.

Effectiveness is essential if the work of disciple-making is to be accomplished. In order for *all nations* to become disciples, current disciples must stay involved in the process and multiply themselves. This is true because discipleship is about more than learning; it "is about being and reproducing spiritually mature zealots for Christ" (Barna 2000, 20). The need for continued discipleship and multiplication is why pastors and

teachers were given "to prepare God's people for works of service, so that the body of Christ may be built up" (Eph 4:12). Disciples who invest the training they have received in others will multiply themselves.

One serious problem for the church in making disciples of *all* nations is the lack of persistence by disciples. When disciples withdraw from the disciple-making process, they short-change the process in at least three ways: (1) their involvement in the work is removed, (2) their synergistic growth in community is diverted, and (3) their investment in the multiplication process is stopped. "The real challenge is to retain the people who come in through evangelism and build on this growth year after year" (Mittelberg 2000, 371). Each person is needed, and each person needs "community to achieve lasting transformation" (Donahue and Robinson 2001, 42).

"Having small groups of people committed to helping each other grow can be an incredibly effective process" (Barna 2002, 78). In Kentucky Baptist Convention churches, the adult Sunday School class plays a significant role in the strategy of discipling, assimilating, and multiplying disciples. "People cannot be sent out to live as disciples until they start becoming disciples" (Hadaway 2001, 30). While Sunday School is essential to the strategy, it must be acknowledged that "the success of the church is primarily due to the blessing of God" (Comiskey 1999, 30). Understanding and addressing God's work of assimilation in adult Sunday School calls for an examination of (1) the biblical basis for this work, (2) adult learning assumptions, (3) learning environment factors, and (4) the impact of learning environment factors upon the retention and attrition (assimilation) of members of adult classes. "Just as each believer's life is examined to see if it produces fruit, so must each church evaluate its ministry to

determine the quantity and quality of the fruit it is producing" (Barna 2000, 29). This research project has been an effort to examine the learning environment in which adult Sunday School produces fruit, in which efforts are made for lives to be transformed.

Research Purpose

The purpose of this empirical research effort has been to examine the role of assimilation in the adult Sunday School class. Specifically, the purpose of this project has been to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. The descriptive quantitative design of qualitative social science research has been utilized.

Delimitations of the Study

In the effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches, the study was delimited to a focus on factors which were internal to the class rather than those which were external to the class, such as community growth or church staff support and change. The study was delimited to physical, social, and spiritual learning environment factors. The study was delimited to an investigation of adult Sunday School classes and did not consider preschool, children, or youth classes. The study was delimited to an investigation of adult Sunday School classes, and other types of adult discipleship or support groups were not considered. In addition, the study was delimited to a focus on classes meeting on Sunday at church. Classes meeting on another day of the week or at places other than the church were not considered. The

study was also delimited to an investigation of adult Sunday School classes whose teachers had been with the class for the previous eleven months.

In addition, the study was delimited to consideration of the following demographics factors: gender, age, marital status, education level, Christianity tenure, church membership tenure, worship attendance frequency, class involvement, class membership tenure, class attendance frequency, close friends in this class, numerical class growth opinion, spiritual/maturational class growth opinion, and most frequently used teaching style. The study was further delimited to consideration of the following teacher, class, and church demographics factors: teacher's gender, age, education level, Christianity tenure, tenure teaching this class, and total teaching tenure, along with class gender, class attendance today, average total weekly church Sunday School attendance, and church location.

Research Questions

In a study of the nature of this one, the number of questions which might be pursued must be narrowed in order to focus research. The following six research questions were investigated in the quest to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches:

1. What is the strength of spiritual (divine involvement) learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

2. What is the strength of physical learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

3. What is the strength of social learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

4. What is the relationship between learning environment factors for adult Sunday School class high attenders, average attenders, low attenders, and no attenders in Kentucky Baptist Convention churches?

5. What is the relationship between adult Sunday School class member retention and attrition and demographics factors?

6. In what ways do learning environment factors vary by demographic factors?

Terminology

For the purposes of this research which identified and analyzed the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches, the following definitions were offered:

Attrition. Class member's withdrawal behavior (absenteeism) in Sunday School; for the purposes of this research, a reduction in attendance frequency to one Sunday or less per month (low/no attender).

Average attender. Class member whose persistence in Sunday School attendance has averaged two or three Sundays per month.

Class attendance. Total number of members and guests present in a class on a given Sunday.

Class enrollment. Membership list of a class on a given Sunday; for the purposes of this research, the total number of persons on the class membership list.

Guest. Person present in a class on a given Sunday who is not a member of the class.

High attender. Class member whose persistence in Sunday School attendance has averaged four or more Sundays per month.

Large church. Church in the upper 20% of Kentucky Baptist Convention church size, with a reported total Sunday School average attendance of 200 or more, inclusive.

Learning environment factors. The combination of physical, social, and spiritual aspects influencing the motivation, participation, receptivity, response, growth, and learning of an individual or a group (Hiemstra 1991, 8; Pazmiño 1999, 112; Hutchison 1997, 6).

Low attender. Class member whose persistence in Sunday School attendance has averaged one Sunday per month.

Medium church. Church in the middle 40% of Kentucky Baptist Convention church size, with a reported total Sunday School average attendance between 50 and 199, inclusive.

Member. Person who has agreed to join a Sunday School class and is listed on the class enrollment or membership list.

No attender. Class member who has withdrawn temporarily or permanently from Sunday School attendance.

Persistence. Class member's continuation behavior (continued attendance) in Sunday School.

Retention. Teacher, class, and church responsibility and efforts to encourage student persistence (continued attendance) in Sunday School; for the purposes of this

research, a continuation in attendance of two or more Sundays per month (high/average attender).

Small church. Church in the lower 40% of Kentucky Baptist Convention church size, with a reported total Sunday School average attendance of 49 or fewer, inclusive.

Small group. "[G]roup of people (4-15) who meet regularly for the purpose of spiritual edification and evangelistic outreach . . . committed to participate in the functions of the local church" (Comiskey 2001, 13).

Sunday School. "The foundational strategy in a local church for leading people to faith in the Lord Jesus Christ and for building on-mission Christians through open Bible study groups that engage people in evangelism, discipleship, ministry, fellowship, and worship" (Hemphill and Taylor 2001, 13). For the purposes of this research, the term Sunday School will be focused upon open Bible study groups meeting at the church on Sunday.

Procedural Overview

The effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches required the following procedural process. Two instruments, utilizing a Likert response scale, were created addressing learning environment factors of adult Sunday School classes in Kentucky Baptist Convention churches: one for the teacher and one for class members. The first part of July 2002, an expert panel was asked to examine the instruments in an effort to address their thoroughness and clarity. The expert panel made suggestions for changing twenty-six of

the statements and the addition of two demographics questions. After appropriate adjustments were made, the instrument was then field tested in a church with a number of adult Sunday School classes, at the end July 2002. Following examination of the results of the field test, one adjustment was made on page 4 highlighting the need to respond to statements 69 through 72 (which had been skipped a significant number of times in the field test).

During the last two weeks of July 2002, pastors of Kentucky Baptist Convention churches which were members of the Long Run Baptist Association (greater Louisville area) were contacted. These churches were selected from a random proportionally stratified sample of six large, twelve medium, and twelve small churches. Pastors, church staff, or Sunday School directors were contacted by phone and asked about their willingness to participate in the research. Those pastors, staff, and Sunday School directors willing to participate were invited to choose one of three informational meetings. Pastors and Sunday School directors interested but unable to attend the meeting received individual consultations in person or by phone.

Participating pastors and Sunday School directors were asked to take three actions. First, they were asked to administer the instruments on their choice of either the second or third Sunday of August 2002 to adult classes who had been taught by the same adult teacher since September 2001. Classes willing to complete the instrument were asked to do so during the first part of the Sunday School hour. The pastor or Sunday School director collected completed instruments with class records and returned them by mail or in person to the researcher. Most were returned by the end of August 2002, but three churches returned them in September 2002.

Second, participating pastors and Sunday School directors were asked to provide by August 20, 2002, a list of the names, addresses, and phone numbers of adult no attenders and low attenders (who have attended 0 to 10 times in the last 11 months). Third, the pastors were asked to provide and sign two brief letters by early August 2002 (pre-written letters were provided to the pastors) on church stationery explaining the purpose of the attached instrument. These lists and letters came in slowly even in the month of September 2002.

The researcher began mailing instruments to no attenders and low attenders the third week of August 2002 along with the pastor's letter and a self-addressed stamped envelope. Persons receiving the instrument by mail were asked to complete and return the instrument within seven days. Two follow-up mailings were made: a reminder and appreciation postcard and a letter with another instrument and return envelope. In order to preserve confidentiality, all records of names and addresses in the possession of the researcher were permanently destroyed after the third mailing.

Research instruments (teacher and member) were examined in a variety of ways. One of the methods was to examine the results separately for teachers, high attenders, average attender, low attenders, and no attenders. When results warranted combining any of these categories, effort was made to do so. Since the intent of this research was not to address guests, the results from their instruments were not included in the research.

Research Assumptions

In the pursuit of identifying and analyzing the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in

Kentucky Baptist Convention churches, the following research assumptions were acknowledged:

1. Adult Sunday School classes play a significant role in the strategy of discipling and multiplying the body of Christ and in the retention and attrition of adults in Kentucky Baptist Convention churches.

2. Learning environment factors and the perception of those factors impact adult Sunday School retention and attrition.

3. Some individuals participating in this research may have had a prior relationship with the researcher or with the researcher's place of employment that positively or negatively biased the results.

CHAPTER 2

PRECEDENT LITERATURE

Perhaps the most important innovation in the modern U. S. church is the decision "by tens of millions of teenagers and adults to place a high personal priority on weekly participation in serious, in-depth, lay-led, and continuing Bible study and prayer groups" (Schaller 1995, 14). "Most of the great redemptive movements throughout church history have discovered that long lasting transformation requires the kind of community and accountability best experienced in small cells of four to twelve people" (Crandall 1995, 124). "Seventy-five million adult Americans regularly attend a small group," and as a result examination of this innovation in the church is worthy of time and effort (Wuthnow 1994a, 45). Many dynamics were at play in the quest to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention (KBC) churches. First, since Sunday School involves the study of God's Word, the Bible, an understanding of the impact and influence of God and theological assumptions upon life and learning was needed. Second, it was valuable to examine adult learning assumptions in the setting of adult Sunday School. Third, it was essential to identify and analyze the learning environment factors impacting adult education, particularly those relevant to adult Sunday School in KBC churches. Finally, the process was benefited from an examination of retention and attrition (assimilation) issues with application to adult

Sunday School classes. Because limited literature was available addressing these issues in the church, many resources from a diversity of fields were identified, analyzed, and applied to the setting of adult Sunday School.

Biblical Metaphor for This Study

The metaphor of the shepherd and the sheep in John 10 pictured, balanced, and guided the author's integration of theological presuppositions and educational and leadership assumptions in this study. God is the Shepherd-Owner of the sheep (John 10:11, Ps 23:1). He has created everything from nothing (Gen 1). God is transcendent (above and beyond all creation) in more than distance and time. He is holy, separate, deserving of worship and awe, and above and beyond comprehension. God is also immanent (very near). John reminds us that "God is love" (1 John 4:8). He is not far off; He "keeps close watch on all my paths" (Job 33:11).

Sheep and Sin

Furthermore, people may be compared to sheep who are lost in sin, dying, and need help to find their way to the Shepherd-Owner (Rom 3:23, 6:23). Sin is represented by those things which get in the way of the sheep listening to God's voice and following Him, specifically getting distracted and lost. "Sin blinds them until they hurt themselves and others in a spiral of destruction" (Kramp 1995, 21-22). Sin for the shepherd-steward (hired hand) is not doing the job the Shepherd-Owner has commanded (John 10:12-13). Wolves are a metaphor for Satan and his destructive ways of encouraging sin (John 10:1, 5, 13). Sin has affected all of creation (Rom 8:20-22) bringing about the death and separation of all sheep from God (Rom 3:23, 6:23; Jas 3:2). Sheep have the help of

Jesus, the Good Shepherd and sinless High Priest (John 10:11; Heb 2:17-18, 4:15) who is God's answer for sin (Rom 5:8). Sin which could only be temporarily assuaged by a sacrificial lamb has been permanently satisfied by Jesus' sacrifice (Heb 9:26). Jesus accomplished this through His death, burial, and resurrection for the sins of the sheep (1 Cor 15:3b-4). Acceptance of Jesus as Savior and Lord restores fellowship with God (Rom 5:11, 2 Cor 5:19) and the hope of eternal life (1 Tim 1:16).

Shepherd-Stewards and the Learning Environment

Shepherd-stewards (hired hands) are sheep who have (1) listened to, loved, and followed the Shepherd-Owner and (2) responded to God's call to seek (Matt 10:6), know, care for (John 21:16), and teach His sheep His way (John 10:12-14). A shepherd is "one who exercises spiritual care over a community" (Neighbour 1996, 23). Shepherds are always alert for the teachable moment, for the moment of need, in order to "start where people are" (Kramp 1995, 13). "Shepherds are servants who make sacrifices for those under their care" (Donahue and Robinson 2001, 108). The sheep's time and needs are more important than those of the shepherd. "The Shepherd lives with the flock, sleeps in the fields, and carries the lambs in his arms" (Neighbour 1996, 34).

Leadership by shepherd-stewards is taking sheep where they (including the Holy Spirit) want/need to go (Wilson 2000, 4). The physical learning environment for shepherding includes life experiences (fields) as well as intentional learning experiences (sheep pens). The social learning environment includes the sheep, shepherd-stewards (hired hands), and the Shepherd-Owner (God). "Well balanced shepherding takes place when caring and discipling get equal emphasis in group life" (Donahue and Robinson 2001, 111). Sheep need the help of shepherd-stewards to find the Way (Matt 9:36). The

Bible states that sheep (mankind) are God's special act of creation in His image (Gen 1:27, 2:7; Ps 8). Part of the purpose of sheep is to have stewardship over the physical environment, over creation (Gen 1:26).

The body of Christ, the Good Shepherd's sheep pen, the church, is both a "local body of baptized believers" and "the body of Christ which includes all of the redeemed of all the ages" (Hobbs 1971, 74,75). The church is "a chosen people, a royal priesthood, a holy nation, a people belonging to God" called to "declare the praises of him who called you out of darkness into his wonderful light" (1 Pet 2:9). The church is the believer-sheep (people) of God (2 Cor 6:16, 1 Pet 2:10). Jesus commissions the believer-sheep, the church, to be his witnesses (Matt 28:18-20, Luke 24:44-49, Acts 1:8). In fact, the "most effective strategy for fulfilling many commands of Scripture is for a church to place priority on *making disciplemakers*" (George 1997, 7).

The Trinity

Revelation refers to the process and actions of God, the Shepherd-Owner, making Himself known to the sheep (John 10:27). God has chosen to reveal Himself to the sheep (mankind) in a variety of ways, the clearest of which was through His Son, the Good Shepherd, Jesus Christ (John 3:16, 14:9; Heb 1:1-3). Jesus Christ is Immanuel, God with us (Isa 7:14, Matt 1:23). He is God in flesh who lived among us (John 1:14, Col 2:9). God sent Jesus, the Good Shepherd, out of His love for man and His desire that none should die (John 3:16-17, Rom 5:11, 2 Cor 5:19). Jesus is the Messiah, the sacrificial Lamb, who paid once and for all our sin penalty (Matt 4:25-26; Rom 6:23, 5:8; Heb 9:26-28; 2 Cor 5:21). He is the way, the truth, and the life, the only Way (the Gate) to a restored relationship with the Shepherd-Owner (John 10:7, 14:6; Heb 13:20). Jesus

came to seek and save the lost sheep (Luke 19:10). Jesus came to show shepherd-stewards how to care for His sheep by laying down His life for them (John 10:11).

The Holy Spirit is "the point at which the Trinity becomes personal to the believer," to the sheep (Erikson 2000, 862). In fact, He lives within the believer-sheep (1 Cor 3:16, 6:19; Rom 8:9-11). The Holy Spirit is the Good Shepherd's Staff to teach, guide, convict, and correct the sheep (John 14:26, 16:8,13). He carries on the work of Jesus, the Good Shepherd (John 14:16-17, 16:7-11), and helps the believer-sheep live obediently (Ezek 36:27). God desires more from the sheep than obedience: "He has showed you, O man, what is good. And what does the LORD require of you? To act justly and to love mercy and to walk humbly with your God" (Mic 6:8). "Love does no harm to its neighbor. Therefore love is the fulfillment of the law" (Rom 13:10). God wants a love relationship with the sheep (Deut 6:5, Matt 22:37-39) that is vertical (God to sheep) and horizontal (sheep to sheep).

"Jesus ordered his life around lost people" (Kramp 1995, 125). Jesus said He had come "to seek and to save what was lost" (Luke 19:10). The Good Shepherd also modeled the use of a small group sheep pen in his discipling ministry with the twelve apostles (Martin and McIntosh 1997, 30). In fact, "Jesus spent the majority of his time with his small group" (McBride 1990, 16). "Jesus' involvement in a small group is the most convincing rationale for why local churches need to seriously consider including groups as an integral part of their congregational lives" (McBride 1990, 15). His small group, the twelve disciples, were also impacted by mutual sharing, teachable moments, and mutual learning (Neighbour 2001, 11-13).

Following the example of Jesus, the Sunday School sheep pen is one of the best strategies for shepherd-steward teachers to lead the sheep to feed on God's Word, to facilitate the sheep to care for one another's needs, to make disciplemakers, and to share the Good Shepherd's love with sheep who are not "of this sheep pen" (John 10:16). An additional biblical precedent for Sunday School/small group sheep pens may be found in Acts: "Day after day, in the temple courts and from *house to house*, they never stopped teaching and proclaiming the good news that Jesus is the Christ" (Acts 5:42, emphasis added). The New Testament church did not possess large worship and educational facilities. Thus, house churches were formed where small group Bible study took place.

Adult Learning Assumptions

Having examined the study's biblical foundation, it was appropriate to identify adult learning assumptions in Sunday School classes. In many considerations of adult education, two terms were discussed at some point: pedagogy and andragogy. Pedagogy was defined as "the art and science of teaching children" (Knowles 1980, 43). Pedagogy often focused more on teaching than learning. Andragogy was defined as "the art and science of helping adults learn" and "another model of assumptions about learners" (Knowles 1980, 43). The focus of andragogy was more on learning than teaching. Andragogy differed from pedagogy in its emphasis on the enlarged learner's role, the teacher as facilitator, and stimulating the learner to learn (Hiemstra and Sisco 1990, 10-15). The introduction focuses on the debate in adult education between pedagogy and andragogy. Then, pedagogy and andragogy were compared and analyzed in the setting of adult Sunday School classes organized around the four major assumptions of andragogy: self-direction, experience, readiness to learn, and immediacy of application.

Adult Learning Introduction

Pedagogy has been around for years. "It evolved in the monastic schools of Europe between the seventh and twelfth centuries and came to dominate secular schools when they were organized in the twelfth century" (Knowles 1980, 40). The term *andragogy* came onto the scene when a German named Alexander Kapp "coined the term in 1833 to describe the educational philosophy of Plato" (Davenport 1987, 17). There was debate about andragogy from the beginning. Some of the debate has been "*between* those who subscribe to a unified outlook on all education and are against an andragogy/pedagogy distinction *and* those who are pro-andragogy and view adult education as uniquely different from children's education" (Podeschi 1987, 15).

Background

The debate really came to the forefront in the writing and lectures of Malcolm Knowles. His 1970 work, *The Modern Practice of Adult Education: Andragogy Versus Pedagogy*, stirred controversy producing much discussion, writing, and research. Setting andragogy against pedagogy may have been a mistake, but it did bring attention to the issues of andragogy and adult education. Still today, more than thirty years after Knowles' pivotal book, the debate continues, though not at the level of a few years ago. This is especially true in local church education where "a stirring is taking place among adults which indicates a growing restlessness and dissatisfaction with traditional approaches to adult education" (Hayes 1993, 31).

Many different perspectives about andragogy remain. "To some it is an empirical descriptor of adult learning styles, to others it is a conceptual anchor from which a set of appropriately 'adult' teaching behaviors can be derived, and to still others

it serves as an exhortatory, prescriptive rallying cry" (Brookfield 1986, 90). Others such as Conner point out that it is debated whether andragogy is "a learning theory (Knowles 1978), a philosophical position (McKenzie 1977), a political reality (Carlson 1979), or hypotheses subject to scientific verification (Elias 1979)" (Cross 1981, 225).

What were the influences on Knowles in his assumptions of andragogy? "Knowles apparently adopted Lindeman's general philosophical and theoretical tenets and buttressed them with additional support from adult education, progressive education, and developmental psychology, and humanistic psychology" (Davenport 1987, 17). In addition, Knowles was influenced by the theory of Abraham Maslow (Knowles 1980, 28, 87). In fact, Maslow's theory of self-actualization sounds quite similar to Knowles' assumption of self-direction. Knowles was not the first educator who emphasized self-direction. In fact, "John Dewey placed a great deal of emphasis on the individual guiding his or her own learning experience rather than on an artificial dependence created in an authoritarian teacher focused environment" (Conner 1999, 1). Others point out that Piaget and Erikson identified elements of self-direction in children and claim that andragogy is more than an adult education theory (Brookfield 1986, 93).

Debate about adult learning assumptions in recent years has focused on the need to "make continuous attempts to upgrade adult education and to meet the basic issues of our times with authentic theological concern" (Hayes 1993, 31). "The problem in education has typically been that of hanging on to pedagogical methods when the learner has progressed to a point of greater independence, and should be understood and motivated in a different way" (Hutchison 1997, 56). Knowles rewrote his 1970 book and reworded the subtitle to *From Pedagogy to Andragogy* in an effort to diffuse the debate

which had served its purpose. He recognized that "the models [of andragogy and pedagogy] are probably most useful when seen not as dichotomous but rather as two ends of a spectrum, with a realistic assumption in a given situation falling in between the two ends" (Knowles 1980, 43). For Knowles, it was not *either/or* but *both/and.*

Additional Issues

What are additional issues for adult education? Knowles himself identified one issue in the difficulty of coming to a consensus on a definition of *adult*. Adulthood has been approached from varied perspectives including biological, legal, social, and psychological definitions. Knowles' own definition of adulthood was "the point at which individuals perceive themselves to be essentially self-directing" (Knowles 1980, 46). Those demonstrating self-direction "are differentiated from others and described as *mature*" (Hutchison 1997, 52). An additional issue is the fact that adults have learning barriers not faced by children. "Some of these barriers include lack of time, money, confidence, or interest, lack of information about opportunities to learn, scheduling problems, 'red tape,' and problems with child care and transportation" (Lieb 2002, intranet/committees/FacDevCom/guidebk/teachtip/adult-2.htm.). "Adults *can* be ordered into a classroom and prodded into a seat, but they *cannot* be forced to learn" (Zemke and Zemke 1981, 46).

Assumptions

What are the assumptions of andragogy? Knowles did not view "andragogy as an ideology at all, but a system of assumptions about learners that needs to be tested out

for different learners in different situations" (Knowles 1980, 59). His assumptions include the following about adults as they mature:

> 1) their self-concept moves from being a dependent personality toward being a self-directed human being; 2) they accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning; 3) their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles; and 4) their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness. (Knowles 1980, 44-45)

The climate of andragogy tends to be more trusting and relaxed; planning, needs diagnosis, and objective-setting are mutual tasks; activities are more participative (such as projects and independent study); and evaluation involves teachers and students (Knowles 1984, 14-18). Furthermore, motivation moves from being externally provided (rewards and punishment) to being internally provided (Knowles 1984, 8, 12).

Adults experiencing a pedagogical approach may view the climate as more formal and competitive. Learners may feel capable of planning, needs diagnosis, and objective-setting while it is conducted only by the teacher. Activities may involve transmittal techniques since learners are believed to have limited experience, and performance may be evaluated by the only one viewed as capable, the teacher (Knowles 1984, 9). Adults can become dissatisfied with this approach. On the other hand, children perceive their major role to be that of learner; learn what they are told to learn; view content as important since adults said so; are much alike; perceive time differently; have limited experience; learn quickly; are open to new information and will adjust their views; have readiness linked to intellectual and biological development; and are externally motivated (Knowles 1984, 9; Knowles 1980, 43-44).

Sunday School Application

In order to apply these andragogical assumptions, it is helpful to define Sunday School. "Sunday School is the foundational strategy in a local church for leading people to faith in the Lord Jesus Christ and for building on-mission Christians through open Bible study groups that engage people in evangelism, discipleship, ministry, fellowship, and worship" (Hemphill and Taylor 2001, 13). Sunday School as an open group "is a foundational strategy that serves as an entry point into the church for unbelievers" (Hemphill and Taylor 2001, 14). Having laid out the adult education debate in a general fashion, comparison and analysis of pedagogy and andragogy in the setting of an adult Sunday School class will complete this discussion. Brief adult Sunday School class situations are presented followed by Sunday School application and analysis of pedagogical and andragogical approaches around the four major assumptions of andragogy: self-direction, experience, readiness to learn, and immediacy of application. While none of Knowles' four assumptions can be completely separated from the others, each assumption is examined individually. Following examination of the four assumptions, a brief conclusion is offered before moving on to consider learning environment factors.

Self-Direction

Consider the experience of Al. Al, a popular local college president, has been teaching the same men's Sunday School class for the last ten years. More than forty men attend each week. They love to hear him lecture on the Bible. Lately he has begun to wonder how to get the men more involved in their own learning. What can Al do to help the men to be more self-directing?

Pedagogical Approach

In a pedagogical approach, Al is completely in charge. The learning task is his responsibility. Al does all the planning and evaluation, and the learner is considered to be dependent. If members of the class learn anything, it is up to Al. While andragogical theory "suggests all kinds of humanistically desirable and democratic practices" (Brookfield 1986, 96), the pedagogical approach allows no questioning of the teacher's authority, information, or approach. Learners are deeply conditioned by their previous schooling. Al does not expect class members to read the lesson or to assess their spiritual progress. He plans according to what is next in the curriculum. The climate is formal and lecture is the method-of-the-day.

Andragogical Approach

In an andragogical approach, the class is alive, warm, and trusting. Class members never know what to expect when they show up. Al is constantly tapping into their preparation in new ways. He involves learners in needs assessment, planning, and evaluation of learning (Knowles 1980, 47-49). Al expects members to read their lessons, and most of them do. He realizes that members are volunteers who "seek out learning opportunities" (Green 2001, eet/Articles/andragogy/start.htm). He makes assignments and divides the group into smaller groups in order for each man to have more opportunities to participate and lead. He places instructional variables into the hands of learners: "(1) needs identification, (2) content area and purpose, (3) expected outcomes, (4) evaluation and validation, (5) methods of documentation, (6) appropriateness of the learning experiences, (7) variety of learning resources, (8) adequacy of learning environment, and (9) pace of learning" (Hiemstra and Sisco 1990, 11-12).

There is no doubt in Al's class that the "task of learning itself is . . . owned by the learner" (Atherton 2001, ~jamesa/learning/knowlesa.htm). Rather than allowing learners to be backseat drivers, he places each learner in the front seat of his own learning experience (Mynen 2001, core/102%20B/victoria/mynen.htm). He takes time in small groups of two or three learners to help them set learning goals and to assess progress each year. Al utilizes a variety of teaching methods to tap into the learning styles of the group and to lead them to participate and share with one another even more fully in the learning experience and between classes.

Problems and Benefits

With this information to add texture to the discussion, what are the problems with and benefits of each approach? In the pedagogical approach, the teacher is able to communicate a lot of information. He or she can be efficient in lesson preparation since learners do not have to be involved in setting the direction or assessing their progress. On the other hand, the teacher's effectiveness may not be as high as it could be if he/she better understood and responded to learner needs. In a large class, there also may not be enough input about how well learners are getting the information the teacher is communicating. Furthermore, since participation in the content is low, there may be less ownership and application of the content. Ownership is important in order to lead learners to be obedient (Matt 28:20a).

Another challenge is that "people frequently bring to the initial learning periods their own expectations about the instructor's role" (Hiemstra 1990, 13). Some come to adult Sunday School expecting the teacher to do all the preparation while they sit and soak it up. Others come hoping to get involved, but after the initial disappointment

has worn off they settle into a routine of listening and little more. New Christians may join Sunday School with enthusiasm and high expectations only to observe that no one prepares except for the teacher.

One of the problems of the andragogical assumption of self-direction is that "most students lack the experience to adapt readily to a totally andragogical system" (Paulet 1988, 60-64). Thus, some of the men may be prepared and eager while others may have been unprepared and frustrated. For the teacher, the andragogical approach would be more time-consuming. It would take him or her more time to prepare assignments, to prepare thoroughly to teach beyond what learners had studied themselves, and to get to know the their needs. On the other hand, steps in this direction could prepare some class members to take the next step toward being teachers themselves. The teacher's use of small group assignments would give many opportunities for learners to lead others. While less content might be covered in the andragogical approach, more of it would be of interest and would likely be retained.

Other Issues

Other issues about this andragogical assumption which deserve mention include the following. Is self-direction really a sign of adulthood? No, as Brookfield and many others noted, self-direction has been observed in children by both Piaget and Erikson (Brookfield 1986, 93). Is andragogy a panacea (Atherton 2001, ~jamesa/learning/knowlesa.htm)? No, it may be that having "a student totally dependent on an instructor to make learning occur may be appropriate in some cases for adults (for example, if they are faced with a completely new piece of equipment), but it is obviously more appropriate for young children" (Saunders 2002, Pedagogy.htm). Furthermore,

balance in the transition from dependency to self-direction is more healthy and positive in the learning process. Placing the learner in the center of the learning experience "allows the learner to have autonomy which may feel uncomfortable in the beginning, but becomes welcomed and valuable as time continues" even though "this does not necessarily correspond with the age of the adult" (England 2001, 27, 145). "Until the adult learners perceive their learning needs as ultimately in their own hands, the amount of learning that actually occurs will be negligible" (England 2001, 21). In summary, it should be noted that adults "learn best when treated as human beings and that the ultimate purpose of all of education is to empower individuals through a process of lifelong learning" (Knowles 1984, xvi).

Experience

Consider the experience of Brad. Brad's Sunday School class of newly retired couples, widows, and widowers has seen and done it all. He has been teaching them using lecture and discussion and noted that the group gets really lively during discussion. What can Brad do to capitalize upon the rich experience base of his class?

Pedagogical Approach

In a pedagogical approach, Brad considers class members' experience to be "of little worth" (Knowles 1980, 44). He studies his lesson more than class members do. They may have seen and done it all, but after all he is the expert on the Bible. Brad views the experiences of learners as a starting point, as something to be built upon rather than to be used as a resource (Knowles 1980, 44-45). He seldom utilizes teaching methods designed to bring out that experience. Class members learn what they are told to learn,

have limited experience, and are externally motivated (Knowles 1980, 43-44). Brad leans more toward lecture, prepared handouts, and assigned reading in order to transmit his experience (Knowles 1984, 8). He may utilize maps and charts and may even borrow the church's overhead projector to share some prepared outlines.

Andragogical Approach

In an andragogical approach, Brad has seen the excitement that takes place when the men and women of his class are given opportunities to share their experiences through teaching methods such as large and small group discussion, simulation exercises, role-playing, field projects, and action projects (Knowles 1980, 44). Without any question, these methods lead to greater learning as well as building the bonds of relationships that make it possible for content to be covered at more depth due to a trusting environment. Brad learns something new almost every Sunday from class members, and they learn as much or more from each other as they do from him. Two of the ways in which he invests a good portion of his preparation time is in developing (1) learning assignments which will be readily useable by the group and (2) good "open-ended questions to bring out the vast experiences of adult learners" (Green 2001, eet/Articiles/andragogy/start.htm).

Problems and Benefits

What are the problems and benefits of each set of assumptions about the learner's experience? From the standpoint of pedagogy, learners may have no clearly connected experiences relative to the topic for the day, but the truth is that there are very few topics that cannot be connected to something adults already know. This is also true

for children. A good teaching methodology starts with a "hook" to connect with learners' interest in order to get their minds in the room and involved in the Bible study for the day. Pedagogy may lead the teacher to be as interesting as possible, but often the experiences of the learners are far more interesting than the teacher could ever be. A good lecture can be a great starting point for a more participative method which can utilize the group's experience.

From the standpoint of andragogy, a rich resource of learning awaits being tapped. "Everyone has had educational experiences, work experiences, social and cultural experiences, personal experiences, spiritual experiences, and the practical experiences of daily living" (Cranton 1992, 57). The teacher serves as facilitator to guide the learning encounter so that the experiences shared are relevant rather than just rabbit trails. The teacher's job becomes one of getting to know the best way to lead the group to learn from each other. This can be difficult for many teachers who were taught lecture and have to stretch themselves to try other teaching methods. This can also be difficult for teachers who are so kind that they allow one or two persons to dominate the group. It may, however, be helpful to note that while adults often prefer independent learning and noncompetitive activities, many also prefer educator direction.

Two final thoughts need to be shared. First, the "life experiences of the learner and how they influence the learning process in adults are certainly components of many educational models" (Cranton 1994, 63). Thus, this assumption of andragogy is not a new revelation. Second, adult "learners must balance life responsibilities with the demands of learning" (Green 2001, eet/Articiles/andragogy/start.htm). While this is not as much an issue for children, few adults are willing to invest an unlimited amount of

time in preparing. This limits some methods which might be utilized to incorporate the vast experience of adults in the class.

Readiness to Learn

Consider the experience of Hal. Hal's young adult Sunday School class is full of questions. He thought teaching senior adults would be harder, but he was wrong. He is having to study hard to keep ahead of all their questions and their curiosity. What can Hal do to tap into his class's readiness to learn?

Pedagogical Approach

In a pedagogical approach, Hal examines intellectual, social, spiritual, and psychological development and prepares to teach the young adults that for which they are ready. He also examines the content/curriculum and presents it in a logical, sequential approach. Because most children of the same age are ready to learn the same things (Knowles 1980, 44), Hal makes an assumption about the common level of development that these young adult learners have attained. As opposed to an andragogical approach, He treats the group as a group rather than as individuals (Hiemstra 1990, 15).

Andragogical Approach

In an andragogical approach, Hal acknowledges that there are differences which need to be addressed. He realizes that a "group of fifty-years-old is more different from one another than a group of forty-year-olds, who in turn, are more differentiated than a group of ten-year-olds" (Knowles 1978, 57). Thus, Hal realizes that "the best way of stimulating people to become interested in the subject matter, involved in the instructional process, and positive about learning is to treat them as individuals"

(Hiemstra 1990, 15). In addition, he understands that people "join groups in order to satisfy some individual need. A person's primary motivation for small group membership is usually self-centered" (McBride 1990, 57). Thus, the "learners' perceived needs are an important consideration in curriculum planning and implementation" (Hutchison 1997, 53).

Hal focuses attention on what the young adults are ready to learn based on the "developmental phases they are approaching in their roles as workers, spouses, parents, organizational members and leaders, leisure time users, and the like" (Knowles 1978, 57). Hal takes advantage of teachable moments which occur regularly when the young adults are seeking help in learning how "to cope more satisfyingly with real-life tasks or problems" (Knowles 1980, 44), even if that means that he has to change directions in his teaching plan. He works hard to make sure that everything he teaches is relevant (Green 2001, eet/Articiles/andragogy/start.htm).

Problems and Benefits

What are the problems and benefits related to this third assumption? Certainly, teaching from a preset curriculum plan may be easier and more economical of time. In addition, a pedagogical belief in the similarity of the developmental status of participants may make lesson preparation easier. A pedagogical assumption about the sequentiality of a curriculum plan, however, may not be responsive to the needs of an adult Sunday School class. For instance, teaching a lesson against drug and alcohol use on a Sunday following the tragic death of a class member may be an inappropriate decision. Also, sticking to a teaching plan when the Holy Spirit is leading in other directions is always inappropriate.

In reference to an andragogical perspective, complete flexibility may be a distraction for everyone involved. Complete flexibility may serve as an excuse for learners not to read their lessons or prepare assignments. On the other hand, tapping into a learner's readiness to learn is a wise step toward ownership and retention of learning as well as relationship development and persistence in class. Are all adults motivated only by what they need to know to help with "life circumstances and how these circumstances impact their social roles" (Knowles 1984, 31)? No, there are many individuals at various ages who "enjoy learning simply for the sake of learning" (Hutchison 1997, 54). On the other hand, crisis and need are strong motivators for adults (and other ages as well).

Immediacy of Application

Consider the experience of Mark. Mark has been teaching his forty-something adult Sunday School class for three years. Many are struggling with living out the gospel in their jobs and raising their children to love the Lord. How can Mark connect the gospel with where his class lives so they can see the immediacy of the application?

Pedagogical Approach

In a pedagogical approach, Mark believes that delayed application is acceptable since heaven is the ultimate goal. Hope is what he wants to leave with his adult class. He reassures them of their salvation and hope for tomorrow. Mark teaches content that they may eventually need in this life, without concern with the tasks and problems they are facing today. This approach allows him to prepare a teaching plan that he does not have to fear changing. Class members understand that it will all eventually make sense and come together in a helpful manner.

Andragogical Approach

In an andragogical approach, Mark understands that class members enter his class with expectations about meeting current life problems (England 2001, 34). He leads class members to address "a need for them to learn something to cope with real-life tasks" rather than to memorize content (England 2001, 147). He is more concerned with the learners and the learning process than he is with "the content . . . or body of knowledge being covered" (Hiemstra and Sisco 1990, 11). More than once Mark has been reminded that his forty-something class is motivated to learn by a desire to solve immediate problems (Knowles 1984, 11-12). He has utilized the great experience base of the class to meet many of those problems. He has led them not only to be practical but also goal-oriented in their approach to learning (Lieb 2002, adult-2.htm).

Problems and Benefits

What are the problems and benefits of this fourth assumption? From the standpoint of pedagogy, a disconnect can occur between what is learned and life. While the gospel is a gospel of hope, it is also a gospel of the here and now. Jesus said, "I have come that they may have life, and have it to the full" (John 10:10b). While some lessons build for other days, lessons will also benefit from an immediacy of application for facing today's situations. Furthermore, a pedagogical approach may avoid the messiness of having to deal with the variety of life situations of learners, but such an approach can also deflate motivation for learning.

From the standpoint of andragogy, adult learners need to understand the entire Bible and not just parts with which they most connect. An over-reliance upon topical teaching may produce a lack of balance and understanding of the breadth of God's Word.

And yet, much can be said for the immediacy of application of God's Word to the life situations and problems every learner faces. Understanding how God's Word is relevant to today's trials and activities makes seeking His truth tomorrow even more likely.

Adult Learning Assumptions Conclusion

Does it really matter whether andragogy "is a 'theory about' (based upon individual characteristics of adults, learners, and educators)" or "a 'philosophy of' (entails the questions of purpose, how knowledge is defined, and the relationship between the individual and the society)" adult education (Podeschi 1987, 14-16)? Knowles' choice of the word, *assumptions*, to describe the elements of andragogy was wise. He made his assumptions based on experience but also with the expectation that research would be conducted. While research has not fully borne out his assumptions, "andragogy's greatest impact has been in action" (Knowles 1984, 21).

An emphasis on the assumptions of adult education is needed in adult Sunday School, but such an emphasis should not sell out pedagogical practice in the process. There are elements of both andragogy and pedagogy that are needed in the education of adults in Sunday School. Efforts by adult class teachers can be wisely invested on the spectrum of "from pedagogy to andragogy" for the good of the learning experience and learners. Such efforts have potential to lead to greater maturity by adults and greater advancement of the Kingdom! This requires an appropriately balanced practice of adult education (with elements of both andragogy and pedagogy) coupled with intentional efforts to improve the learning environment. For many adult classes in Kentucky Baptist Convention (KBC) churches, a balanced practice will require greater emphasis on andragogical assumptions.

Learning Environment Factors

"The task of understanding the multiple aspects of learning environments and then attempting to make these environments more effective . . . requires that professional adult educators look not only at the physical spaces in which learning takes place but also at the attitudes, perceptions, and beliefs that they and participating learners bring to educational settings" (Hiemstra 1991, 93). There is a need to give attention to three factors in the learning environment: natural, human, and divine aspects of the learning environment (Pazmiño 1999, 112). The natural aspects of the learning environment include the "physical factors and material resources of the classroom, including room arrangement, decoration, aesthetics, and resource display, along with factors that affect visibility, mobility, and comfort" (Pazmiño 1999, 112). The human aspects include the learner(s) and teacher(s) while the divine acknowledges the work of the Holy Spirit.

"The learner needs an environment that is physically comfortable, safe and secure, a place that enhances social interaction and exchange of information, an environment that projects the image of caring and concern for the learner's needs" (Leed and Leed 1987, 4). Since learning takes place in all kinds of settings, it may be beneficial to note some definitions and terms for consideration. There are many terms used by writers and researchers, often interchangeably, to describe the learning environment. These include learning culture, classroom environment, classroom climate, climate setting, behavior setting, learning atmosphere, and so on. For the purposes of this project, all terms will be considered to be related despite differences in intent by users of each term. In order to address the retention and attrition of adult Sunday School members in KBC churches, an examination of learning environment factors is

appropriate. Following an introduction in which definitions and an overview of the learning environment will be considered, major elements of the environment will be considered with application to adult Sunday School classes in KBC churches.

Learning Environment Overview and Definitions

An examination of learning environment factors naturally begins by offering some foundational definitions and terms. Definitions range from simple (environment = physical factors) to more complex. The environment has been defined "as the aggregate of conditions that influence a person or community, social, cultural, and physical aspects" (Hutchison 1997, 11). One of the most influential contributors to the examination of the impact of the environment on adult learning has been Malcolm Knowles. He spent much time promoting social and physical environmental conditions that he believed impacted adult learning (Knowles 1984, 14-18). He believed that an educative environment that promotes the growth and development of adults should include these conditions: "(1) respect for personality; (2) participation in decision making; (3) freedom of expression and availability of information; and (4) mutuality of responsibility in defining goals, planning and conducting activities, and evaluating" (Knowles 1980, 67).

Obviously influenced by andragogical assumptions, Leed and Leed, two architects, offer a five-step model of the physical environment (that contains social factors as well): meeting physiological needs or "creature comforts," creating a climate of *trust* and sharing, maximizing social contact and exchange of information, meeting highest expectations of quality, and inspiring greater achievements (Leed and Leed 1987, 10-11, emphasis added). Trust is a factor not often mentioned by writers dealing with

environmental factors but is important nonetheless. Trust is even more significant in dealing with spiritual issues because of the connection between faith and trust.

Overview

In the 1960's and 1970's when adult education was being scrutinized closely, many also examined the learning environment. Bloom was one of those. He said, "The environment is made of conditions, forces, and external stimuli—whether physical, social, or *intellectual*—that provide a network surrounding, engulfing, and playing on the individual" (Bloom 1964, 16, emphasis added). Other writers and researchers include intellectual stimuli in psychological or psychosocial environmental factors, but Bloom highlights the significant place intellectual stimuli have upon a person's learning environment.

Some include cultural environment factors in their consideration of social elements of the learning environment, while others want to call special attention to the influence culture has upon behavior, learning, and perception. Hiemstra and Sisco highlight cultural elements in their definition of the learning environment which "includes social, *cultural* and *psychological* elements as well as physical features" (Hiemstra and Sisco 1990, 245, emphasis added). Hiemstra and Sisco also add to the discussion the potential impact of psychological environment factors. Like cultural environment factors, some include psychological factors in their consideration of the comprehensive social environment.

Definitions

While climate can refer to weather, climate can also refer to factors in the

learning environment, "such as a prevailing condition, atmosphere, or ambiance" (Hiemstra 1991, 42). Such conditions can be created by both physical and social factors in the environment. Lee focused on a psychological environment variable worthy of consideration. He identified the maturing environment (early family life and background) as constituting "the most powerful, the most pervasive, and the most perduring variable affecting virtually all phases of an individual's learning" (Lee 1973, 60). The place, conditions, and culture in which persons grow up exert influence upon how they learn. Persons may resist or agree with those pressures, but influence is present nevertheless. The environment is "that aggregate of external physical, biological, cultural, and social conditions or stimuli to which an individual consciously or unconsciously responds" including the (1) overall cultural environment, (2) local environment, (3) school or institutional environment, (4) classroom or learning group environment, (5) peer group environment, (6) home environment, and (7) immediate physical environment (Lee 1973, 65). Along with Lee's definition of environment is *learning press* which is "the extent to which one's total current environment requires or encourages further learning" (Darkenwald and Merriam 1982, 142).

Hiemstra adds to this discussion his definition: "A learning environment is all of the physical surroundings, psychological or emotional conditions, and social or cultural influences affecting the growth and development of an adult engaged in an educational enterprise" (Hiemstra 1991, 8). As Hiemstra points out, not only are social, cultural, and psychological environment factors included, physical factors require serious consideration. The book *Individualizing Instruction* contains a section dealing with the physical environment. In the book, the connectedness of social and physical environment

factors can be seen in Hiemstra and Sisco's suggestions for creating a positive learning environment: (1) set the correct tone during the first session, (2) create proper room arrangement, (3) monitor the physical environment, (4) monitor personal comfort, (5) help participants become acquainted with each other, and (6) describe the instructional process to learners (Hiemstra and Sisco 1990, 81-88).

Astin, who spent years examining the college environment, identified an environmental stimulus as "any behavior, event, or other observable characteristic of the institution capable of changing a student's sensory input, the existence or occurrence of which can be confirmed by independent observation" (Astin 1968, 5). These changes in sensory input may have one (or a combination) of four consequences: (1) a change in the student's immediate subjective experience, (2) a temporary or situational change in the student's overt behavior, (3) a lasting or relatively permanent change in the student's experience, or (4) a lasting or relatively permanent change in the student's behavior (Astin 1968, 3-4). "Although the student's perception of his college environment . . . may influence his behavior toward his fellow students, his perception alone cannot function as a stimulus for others" (Astin 1968, 8).

In his definition mentioned previously, Hutchison adds to these foundations that an environment is an "aggregate of conditions that influence a person or community" (Hutchison 1997, 11). His definition adds one critical element assumed, or ignored, by previous definitions: there can be community or group influence by the environment. Hutchison points out that studies have shown that the environment influences student motivation, participation, receptivity, and response (Hutchison 1997, 6). Each of these, in turn, impacts learning and learner retention in the adult Sunday School class.

Impact and Application

The social, physical, and divine factors of the environment impact learning and learner retention. "Studies have demonstrated that environment influences student motivation, participation, receptivity, and response" (Hutchison 1997, 6). As has been said, environmental factors affect the growth and development of learners (Hiemstra 1991, 8). While this is obvious, if learners do not persist (continue to participate) in the learning environment of Sunday School, they cannot continue to benefit from it and neither can other class members benefit from them.

While these definitions could go on and on, the reader will now have a sense of the multitude of learning environment definitions and factors contributing to learning, behavior change, and retention. From this foundation, a definition of the learning environment can be offered. For the purposes of this paper, learning environment factors will be defined as the combination of physical, social, and spiritual aspects influencing the motivation, participation, receptivity, response, growth, and learning of an individual or a group (Hiemstra 1991, 8; Pazmiño 1999, 112; Hutchison 1997, 6).

The author came to realize that the learner is set within a learning environment which is set within a human or social environment which is in turn set within a physical environment all of which is subject to spiritual (divine involvement) factors (adapted from Cranton 1992, 19). And God pervades it all. Figure 1 illustrates the model for this paper. The following three sections will examine the factors of the model: spiritual, physical, and social environments and their impact upon the learner. Intellectual, cultural, and psychological environmental factors will be included in the material about the social environment since few persons mature and move in an environment devoid of

the influence of other people. While much research has been completed on educational environments (school, colleges, and universities), little has been conducted in church settings.

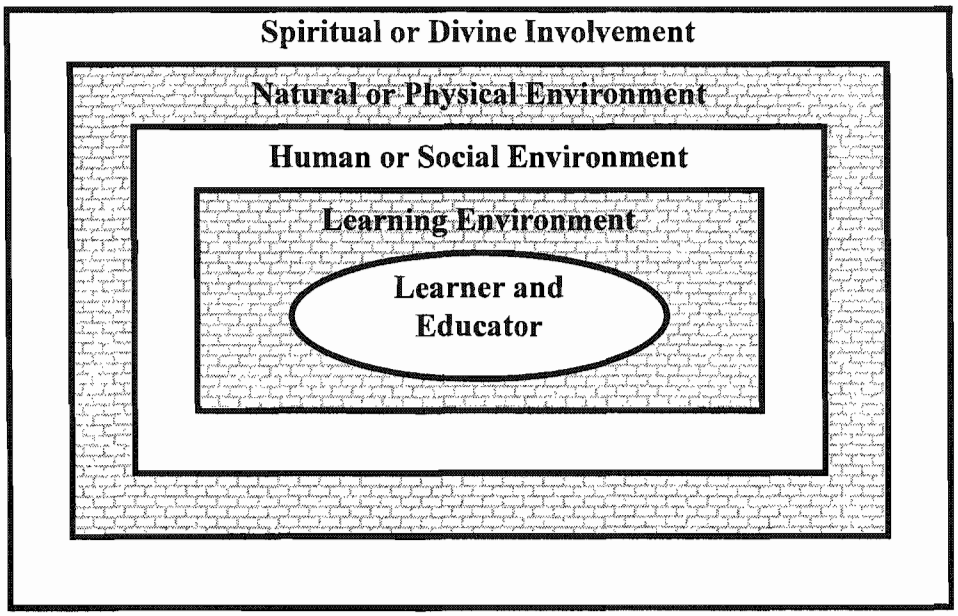

Figure 1. Modified Cranton learning environment model

Though many learning environments exist, the application for the identification and analysis of learning environment factors in this research project was adult Sunday School classes of Kentucky Baptist Convention (KBC) churches. It is appropriate at this point to return to the definition of Sunday School as "the foundational strategy in a local church for leading people to faith in the Lord Jesus Christ and for building on-mission Christians through open Bible study groups that engage people in evangelism, discipleship, ministry, fellowship, and worship" (Hemphill and Taylor 2001, 13). This definition describes a learning environment that challenges most adult Sunday School classes beyond current practice toward ideal practice. It should be noted that the

learning environments for adult Sunday School classes vary from class to class and from church to church. This examination will begin from the outside (area most distant from the learner in Figure 1) and work toward factors closest to the learner. Thus, spiritual (divine involvement) factors will be considered first followed by examination of natural or physical learning environment factors and then examination of human or social factors. A summary conclusion will then be offered.

Spiritual (Divine Involvement) Factors

The earlier section entitled, Biblical Metaphor for This Study, introduces the significance of God's involvement in the learning environment of adult Sunday School. At this point, it is important to revisit the Sunday School definition as the "foundational strategy in a local church for leading people to faith in the Lord Jesus Christ and for building on-mission Christians through open Bible study groups that engage people in evangelism, discipleship, ministry, fellowship, and worship" (Hemphill and Taylor 2001, 13). Sunday School, by this definition, is more than a history class whose main text is the Bible. Instead, Sunday School is a life-changing encounter with the living God through individual and corporate examination of truths in God's Word. For this to be true, leaders would benefit from a realization that the "church is not first a methodology, but a dependence on the infinite power of a sovereign God" (Rainer 1994, 79).

Sunday School's curriculum, the Bible, accomplishes God's purposes (Isa 55:11) and is useful for teaching, rebuking, correcting and teaching in righteousness (2 Tim 3:16), and for evangelism (Acts 8:35). When working with the Holy Spirit, teachers are able to accomplish the "objective of Christian teaching . . . to produce mature disciples of Jesus Christ" (Hunt and Mays 1998, 9). God gave the Bible's message the

power to bring people to faith in Christ and guide them to follow Him in obedience, "equipped for every good work" (2 Tim 3:15-17). In Sunday School, adults open the Bible and listen to God's still small voice speak to heart, mind, and life. Jesus promised: "For where two or three come together in my name, there am I with them" (Matt 18:20). "This promise speaks of a meeting ('gathered together') with an agenda ('in my name') that is blessed with Christ's presence ('in the midst')" (George 1997, 9).

While the Spirit inspires and illuminates scripture (1 Tim 3:16-17, 2 Pet 1:21), the "man without the Spirit does not accept the things that come from the Spirit of God, for they are foolishness to him, and he cannot understand them, because they are spiritually discerned" (1 Cor 2:14). Thus, the success of the ministry of the Sunday School "depends first on God's leadership and then on the church leaders" rather than the opposite (Adams and Young 1996, 41). "The goal of the Bible study and biblical instruction that takes place in Sunday School ministry is transformed lives that exhibit love for God and others" (Hemphill and Taylor 2001, 181).

Natural or Physical Environment Factors

Whatever the setting, natural or physical environment factors "are frequently overlooked, misunderstood, or taken for granted" (Hiemstra and Sisco 1990, 245). "While educational research has dealt with many variables found to be important in the learning equation, practitioners have been relatively uninformed about either the potential value or the possible harm of physical space to learning" (Hiemstra 1991, 13). "Even when the relationships of a setting's physical attributes to learning have been considered within an educational framework, findings frequently have been limited to children and may or may not be applicable to adults" (Hiemstra 1991, 14). While most "adult learners

are not consciously aware of a facility . . . subconsciously they detect annoyances which can quickly block or hamper learning" (Leed and Leed 1987, 3).

What are the physical factors at work in an adult Sunday School class? Because of the wide range of facilities and equipment utilized in adult Sunday School in the 2,400+ KBC churches, there can be no simple answer. Church educational facilities range from small to large and from old and outdated to new and cutting edge and everywhere in between. Some are well-appointed and well-maintained and others are plain and in poor condition. In some churches, adults have the best facilities and equipment; while in others, preschoolers or other groups have the best.

"The effectiveness of a classroom depends on its arrangement, its contents, its appeal, and the occupant's familiarity with the setting" (McFarland 1993, 31). The effects of physical space "can be seen not only in achievement levels, the traditional outcomes variable measure in educational research, but also in levels of participation and satisfaction" (Hiemstra 1991, 13). In order to work toward creating an ideal adult Sunday School learning environment to encourage learning and learner retention, what are the natural or physical factors and their consequences worthy of consideration? An early, often-cited book states that "general estimates indicate that while about 75 percent of learning is accounted for by motivation, meaningfulness, and memory, the remaining 25 percent . . . is dependent upon the effects of the physical environment" (White 1972, 1). While other studies have led researchers to question the percentage that White gives, few today believe that the physical environment can be discounted. With this potential for impact, the church would do well to give greater consideration to the issue of the natural or physical learning environment in adult Sunday School. Mason adds that the

"atmosphere you teach in can have an impact on your lesson and your students" (Mason 2001, pmi/issue-100901/article_0029.html). Adult Sunday School guests can form (simply from the physical classroom environment) negative perceptions about learning even before interacting with learners. This can lead to attrition of potential class members. McBride puts it this way: "The physical setting in which the group meets affects members' attitudes and actions and, consequently, helps determine group processes. The meeting place either positively or negatively influences members' participation in the group" (McBride 1990, 57).

McFarland, in his study on proxemics in Christian education, states that the "physical features . . . permit, enhance, or detract from the learning experience" (McFarland 1993, 28-29). In addition, the "physical environment is defined by both material attributes and the perceptions of those attributes by learners" (Hiemstra 1991, 15). For instance, some adults come to Sunday School with pre-existing (positive or negative) perceptions about educational settings, many of which were set during elementary and high school years. This is true because an "individual's background and past experiences amalgamate with the immediate setting to impact the present ability to gather new knowledge" (McFarland 1993, 27). But there is hope even when the learner's background and past experience have been negative. "A setting that facilitates the assimilation of new knowledge raises expectations for better learning" (McFarland 1993, 30). As a result, it is important that the adult Sunday School class attempt to make a positive first impression for guests and new members. This consideration of the natural or physical factors of the learning environment will include physical arrangement, flexibility, and space size; proxemics and territoriality; aesthetics and tidiness; lighting,

writing, and reading; temperature, ventilation, and humidity; as well as odors, seating, and noise.

Physical Arrangement, Flexibility, and Space Size

Physical arrangement, flexibility of arrangement, and space size have important consequences for an adult Sunday School classroom environment (Hiemstra and Sisco 1990, 82). "The placement of chairs in a classroom can facilitate or inhibit class discussion" (Moos 1986, 108). As a whole, few classrooms in Southern Baptist churches have fixed furniture (such as pews or theater seating), but some do. In those cases, a good teacher will adapt lesson plans, but the fixed arrangement will be a limiting factor much like space size impacting the learning experience and environment.

Physical Arrangement

The arrangement of furnishings can have impact upon whether interaction is discouraged or encouraged. Sommer suggests that there "is no single best arrangement for all classroom tasks. For individual study, a sociofugal arrangement that minimizes eye contact may be preferred, while in small-group discussions a circular or sociopetal arrangement may be best" (Sommer 1967, 502). Mason agrees:

> If possible, arrange your seating in a circle or semi-circle. An open seating arrangement encourages interactivity. Everyone in a circle is a participant. A lecture format, where all students sit in rows facing the teacher, indicates subconsciously that class members are there to listen only. (Mason 2001, pmi/issue-100901/article_0029.html)

While expectations may vary according to cultural background, "sociofugal space is not necessarily bad, nor is sociopetal space universally good. What *is* desirable is flexibility and congruence between design and function" (Hall 1966, 103-04). Or said in another

way, space "takes on meaning depending on how one fills it" and uses it (Hendrix and Hendrix 1975, 39).

Furnishings and their arrangement affect the behavior, perceptions, and even learning. Setting up a room so people have equal visual access with each other during discussions, makes participants "far more likely to interact with the content on a personal basis" (George 1997, 118-19). Many adult Sunday School classes are arranged in rows which impede the natural development of relationships. Without a doubt, circles and semi-circles take up more space per learner, but their sociopetal arrangement tends to provide more potential for relationships to develop. This in turn allows for trust to be developed allowing for greater depth in Bible study to be able to be accomplished than when relationships are ignored or treated superficially. An illustration of one of the most intentional sociopetal arrangements in some churches may be seen in several groups meeting around round tables in an open area such as a fellowship hall or gymnasium. The size of the space and the number of persons in attendance in an adult Sunday School classroom often serve to determine arrangement since rows tend to allow for more people to fit into less space. Because much of the learning experience is social in an adult Sunday School class, such crowding of the physical learning environment can have negative consequences.

Flexibility

In addition to arrangement, the natural or physical elements of the learning environment need flexibility in order to provide "easy alteration between a state of separateness and a state of togetherness" (Altman 1975, 107). Flexibility can be limited in adult Sunday School in a number of ways. For example, some churches have one or

more classrooms with pews or couches or entirely too much furniture. Also, allowing a class to grow too large for the space in which it meets can limit flexibility. Spaces like these limit choices of teaching methods which might better address the learning styles of adults. Thus, learning is made more difficult and may even be uncomfortable. Such discomfort can lead to irregularity of attendance or dropping out.

Space Size

As has been mentioned, an additional issue is that many adult Sunday School classes meet in rooms of the wrong size. Unfortunately, providing space of the right size is recognized and implemented too seldom in KBC churches. Churches often do not realize that a "space can be too small, cramping and hindering our performance. But a space can also be too large, leaving us feeling lost and insignificant or too far away to see and hear well. The best size spaces are those which are comfortable for the activities we perform in them" (Farbstein and Kantrowitz 1978, 36). Adult Sunday School classes in classrooms of the wrong size can result in negative learning influence. And leadership is often slow in making changes because of the territorial nature of many adult classes. For instance, growing classes may be forced to remain in small spaces due to the "we-will-not-be-moved" syndrome found in some older but declining classes. On the whole, KBC churches are also slow in making provision for additional classroom space when classes begin to get too crowded. In addition, KBC churches seldom recognize that a space can be too large for the benefit of adults. Large rooms can feel impersonal.

Proxemics and Territoriality

Proxemics, the use of space and distance, is a physical environment factor

worthy of consideration. "Humans learn social distance and it differs in different cultures. In some, close bodily contact is necessary to show ordinary trust, while in other[s] the same behavior is offensively familiar, even repulsive" (Goshen 1959, 9). Hall cites four zones affecting American's behavior: intimate—from 0 to 18 inches; personal—from 18 to 48 inches; social—from 48 to 144 inches; and public—over 144 inches (Hall 1966, 110-20). Teachers will benefit from understanding these zones and understanding that the "specific distance chosen depends on the transaction: the relationships of the interacting individuals, how they feel and what they are doing" (Hall 1966, 120). A wise adult teacher will note the seating and acknowledge what such positioning says. Invasion of a person's space can produce a fight or flight response, making learning and its perception unpleasant or difficult. "It should be noted at this point that *how people are feeling toward each other* at the time is a decisive factor in the distance used" (Hall 1966, 108).

Ross et al. did an interesting study which showed that (1) males felt that a small room was too intimate for interaction with the same sex while females found it comfortable and (2) a large room produced comfortable interpersonal spacing for males but too distant spacing for females (Ross et al. 1973, 69-76). Small rooms could be a contributing factor for some women's classes growing more quickly than some men's classes in Kentucky Baptist Convention (KBC) churches. In addition, adult teachers and Sunday School directors might do well to allow more space in classes for men and more intimate spaces for women, where possible. Some reasons that have been given for such differences include innate sex differences, differences in activity levels, learned differences, and differences in expectations (Freedman et al. 1972, 545). When the group

is made up of both males and females, space size and density of the learning environment did not have same impact.

Not only do space requirements depend on how people feel toward one another, humans, "like other creatures, tend to establish territories" in order to give meaning to space and to create a sense of comfort and familiarity (Hiemstra 1991, 27). Sometimes this leads to a negative expression. "When someone encroaches on our space we tend to become defensive and protective" (Hiemstra 1991, 27). For example, in the church this may be expressed by persons who prefer to sit on a certain row in worship or a specific chair in the class and who get frustrated when someone sits in their space.

Spaces in which territoriality is expressed have been called *behavior settings*. "The behavior setting is a naturally occurring unit, having physical, behavioral, and temporal properties, and it reveals a variety of complex interrelationships among its parts" (Barker 1963, 26). Attributes of behavior settings include: (1) one or more standing patterns of behavior, (2) a milieu that is physical and may include man-made objects such as buildings, streets, or chairs, (3) the physical milieu surrounding or enclosing the behavior, and (4) standing patterns of behavior in the setting are similar in structure to the milieu (Barker 1963, 26-27). In other words, the physical environment tends to mold behavior. Examples include the theater, church, and school.

Aesthetics and Tidiness

In addition to spatial amount and arrangement, chair placement, color, and carpeting all "affect individual role behavior" (Moos 1986, 115-25). Few churches and adult Sunday School classes consider color or carpeting to have any education value. Goulette cites research showing that "well-appointed, well-ordered and tidy classrooms"

lead to better performance among younger persons (Goulette 1970, 41). Many adult Sunday School classes allow old curriculum, maps, posters, and other items to accumulate on top of pianos, cabinets, and in piles in corners of the room without any understanding of the potential for impact upon the learning that takes place in the physical environment. Furthermore, the "effectiveness of a classroom depends on arrangement, its contents, its appeal, and the occupant's familiarity with the setting" (McFarland 1993, 31). "A well-planned and a well-kept classroom not only instills confidence, it creates an atmosphere conducive to learning" (Goulette 1970, 41). On the other hand, moving an adult Sunday School class to new space can be exciting, but the new environment can also distract from the learning experience.

In addition to maintaining the tidiness of classrooms, the personal comfort level of learners needs to be monitored in order to optimize learning (Hiemstra and Sisco 1990, 84). The physical environment should be comfortable, aesthetically pleasing, not too crowded or spacious, and facilitative of interaction (Knowles 1980, 223). "Luxury is not required, but comfort, excellent illumination without glare, absence from disturbing sounds or movements, provide a setting in which the chances for effective learning are increased" (Kidd 1973, 233). It should not be surprising in many KBC churches that the most aesthetically pleasing and often the most comfortable learning environments are found in senior adult women's classrooms which have been decorated by class members. Few pastors and educational leaders in churches give serious consideration to providing more than the barest necessities for adult Sunday School.

Lighting, Writing, and Reading

Other issues in the physical environment also have direct impact upon the

learning environment and the learner. Goulette lists a number of physical factors which are to be taken into account when training adults: lighting amount and glare; font size, spacing, and leading; noise level and hearing; temperature and homeostasis; and humidity (Goulette 1970, 40-42). The amount of lighting (or lack thereof) and the direction of the lighting and any consequences of glare can affect learning ease and enjoyment. "If classroom or nearby exterior space is inadequately lighted, a person's feeling of well-being and ability to read learning materials or to take appropriate notes can be affected" (Hiemstra and Sisco 1990, 257). "The leader should ensure that the temperature of the room is comfortable and that lighting is adequate" (Martin and McIntosh 1997, 151). Teachers need to realize that "75% of what we learn is through the sense of sight" (Goulette 1970, 41).

> Researchers have definitely established that performance is better in well-lighted rooms. Recommended light intensities for classrooms are 10 foot candles. For adults it can and probably should be as high as 20 to 25 foot candles . . . . The best system of lighting is indirect or semi-indirect. (Goulette 1970, 40)

Many adult classrooms have enough lighting when the sun is shining, but the one light bulb in the center of the ceiling is hardly enough on cloudy days or at night, especially for adults whose vision may not be as good as it once was. Glare can also be a problem in classrooms of KBC churches leading to the installation of blinds for the windows. While blinds may reduce glare, they also may reduce a much needed source for sufficient illumination in some classrooms.

Mason adds to the discussion about well-lit rooms an encouragement for "class members to take notes, underline or highlight key scriptures, and record their prayer needs and class requests" and for teachers to write "outlines, key thoughts, scripture, and responses from class members on a blackboard" since "class members forget 75% of

what they hear in your class within 72 hours if they do not write it down" (Mason 2001, pmi/issue-100901/article_0029.html). This adds weight to the consideration of lighting and glare. It appears that few adult Sunday School teachers in KBC churches encourage class members to take notes or to do any writing related to the lesson. Thus, much of what is learned is forgotten all too quickly. Along with lighting comes consideration of font size and spacing in printed materials for adults whose eye sight and hearing deteriorate at various rates over the years (Goulette 1970, 40-41). Fortunately, curriculum and Bible publishers are addressing printed needs of adults.

Temperature, Ventilation, and Humidity

"The thermal conditions of a physical environment are also important. A room that is too warm or too cold will create various kinds of barriers for learners" (Hiemstra and Sisco 1990, 258). "It has been shown that between 82° and 95° or higher, performance deteriorates markedly, in fact, at 93° and higher, performance may drop by as much as 50%" (Goulette 1970, 42). Unfortunately, it can be difficult to set a temperature to satisfy men and women. "Sitting in a cool draft or next to a noisy heating system certainly lowers the learner's effective concentration level" (Leed and Leed 1987, 4). "A chilly or torrid space, no matter how beautifully conceived, will not attract and hold people" (Goshen 1959, 21).

In Kentucky Baptist Convention (KBC) churches, space is often regulated by thermostats for multiple classrooms of adults covering a range of ages and sex. This makes comfort for all persons challenging, if not impossible. Humidity, ventilation, and temperature have the greatest positive impact upon the learner and the learning environment when they are not noticed. Many adult classrooms in KBC churches are

poorly ventilated, with uncomfortable temperature and/or humidity. This can adversely affect the homeostasis of adults, especially senior adults, making learning difficult. Some adults choose to stay home rather than to have to deal with classrooms which are too warm or too cold.

Odors, Seating, and Noise

In addition to room temperature, ventilation, and lighting, physical factors that may affect training include "comfort of seating, ease of writing . . . aromas, music, hard-to-read visuals, maintenance of attention, time of day, and formal or informal room arrangement" (Stratvisions.com 2001, AdultLearning/22SVPhysical.htm). In some churches odors such as mildew and urine can be a distraction for adults.

As it was with temperature, what is comfortable seating for men may not be comfortable for women. Women have difficulty sitting in chairs in which their feet cannot touch the ground. In addition, adults in KBC churches "are often physically uncomfortable in child-sized furniture" (White 1972, 3). This discomfort can distract from learning. "A good seat should allow for movement or a change in the sitting posture; there must be space for easement to maintain the best sitting posture for a lengthy period, but there should be enough control from the seating surfaces to effect the relief of body weight and give a sense of security" (Croney 1981, 116). In addition, "seat pans, whether upholstered or solid material, should be slightly contoured at front without seam or ridge" in order to avoid pressure points that will create problems for some people (Hutchingson 1981, 275).

The distractions of noise or amount of noise can also impact learning. "Adults seem to be able to put up with inadequate lighting and poor visual presentations a great

deal better than they can endure disruptive noises" (Leed and Leed 1987, 4). Rapid speech may result in decreased understanding of up to 45% for older adults who take longer to translate the meaning of sound and act on it (Cross 1981, 156). In particular, older learners have difficulty filtering extraneous noise (Draves 1984, 8). An innovative field experiment conducted to evaluate the psychological and behavior consequences of highway noise discovered less participation, less attentiveness, and greater difficulty in hearing comments of instructors and students under noisy conditions (Moos 1986, 183). Some learners, especially males, have additional difficulty in filtering noise due to attention deficit disorder and/or attention deficit hyperactive disorder.

Some adult Sunday School classes meet in spaces shared by other classes, such as in fellowship halls with or without sight barriers. These situations require wisdom in making them work effectively. When multiple classes meet in an open space, three or more classes meeting in the space will produce fewer distractions due to blended voices.

Other classes deal with heating and air conditioning noise that interferes with learning efforts. Noise can make the learning experience uncomfortable or difficult for adults, especially those with hearing difficulties. This varies for males and females: "As men age, they tend to lose high frequency hearing. Women, on the other hand, lose hearing at low frequencies. Thus, older male students will hear male instructors best and older female students will hear female instructors best" (Cross 1981, 156). Discomfort can lead to difficulty in learning and to departure.

Physical Environment Conclusion

What is the impact and influence of the physical environment on the learning environment and the learner? "Although humans can adapt and survive in the most

austere conditions, the physical environment should foster friendliness" (Hiemstra 1991, 26). There are three "major areas of life which are influenced by the physical setting: relationships, emotions, and self-identity" (Miller and Schlitt 1985, 147). The truth is that "the built environment affects our behavior whether we notice it or not" (Hiemstra 1991, 25). Despite the potential impact, institutions and teachers often ignore questions about the adult physical learning environment, and they are passed over in the literature and research (Vosko and Hiemstra 1998, 185-96).

Human or Social Environment Factors

With the pervasive impact potential in the learning environment from physical factors, what is the potential impact of the human or social environment? "Social environment or climate is one of the most important variables in an educational environment" (Beer 1986, 2). Going back to Figure 1, the social environment is set within the physical environment and is thus closer to the learner, thereby subject to potentially greater influence. The classroom social climate includes "the collective perceptions of the pupils regarding those dimensions . . . that have great impact on their capacity and motivation to learn" (McBer 2000, 3). Perceptions include those about the teacher, peers, teaching, and others.

Human or social factors, as has already been indicated, cover a diversity of issues. A social factor can be as simple as recognition that some learners select their position in the environment by how they initially want to interact (Hall 1966, 120). In adult Sunday School classes, some sit by the door to make a fast exit at the end of class while others sit in the middle of the group in order to interact with the teacher and class members. Teachers will benefit from realizing, however, that some adult Sunday School

class members stay in the same position in the environment as they initially chose because it has become a habit, even though their interaction has since changed.

It is important to note that the ability to create a particular learning environment "depends, to a considerable extent, on the kinds of students recruited into the institution" (Astin 1968, 139). What Astin means is that a college (or other setting for learning) attracts certain kinds of students which then make up and influence the kind of learning environment that is able to be established and the kind of student that is able to be recruited. Furthermore, the ability "to create a particular type of classroom environment . . . depend[s] more on the type of students making up the class than they do on the deliberate efforts of the instructor" (Astin 1968, 133). This is also true for adult Sunday School classes and learners. Since the principles of homogeneity and receptivity mean that adult classes tend to reach similar people, this can have direct impact upon learners and the learning situation. The fact is that peers often are more influential than the teacher on attracting and keeping their friends as new members of the class.

Establishing a safe, warm (interpersonal) climate is critical to effective learning (US Department of Health, Education, and Welfare 1972, trtp/trtp0301.htm). A high school study showed that the social environment was a mediator of classroom learning and perception (Walberg 1969, 443-48). Interestingly, Moos is clear in stating that often "people's perceptions of their environments are more important than the realities of the environments themselves" (Moos 1986, 132). When perception is more important than reality, it does little good in adult Sunday School class to argue that the social environment is different than an individual describes. Several social factors of the learning environment will receive consideration in the sections to follow: teacher factors;

peer factors; group size factors; psychological factors; participation factors; as well as demographic, cultural, and personality factors.

Teacher Factors

Teachers and peers are two major elements of the human or social environment. Seldom do differences in teacher demographics explain the impact of teachers upon the learning environment. On the other hand, studies of the learning environment in schools have pointed out that "that teacher support was the most prevalent dimension of the actual classroom environment" (Bartholomay 1996, 34). One of the best ways of communicating a teacher's support is through listening to students (Knowles 1980, 47). Teacher support impacts both kinds of retention, learning and learner. Teacher personality and behaviors with potential to impact the environment include warmth, enthusiasm, flexibility, emotional maturity, content-communication balance, preparation, organizational clarity, scholarship, responsibility, and self-evaluation (Yount 1996, 296-300).

Brookfield, who believes that the building of trust is essential for meaningful learning, identifies two particular characteristics that make instructors more trustworthy to their students: (1) teacher credibility—possessing a breadth of knowledge, depth of insight, and length of experience that far exceeds that of the students; and (2) teacher authenticity—being explicit about teaching and learning organization and evaluation criteria, consistent and congruent words and actions, ready admission of errors, personal revelation, listening carefully, and role modeling (Brookfield 1990, 163-64). At times when adult Sunday School classes are started, classes may not grow because the timing is not right. In other cases, the reason the new class does not grow may be that the teacher

does not fit, is not credible, or is not authentic. Perhaps the teacher is not growing closer to God. Joel Comiskey's survey of 700 small group leaders "revealed that the leader's success depended upon how much time he or she spent in daily devotions" (Comiskey 2001, 24). "Classroom social environment has been supported by many researchers as a contributing factor in student retention" (Bartholomay 1996, 32). Unquestionably, an adult Sunday School class teacher and his or her involvement with students impacts persistence and learning.

Teacher Influence

An interesting school study showed that "taken together, teaching skills, professional characteristics and classroom climate will predict well over 30% of the variance in pupil progress" (McBer 2000, teachingreformsold/mcber/01.htm). Such influence on pupil progress deserves attention. It is important to acknowledge that the "behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles 1980, 47). Robert Wuthnow and George Gallup conducted a national research project on small groups in the United States which revealed that small group leaders "function best when they are sensitive to the dynamics of the group, steer the discussion, encourage members to participate, and help to keep things running smoothly rather than dominating the discussion themselves" (Wuthnow 1994b, 267). Thus, teacher behavior is significant. If pastors and church educators were more aware of that fact, they might take more seriously the training needs of adult teachers and intentionally address the classroom social environment.

The learning environment of an adult Sunday School class can be significantly impacted by three things: the call, the devotional life, and the example of the teacher.

First, the church should seek to enlist God-called teachers for Sunday School classes (Hemphill and Taylor 2001, 81). Teachers without the call of God on their lives will not be as fulfilled or fulfilling. Second, "God wants one-on-one time" with teachers (George 1997, 177). Class members will be able to discern whether the teacher has spent time with God. Effective adult Sunday School teachers realize that "it takes quality quiet time to get ready to lead a group meeting" (George 1997, 84). How else will the teacher be able to guide class members on the journey to encounter God in His Word, if the teacher has not already been there? A quality quiet time involves listening to God in Bible study and prayer, but it also takes time to get quiet (George 1997, 178). Third, not only is the learning environment impacted by the call and devotional life of the teacher, the environment is also influenced by the leader's life and example. Adult "Sunday School recognizes that the leader is the lesson in that every leader is accountable for being an authentic example of Christianity in personal living and in producing new leaders for service through the ministries of the church" (Hemphill and Taylor 2001, 17). A poor example speaks louder than any verbal lessons. "Jesus is to be the model of leadership" (Hemphill and Taylor 2001, 80). The more the leader spends time with Jesus, the more like Jesus he or she will become.

Teacher support and student involvement in adult Sunday School classes will likely produce security and interest among adults. Adult Sunday School teachers will impact their classes most when they exemplify Jesus' response about the greatest commandment: "Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength" and "Love your neighbor as yourself" (Mark 12:30-31). Effective teachers "learn to enjoy the people they teach" and "make

sure that ministry to the individual's needs takes place" (Hemphill and Taylor 2001, 187). This means recognizing that teachers will have greater impact upon the learning environment when they "care for the context in which their students live, including their communities, societies, and eventually their world" (Pazmiño 1999, 225).

Classroom Management

An analysis of classroom climate has "revealed three important underlying factors which are particularly significant to pupils' learning opportunity: Lack of disruption; Encouragement to engage; and High expectations (by teacher)" (McBer 2000, teachingreformsold/mcber/01.htm). Classroom management (group alerting, learner accountability, smooth transitions, and teacher "with-it-ness") has been shown to have almost as much impact on learning as student aptitude categories (Wang, Haertel, and Walberg 1993, 76). Instances abound in KBC churches of adult teachers allowing the class to talk about the ball game, make announcements, and take prayer requests while saving fifteen minutes or less for the lesson. Effective teachers "create environments which maximise [*sic*] opportunities to learn, in which pupils are well managed and motivated to learn" (McBer 2000, teachingreformsold/mcber/01.htm). Classroom management has serious consequences upon learning, and the learning that takes place in adult Sunday School can make an eternal difference. The work cannot be underestimated or ignored!

Furthermore, an effective teacher occasionally will have to deal with challenging people, expectations, and situations. First, the learning environment will benefit from effective adult Sunday School teachers who learn to manage challenging people. George says that an "'extra-care-required' person shows up in about one group

out of two" (George 1997, 110). Studies of high school classrooms have shown that students are more secure and interested in classrooms that emphasize teacher support, student involvement, and *rule clarity* (Trickett and Moos 1974, 6-7, emphasis added). Teachers should be prepared to respond appropriately to these "extra-grace-required" adults who regularly create turmoil by disagreeing with the leader, attacking a group member, criticizing the behavior of others, dominating the discussion time, complaining about the church or staff, behaving rudely or cynically, or refusing to cooperate (George 1997, 110). Adult Sunday School teachers may prepare for these challenges by leading the class to set class guidelines in advance, by receiving training in how to respond, and by seeking the help of a teacher coach.

Second, teachers also have to manage expectations of class members. "Most members bring with them ideas . . . of what the purpose of the group is, what the group does, how they'll profit from being a member, and the demands the group will place on them" (McBride 1990, 103). Poor management can produce conflict. Potential problems can be warded off by talking about expectations; formulating new, appropriate expectations; evaluating expectation change; speaking privately to individual group members; and when no other choice remains asking an uncooperative group member to withdraw (McBride 1990, 110). Third, distractions "are also enemies to effectiveness" which deserve advance thought and planning by the teacher and/or the adult Sunday School class members (George 1997, 117).

Social Interaction

In addition, the frequency and quality of constructive *student and teacher social interactions* have a documented effect on school learning (Wang, Haertel, and

Walberg 1993, 76). What is true of a school setting is also true in Sunday School. Much can be accomplished in a few minutes of interacting before and after Sunday School by students as well as the teacher. This social interaction, often called fellowship in the church, is essential to building trust which allows for deeper sharing and learning during Bible study. "Trust is built when we make ourselves vulnerable to others . . . . Letting others know what we stand for, what we value, what we want, what we hope for, what we're willing (and not willing) to do means disclosing information about ourselves" (Kouzes and Posner 1995, 167).

Students learn more when teachers are accessible, interested in teaching, and interested in students. The day of universal acceptance of professional distance is over. A good teacher will care and be a good listener. "Active listening is vigorous, energetic, and diligent" (Comiskey 2001, 74). "Most people do not listen to understand; they listen in order to answer. While the other is talking, they are preparing their reply" (Covey 1989, 239). The teacher who is listening will understand that his/her thoughts are "not as important as the thoughts of those present" (Comiskey 2001, 74). Adult teachers need to do a good job not only of teaching but also of listening and caring for learners as well. The truth is that people do not "care how skilled you are nearly as much as they want to know that you care about them" (George 1997, 93).

Caring has a cyclical effect. The Sunday School teacher's interest in students and in God's Word impacts learning. Stephen Covey emphasizes the importance of listening by saying that "an effective sales person first seeks to understand the needs of the customer. The amateur sells products; the professional sells solutions to the needs of the customer" (Covey 1989, 244). In a similar way, a teacher interested in students will

tend to know more about students and be able to plan lessons to meet their real needs. Sometimes an adult Sunday School teacher will need to change the teaching plan because of the presence of a guest or when a member is in an overwhelmed condition (George 1997, 100). An effective teacher follows the advice of Paul to the church at Philippi: "Do nothing out of selfish ambition or vain conceit, but in humility consider others better than yourselves. Each of you should look not only to your own interests, but also to the interests of others" (Phil 2:3-4). An adult Sunday School member will "be more secure and motivated when his leader believes in him, encourages him, shares with him, and trusts him" (Maxwell 1995, 2).

Peer Factors

Astin in his study of the college learning environment identified four environmental stimuli: the peer environment, the classroom environment, the administrative environment, and the physical environment (Astin 1968, 9). In a similar way as the college campus, the impact of peers in an adult Sunday School class cannot be underestimated for their contribution toward the learning experience and toward assimilation of new class members. While it has been shown that the "peer group [has] a strong influence on school learning" (Wang, Haertel, and Walberg 1993, 77), peers in an adult Sunday School class also have positive or negative influences on learning. For example, the author has seen the impact that one learner taking notes has upon others. On the other hand, excessive talkers will drain the life of the group (Price and Springle 1991, 116-17). The process of cultivating "a culture of community requires that the quality of group life transcend the traditional experience of most Bible studies" (Donahue and Robinson 2001, 70). A culture of community requires that students understand the

importance of mutual respect, openness, collaboration, support, friendliness, risk-taking, and challenge (Galbraith 1992, 11).

Male and Female Differences

It should be noted that the perception of the human or social environment can vary from males to females. Adult Sunday School teachers should be aware that males "regard close physical contact with other males rather negatively, whereas females expect situations of close contact with other females to be positive" (Moos 1986, 158). Thus, males often prefer larger spaces while females prefer smaller spaces. Harold Ivan Smith has added to this discussion the following:

> After childhood, some males prefer acquaintances rather than close friends because adult friendships require disclosure and vulnerability—risky notions to many males. . . . Women, on the other hand, tend to create rich social networks and have better friendship skills—evident in both making and nurturing friendships. Because of this, women are far more vulnerable in relationships. (Smith 1996, 15)

Relationship-Building in Class

Relationship-building in class is a peer factor which also impacts the learning environment. Some adult Sunday School class members desire to spend the entire class period on content without working on the relational factors in the course of the lesson. This can have two negative impacts upon learning. First, a lack of relational time invested in class slows or prevents trust from developing that could lead the group to delve deeper together in studying God's Word. "Small groups are where people connect with other people, with God, and with the church" (Galloway and Mills 1995, 54). Whether connections occur intentionally or accidentally, they take time. Intimacy, a function of risk and trust, is the "willingness to share one's person, insight, feelings, and

identity with others . . . in small increments" (Coleman 1999, 33). "Rarely does a group coalesce instantly. It normally takes focused effort over a period of time" (McBride 1998, 11).

A second negative impact from a lack of relational time can be the disconnection of class members and guests. "Unless people form meaningful friendships within the group, they probably won't stay for long" (Dockery 1997, 47). In order for groups to build authentic relationships, five practices are necessary: "self-disclosure, care giving, humility, truth-telling, and affirmation" (Donahue and Robinson 2001, 60). Unless a class strives toward this kind of relationship, only friendliness will be achieved. But authentic relationships can "develop when people move toward knowing, loving, and serving" (Donahue and Robinson 2001, 65).

Members of a Sunday School class who care genuinely for each other and for guests will secure connection. "Secular people usually come to Christ over bridges of friendships. A trusted friend helps the seeker ease into church and learn about Christ" (Kramp 1995, 68). It should be the intention of the group that the class "becomes a second family for many" (Comiskey 2001, 99). The result will be that as "relationships within the group grow stronger, evangelism, ministry, and discipleship are enhanced" (Adams and Young 1996, 9). The bottom line is that if the adult Sunday School class "is marked by a contagious love, then people will want to join it. As a result, more and better disciples will be made" (George 1997, 7). Teachers cannot accomplish this by themselves. Such results require the involvement of class members in the work of the class. "The people who attend Sunday School classes . . . are not merely the intended

recipients of Sunday School's ministry. They are the grassroots ministers" (Hemphill and Taylor 2001, 100).

William Hendricks reports that some people who leave the church do so because their hunger for community or friendship is not being met (Hendricks 1993, 260, 283-84). "In a world of isolation and fragmentation small groups are a powerful way for people to connect with one another and experience the power of the gospel" (Bunch 1996, 8). On the other hand, it has been suggested that if "new believers make seven friends in your group, they will never leave" (Hunt 1997, 99). "The secret of a group's vitality is found *between* the meetings as much as *in* the meeting" (George 1997, 61). When new class members join, an adult Sunday School class investing additional group-building time will help the new member assimilate and help the group build trust. "The higher the level of trust a group builds, the more significant the ministry that occurs" (George 1997, 117).

Relationship-Building Outside of Class

Not only will adult Sunday School classes benefit from time spent in class in developing relationships, but classes also need this kind of time in between sessions. Or put another way, a "healthy group is formed by everything that happens before, during, and after a group meeting" (Adams and Young 1996, 32). Baptists call this fellowship. "Social gatherings offer the best settings to cultivate relationships" (Herring and Garner 1997, 18). "Fellowship provides the bond of unity which draws us closer together as a family of faith" (Wills 1998, 29). Some people will never come to the church until Christians spend time with them elsewhere. "Using special events and occasions to invite neighbors, coworkers, and friends to your home makes good sense if you want to reach

them. . . . Parties are a great way to begin new friendships" (Adams and Young 1996, 24). Classes will benefit from understanding that "what happens one-on-one *between* gatherings often contributes more to the effectiveness of your group than the actual gathering itself. . . . What the meeting does is to give legitimacy to the care that happens between meetings" (George 1997, 122). "The social allows the time necessary for people to get to know one another and to develop the bonds of friendship that bind members to the class, department, and church" (Herring and Garner 1997, 18-19). "People are not interested in a friendly church; they are looking for friends" (Hunt 1997, 95).

Group Size Factors

In addition to teacher and peer factors, group size has been studied extensively in schools, colleges, and universities and shown to impact the learning environment. Specifically, group size has significant impact "on aspects of individual and group performance, on the nature of the interaction and distribution of participation of group members, on group organization, on conformity and consensus, and on member satisfaction" (Thomas and Fink 1963, 383). Many adult Sunday School classes grow so large that teaching method choices, group participation, and social interaction are limited. This impacts persistence of learners as well. An additional social factor impacted by group size is accountability. "Small groups offer Christians the rare opportunity of studying the Bible, then holding each other accountable to grow in Christ and the fruits of the Spirit" (Donahue and Robinson 2001, 73). Accountability is more difficult in large groups.

Furthermore, smaller adult Sunday School classes tend to have a greater percentage of class members involved and interacting with one another. As group size

increases, there is a direct decrease in individual participation. In other words, the difference between the most active person's remarks and the least active person's remarks becomes greater as the group's size increases (Brilhart 1982, 59). That is one of the reasons why group members "usually evaluate smaller groups more positively than larger groups" (McBride 1990, 57). Also, smaller classes are often better organized and satisfied. "Unless cells remain small, they lose their effectiveness and ability to care for the needs of each other" (Comiskey 2001, 13). On the other hand, when the class is made up of only two or three individuals, there can also be dissatisfaction with the experience. It may be possible to address dissatisfaction in large classes with good class organization and creative use of small group interactive activities to facilitate "the group's communication and relationships" (McBride 1990, 72).

What is the ideal size for an adult Sunday School class? Galloway says, "The ideal number for good group dynamics and for caring and dialogue is somewhere between eight and twelve. Participation is much greater when you stay within those numbers" (Galloway 1995, 145). McBride differs only slightly when he says, "The ideal group size is between three and fifteen people. Yet, my experience causes me to recommend twelve members as the maximum ideal group size" (McBride 1995, 81). Many adult Sunday School classes average fifty percent of their enrollment. Thus, a class of ideal size might have twenty persons enrolled and ten persons in attendance. It may be necessary to contact regularly twenty to thirty prospective participants to end up with ten at a given meeting (George 1997, 74).

Psychological Factors

Not only is group size a significant factor of the social environment, but so are

psychological factors. In fact, Knowles has said: "Important as physical climate is, *psychological* climate is even more important" (Knowles 1984, 15). A subset of social environment factors, components "of the psychological environment include past and present experiences, feelings, the learner's character, motivation, cognitive structure, and ways of perceiving" (Bartholomay 1996, 32). For instance, much of the way in which a person learns is formed early, even in the preschool years.

In addition, "adults bring numerous feelings, questions, and doubts about a course or workshop that, left unheeded, can dampen the true potential for everyone involved" (Hiemstra 1991, 48). They "can carry into a learning environment external and internal 'baggage' that adversely affects their abilities to engage in learning experiences" (Hiemstra 1991, 51). Psychological factors can be utilized for good when acknowledged and addressed by teachers and learners. For example, tests have shown "that persons with severe stress are more susceptible to serious illness and have abnormally high incidences of colds, flu, etc." (Neighbour 1996, 118). Recognition of the impact of psychological factors can address realities before they become problems. This is all the more important since a "person's level of social and psychological adjustment directly affects the group process" (McBride 1990, 57). But an adult Sunday School class or Bible study group can also positively impact the person under stress.

An additional consideration can be seen when relationships in adult Sunday School classes are strained or damaged. Class members may vote by staying home or going to the church down the street. Furthermore, adult Sunday School classes can build an environment over time that is not welcoming to guests and new members because of the strain their presence brings to the psychological environment of the class. This is

especially true in a small church with few choices of adult classes, but it can also be true of any church with one or more adult class(es) in which members have been together for a number of years. Thiel identifies four barriers to community: time constraints, individuality, brokenness, and immaturity (Long et al. 1995, 44). Each of these factors can impact the learning environment in negative ways. Members and teachers need to be aware of the consequences of interactions with each other. Arnold offers wise advice:

> It is essential that seekers and believers enter the church through a safe location that will nurture them and equip them to grow. A SAFE group is one that *shares* personal stories, *articulates* its faith, *fosters* dynamic lifestyle ministry, and *encourages* intergroup caring. (Arnold 1998, 15)

Whatever an adult Sunday School teacher can do to get to know and trust his or her learners will be an investment in a more effective learning environment. Knowles states that an andragogical psychological environment exudes a spirit of mutual respect, is supportive and caring, is warm and friendly, is collaborative rather than competitive, has a climate of mutual trust and mutual responsibility, and is a place in which the emphasis is on learning rather than on teaching (Knowles 1980, 223). Mutual responsibility is often ignored in adult Sunday School classes for fear of driving away learners.

The social factors of the learning environment are also impacted by performance expectations. In research that was somewhat controversial, a teacher's expectations of how well students would achieve in class were shown decidedly to affect their scholastic achievement (Rosenthal and Jackson 1968, viii). Despite the controversy surrounding this study, there is truth to the positive impact that expectations have on learning and behavior. While acknowledging that some adults resist active participation because of its excessive effort, responsibility, and risk, most adults actually thrive under

such conditions if they are supported and challenged early (Knox 1986, 132-34). Many adult Sunday School teachers expect nothing, and that is the response they receive. If the adult Sunday School teacher believes that no one will read the lesson, then most or all will not. If the teacher believes that every person should participate in class discussion, then more will participate. Experience suggests that adults in Kentucky Baptist Convention (KBC) churches tend to be fairly autonomous and do what they please despite expectations by teachers, peers, or even the pastor.

Participation Factors

"Togetherness is the essence of teaching" (Highet 1950, 57). Togetherness is a term of mutuality. Adult students tend to prefer human or social environments in which they can 'be actively involved in the learning process" with more "interactional activities with other students and with their instructors" (Bartholomay 1996, 37). "Maximum learning is always the result of maximum involvement . . . with one condition: The activity in which the learner is involved must be meaningful" (Hendricks 1987, 78). Adults do not tend to flock to Sunday School for cold academic biblical instruction. Relationship-developing participatory activities in class build trust and enjoyment into the learning experience. Maximum participation will occur when conversation "flows back and forth among group members so that ideas and opinions may be freely communicated and heard" (Turner 1996, 8). Effective groups tend to have participation and leadership distributed among all group members (Johnson and Johnson 1987, 11). When learning is fun, more is learned, and learners are more likely to return. This is not a surprise for anyone who has studied the assumptions of andragogy over the last thirty years. It is understood that establishing "a safe, warm interpersonal climate in terms of

human and interpersonal relations is critical to effective learning" (US Department 1972, trtp/trtp0301.htm).

In addition to the impact upon learning, "the social climate within which an individual functions has an important impact on his attitudes and moods, his behavior, his health and overall sense of well-being" (Moos 1986, 324). This involves leaders in utilizing participatory responses: "They not only affirm a participant's sharing, but also invite others to engage in the process. Participatory responses do not isolate group members by shaming, embarrassing, or lecturing them" (Donahue 1996, 114). Bible study groups "can become the side door to the local church by removing the barriers of isolation, alienation, and loneliness and provide companionship and compassion" (Adams and Young 1996, 5). Research has shown that learners tend to "feel more secure and interested in classrooms that emphasize the Relationship dimensions of Involvement, Affiliation, and Teacher Support" (Trickett and Moos 1974, 1-2). As has been stated previously, studies "have demonstrated that the environment influences student motivation, participation, receptivity, and response" (Hutchison 1997, 6). "Adults who wish to participate actively in the learning experience will choose locations that allow this" (Sommer 1969, 115). Adult Sunday School classes at times will need to fight the tendency toward stagnation: "It is an unwritten law that small groups left alone will move toward entropy. They will become stagnant and introverted" (Hemphill 1996, 41).

A healthy balance of participation can positively affect persistence while fighting introversion. Thus, adult classes with a good, healthy social environment have more participation, greater motivation, more support, and greater response to what is taught. In effective groups, "cohesion is advanced through high levels of inclusion,

affection, acceptance, support, and trust" (Johnson and Johnson 1987, 11). Additional complications to participation include work, health, and family care conflicts. Such complications do not have to end social connections even if class attendance becomes irregular or ceases completely.

Teaching Methods

Participation factors begin with greeting members and guests personally when entering a Sunday School classroom, whether it is for the first time or the hundredth time. Participation also involves learning styles being addressed through teaching methods that lead to interaction. Jesus used a variety of teaching approaches in his ministry. He did so because "God created people with different ways of learning and dealing with life situations" (Johnston and Brown 2000, 134). Lecture is not a bad method when it is used wisely rather than as the only choice. Psychologists say that the addition of *doing* to seeing and hearing "brings the percentage of memory up to 90 percent" (Hendricks 1987, 82). Participative methods of discussion, group projects, question and answer, and others should be utilized according to the group's preferred learning styles and according to the truth being taught.

"The role of the teacher is to create an environment and guide learning in ways that will facilitate the work of the Holy Spirit and will encourage learners to experience spiritual transformation" (Johnston and Brown 2000, 134). "What happens in class matters, but not as much as what happens in people's homes, workplaces, lives, and relationships" (Hunt and Mays 1998, 10). "Methods are the tools a teacher uses to engage the learner. Use of different methods in the same teaching session opens the possibilities of engaging people who take different approaches to learning" (Johnston and

Brown 2000, 138). "These approaches include relational, musical, logical, natural, physical, reflective, visual, and verbal" (Johnston and Brown 2000, 135).

Meeting Length

An additional factor impacting participation in the learning environment is that of meeting length. Most adult Sunday School classes are scheduled on Sunday morning before or after a worship service. Meeting length is usually forty-five minutes to one hour. Largely because of the worship service following most Sunday Schools, classes cannot extend the meeting time. This can be a blessing since longer meetings can have these pitfalls: mental and physical fatigue, easier to waste time, and some people drop out or choose not to participate (McBride 1995, 86). On the other hand, adult Sunday School classes can have insufficient time to accomplish the agenda, a "rushing it" atmosphere, and relationships which suffer in favor of "getting on with it" (McBride 1995, 87). It is also possible that short, fixed meeting times may quench the Spirit at times (1 Thess 5:19). Furthermore, in order to take the fullest advantage of whatever time is available, it "is usually wise, if your group involves time-sensitive people, to try to make it happen within 5 minutes of the announced start time" (George 1997, 87).

Demographic, Cultural, and Personality Factors

Learners enter the learning environment "with personal and cultural characteristics—psychological type, learning style, developmental stage, values, attitudes, beliefs, and social norms" (Cranton 1992, 111). Few question the impact that age, social class, cultural background, and personality characteristics have upon learning, but these factors also "may determine the degree to which the setting will be congruent

with the behaviors its users wish to perform" (Moos 1986, 131). What is ideal for one group of adults in Sunday School may be different for another. For instance, a group made up of introverts may prefer a sociofugal environment even though they may need to risk sociopetal activities in order for relationships and persistence to occur.

"People prefer to participate in groups where other members are similar in age, attractiveness, attitudes, personality, economic status, perceived ability, and needs" (McBride 1990, 57). Or put another way, the "social environment selects or favors certain people . . . because their characteristics . . . give them specific adaptive advantages" (Moos 1986, 30). Sunday School directors and teachers would do well to note the preferences and the differences between people in the effective design and utilization of space in adult Sunday School by persons of different ages and background. In addition to reasons stated above, this is also true because cultural and "personality differences are related to the distances people prefer to place between themselves" (Moos 1986, 132).

Learning Environment Conclusion

Perhaps it is the overwhelming number of physical, social, and divine factors impacting the learning environment that causes them often to be ignored in the church. More likely, however, there is just ignorance of the consequences of these environmental factors. Pastors and church leaders have many priorities demanding their attention. And yet, the potential impact of these environmental factors upon adult learners could produce an increase of spiritual development enabling churches to (1) disciple more mature members, (2) avoid high attrition, and (3) multiply even more potential leaders. Consideration of these factors is worthy of the time, attention, and effort.

At this point, many recommendations are appropriate. Hiemstra makes these recommendations for changing and improving practice: (1) help learners control the environment, (2) analyze and control the physical space, (3) work with learners, (4) help learners feel at ease, (5) be proactive in bringing about change, and (6) make a personal commitment to change (Hiemstra 1991, 95-96). In order to have even greater impact on learning, physical, social, and divine factors need to be addressed in classes across the Kentucky Baptist Convention (KBC). How can those factors be identified? Instruments have been designed for schools, colleges, and universities. A survey instrument to assess physical and social environmental factors in an adult Sunday School classes could have positive impact upon learning in Southern Baptist Convention (SBC) churches. The development of an instrument to enable an adult Sunday School teacher to assess the physical and social environments could contribute positively toward the improvement of the learning environment in adult Sunday School in KBC churches. It may be beneficial to adapt three instruments created by Thomas Hutchison that measured class member and teacher perceptions of the ideal and real classroom environment (Hutchison 1997, 186-206). The resulting instrument could then be used with high attenders, average attenders, low attenders, and no attenders. Such efforts may be beneficial through purposefully adjusting classroom conditions in order to improve the perception of the student (DeYoung 1977, 256).

Enrollment Management: Retention, Attrition, and Persistence

In addition to understanding theological underpinnings, andragogical assumptions, and learning environment considerations, an examination of enrollment

management is needed. For many students in pursuit of postsecondary education, the freshman year is especially challenging. In a similar way, this is also true for an adult's first year in a Sunday School class. For students in an academic environment, the transition from youth to adulthood and from high school to college or university is filled with many unforeseen freedoms, distractions, adjustments, and difficulties. There are many developmental issues at play. "The research on student attrition and retention demonstrates that the late adolescent and early adult's struggles with identity issues, career choices, interpersonal competence, and values formation clearly affect student decisions to continue or to complete a college education" (Stodt and Klepper 1987, 6). During this time, new routines and relationships are established. For some, a new level of discipline is learned. For others, financial or family challenges arise. As a result of these factors and many more, a sizeable number of students, especially freshmen, drop out every year, many never to return. While reasons may be different, a high number of adults in Sunday School also drop out during the first year enrolled and subsequent years.

"Considerable prior research has concentrated on reasons why adults do participate [in education], with little done in the area of non-participation" (Harton 1984, 2). In today's climate, this cannot continue. The old marketing adage is also true for educational institutions, including the church: "It is easier to keep an existing customer than find a new one." What can adult Sunday School classes do to reduce drop out rates? What actions can be taken to encourage adults to persist: to remain connected, enrolled, and participating? What incentives can be offered to give adults a sense of satisfaction, positive experiences, and relationships they desire to continue? How can churches balance challenging adults and making them happy? What is the relationship between

the learning environment, in class and out of class fellowship opportunities, and persistence? How should churches respond to at-risk students? The bottom line is that the "success of an institution and the success of its students are inseparable" (Gaither 1999, 31). In the pursuit of some answers to these questions, after defining terms, three major intervention strategies will be examined. Then some concluding thoughts will be shared.

Enrollment Management Definitions

A few definitions are needed in order to understand the issue of enrollment management. Some of the terms apply to learners while other apply to the class or institution. An understanding of retention, withdrawal, persistence, attrition, and at-risk students will enable this issue to be addressed more comprehensively.

Retention and Withdrawal

What is retention? In the context of an academic institution or the church, retention has two usages. One usage for retention is *holding onto what has been learned.* The second, of relevance here, is *holding onto students who have been enrolled.* Retention is "usually a percentage measurement showing how many students re-enrolled at an institution" (*Retention and persistence in postsecondary education* 2001, persistence.htm). In an academic setting, retention can be delineated into program, course, and student retention (Seidman 1996, article_retention_revisited.htm). In the church, retention can be delineated into church, class, and student retention.

The root of retention is the word, *retain.* In the eighth edition of *Webster's new collegiate dictionary*, the word *retain* has been defined as "to keep in possession or

use" and "to hold secure or intact." In contrast, it is true for any academic institution other than might be found in the military or a prison, students are not a possession nor are they to be kept, held, or used. Adult students in school or church are enrolled at their own pleasure and discretion. They can withdraw at any time. Withdrawal is a personal action. Retention, on the other hand, is a corporate responsibility. Retention signifies the academic institution, church, and teacher's responsibility and efforts to help students persist (remain connected, enrolled, and attending).

Persistence or Continuation Behavior

In addition to retention, an examination of the term, *persistence*, is needed. While retention focuses on the institution's responsibility in remaining connected to the person who is enrolled, persistence acknowledges the student's responsibility in staying enrolled and on course. Persistence in an academic setting describes a student's "continuation behavior that leads to graduation" (*Retention and persistence in postsecondary education* 2001, persistence.htm). Some studies have called this continuation behavior *resilience*, especially when it refers to "those who have been identified as at risk of academic failure in school, yet manage to succeed" (Seiter 1999, 1). In the church, continuation behavior leads to involvement with the body of Christ, maturation, and multiplication of disciples. Continuation behavior in Sunday School involves participation. "Participation is a critical variable in nonmandated education" (Hiemstra 1991, 13).

Persistence in the church is a sign that the individual has been assimilated. Assimilation is "the meaningful incorporation of individuals into the body of Christ so that they have a sense of belonging and are thus involved in the ministry of that

community" (Brown and Hightower 1994, 9). "Sunday School is the reaching and assimilating arm of the church" (Brown and Hightower 1994, 73). Why do people stay in the church? They stay because of relationships, family needs being met, a special place of service and/or involvement, the mission of the church, worship style, expectation, feeling of being cared for, being held accountable to be there, attachment to the pastor/leader, and feeling of being led to stay (Brown and Hightower 1994, 63-64). Sunday School has the potential to do much of this list well.

Furthermore, a "student who leaves an institution and transfers without an enrollment break to another institution is considered a persister . . . but a leaver from an institutional perspective" (Horn and Carroll 1998, 4). This statement also has relevance for understanding the situation in the KBC church and adult Sunday School class. When an adult drops out of a class and church and joins another class or church, concern remains about how the class or church could have better met the needs of the adult. The one reassuring factor is that the persistence of the adult in the work of the church and of the Lord has continued. "If a student's particular educational goals were assessed at the beginning of each term, we could measure persistence—that percentage of students who had met their goals" (Gaither 1999, 32). The practice of measuring personal student goals annually is seldom practiced in educational or church settings.

Important factors of influence for college persistence are the student's intention to persist, college grade point average, and the institutional commitment to the student (Cabrera, Nora, and Castañeda 1993, 123-29). While grade point average is not relevant in the less formal educational setting of the adult Sunday School class, the adult's intention to persist and the church's commitment to the adult are very relevant.

The number of months the student has been enrolled in the institution also has a significant influence (Porter 1990, 11-28). In other words, the more months one has invested in a college or university, the greater the likelihood that the student will graduate. In the author's experience, this truth runs parallel in the church and adult class as well. In addition to family obligations, other research has shown these factors, in order of importance, to affect persistence behavior in the college setting: postsecondary plans, full-time enrollment, high school academic experience, family income, attending a four-year college, the first two years' grades, receiving loans or grants, mother's educational level, achievement test scores, attending a private college, and tuition costs (St. John 1990, 29-56).

Other issues affecting success and retention in the learning environment, such as human and natural factors, have been dealt with previously in this examination of precedent literature. Finally, relationships are key factors. "People can be reached, baptized, and brought into membership and not be incorporated into the friendship structure of a church" (McIntosh and Martin 1992, 75). Persistence requires relationships. It has been shown statistically that people need at least seven relationships in order to remain in church (Arn and Arn 1982, 156).

Attrition and Dropping Out

Attrition is a fairly recent term in academic settings for what was previously called student *mortality* and *casualty* (Iffert 1958, 1, 3). "Attrition is the flip side of retention, and it has consequences for the student as well as for the image and finances of an institution" (Gaither 1999, 32). Attrition is an issue not only for educational institutions but also for the church and adult Sunday School classes. Attrition is the loss

of students from the school, college, university, church, or class. When students are lost from the class and church, the consequences for the student, church, and Kingdom are significant. The growth of the disciple and the multiplication of disciples can be slowed or halted. Rather than attrition, the church has used the terms, *inactive* and *dropout*. In his 1971 book, Parker defines *dropouts* as "members who leave the church completely, those who attend infrequently, or those who become members of congregations other than those of the main-line denomination" (Parker 1971, 13).

In academic settings, two statistics are important to consider. First, "approximately 50 percent of the freshmen enrolled in colleges and universities drop out before completing their programs" (Brawer [1996], ed393510.html). Second, the freshman year is significant. "Whatever the reason for early withdrawal, nearly 30 percent of . . . beginning students left postsecondary education in their first year" (Horn and Carroll 1998, 7). While the percentage of dropouts varies from one adult Sunday School class to another, the average percentage is probably not far from the thirty percent cited by Horn and Carroll. A 1981 study conducted in 15 Ohio Valley Roman Catholic parishes identified several patterns of non-participation, most of which suggested some degree of aversion to program offerings (McKenzie and Shipp 1981, 11). In pursuit of obedience to the Great Commission (Matt 28:16-20), examination of factors influencing this phenomenon in the church can be fruitful.

It should be noted that withdrawals "cannot be completely eliminated, but they can be sharply reduced" (Iffert 1958, 99). Today, academic institutions are intentionally focusing attention and resources to stem this loss of enrolled students, especially those who leave by choice and those who are disqualified (Gray and Banta 1997, 34-35). Some

of the many reasons college students have identified for discontinuation include the following: personal or family illness; personal or family financial difficulty; difficulty of college work, academic dismissal/probation, or low grades; marital difficulty or immanent marriage; beginning full-time work; disciplinary reasons; commuting distance; and others (Iffert 1958, 91). Attrition has gained attention in recent years for KBC churches and adult Sunday School classes. Why do church members drop out? Factors (crises or turning points) that are reasons for persons to move toward inactivity: personal and family crises, life transitions, shift in priorities, interpersonal conflicts, burnout, immoral behavior, problems with church leaders, problems with the church, church conflict, and move to another community (Webb and Whitehouse 1987, 9).

In academic settings, four types of withdrawals or attrition have been identified: (1) *dropouts* who leave school and do not return, (2) *stayouts* who drop out of school and fail to return within a given time frame, (3) *sysouts/stopouts* who leave school and return at a later time, and (4) *transfers* who move from one institution to another (*Retention and persistence in postsecondary education* 2001, persistence.htm). Kentucky Baptist Convention (KBC) churches do not use the term, *attrition*; instead, the church refers to dropouts, absentees, and transfers. "How can we possibly make disciples if they don't come back? Can we expect God to continue to bless if a strong effort isn't made to retain members?" (Brown and Hightower 1994, 78). Identifying adults and addressing the learning environment factors contributing to their attrition can be a step toward their retention.

At-Risk Students

An additional term in the issue of retention and attrition is that of *at-risk*

students. "Studies indicate that certain student populations, such as older students, African Americans and Hispanics, students who work more than 30 hours weekly, and first generation college students often have persistence problems" (*Retention and persistence in postsecondary education* 2001, persistence.htm). Identifying at-risk students allows the academic institution or the church to address potential needs before factors have accumulated leading to serious consideration of withdrawal. Encouragement and support can be provided around certain characteristics, "called protective factors, that [include] a responsible and mature attitude, high motivation, and high activity levels" (Seiter 1999, 3). In the church, monitoring adult class attendance and staying in contact with all adult class members are minimally essential efforts, especially if adults are identified as at-risk. Martin and McIntosh have emphasized the importance of regular participation by saying:

> Regular participation is necessary if each participant is to build personal relationships that will foster a climate of community. Group members cannot care for, nor be cared for, if they are not spending time together on a regular basis. (Martin and McIntosh 1997, 31)

At-risk students are important. At-risk students have recently become the focus of United States Senate legislative consideration in the College Completion Challenge Grant Act of 1999 (Riley 2001, ltr_vp.html). Also, more than once the Lord challenged the church to focus on the needs of special populations that could easily be considered at-risk (Matt 25:31-46, 1 Tim 5:3, Jas 1:27). It is a sad truth that most "churches routinely lose half their newest people through neglect" (George 1997, 145). A lack of attention to at-risk adults in Sunday School classes will lead to them falling through the relational cracks. The church and God's kingdom can ill afford such loss.

This study is relevant because "classroom environment appears to be a key factor in enabling students labeled 'at-risk' to be successful in school" (Seiter 1999, 13).

Intervention Strategies

Intervention strategies are as varied as the educational institutions and churches employing them. Nevertheless, some strategies and combinations of strategies seem to be common because of their effectiveness. Five strategies which enable a church to do an effective job at assimilation include helping people with the following: (1) develop friendships, (2) become involved, (3) belong, (4) work together, and (5) grow in their faith (McIntosh and Martin 1992, 16-17). "Churches which effectively win and hold new members have a plan . . . [that] normally involves three key ministries" including (1) a new believers' orientation, (2) a new members' orientation, and (3) a focus on discipleship (McIntosh and Martin 1992, 45-46). Assessment, orientation, and mentoring are three strategies which have been practiced in educational institutions as well as the church. A combination of these strategies tends to produce positive results.

Assessment Strategies

Without a question, identifying "the characteristics of persisters and non-persisters is a difficult task" (Brawer [1996], ed393510.html). And yet, research has shown that institutions "can improve retention rates by more accurately determining when and why students withdraw" (*Retention and persistence in postsecondary education* 2001, persistence.htm). Such efforts often require the creation of new evaluation processes and tools. For instance, some churches in the Kentucky Baptist Convention (KBC) have created their own assessment instruments and are making exit surveys a part

of their assessment strategy. "Churches with effective assimilation of new people typically have a number of ministries in place" that (1) help new people identify their gifts and become involved in service, (2) identify entry places of service, and (3) allow and encourage the beginning of new ministries (McIntosh and Martin 1992, 92). Two such churches in Kentucky are Immanuel Baptist Church in Lexington and Little Flock Baptist Church in Shepherdsville.

"Having more up-to-date information could help administrators determine better strategies for increasing retention rates" (*Retention and persistence in postsecondary education* 2001, persistence.htm). "Virtually every program, person, and procedure on a campus has the potential to have an impact on students, and therefore on retention" (Gaither 1999, 40). Thoroughness of institutional and class assessment in the academic setting as well as in the church is important. Efforts to look beyond the superficial will produce the most positive results:

> Measuring the level of student satisfaction outside the context of what is expected (or the level of importance) is incomplete, and perhaps even dangerous. Such practice frequently leads to doing things right rather than doing the right things. (Gaither 1999, 48)

Furthermore, answers are often difficult immediately to ascertain. Clearer pictures can be achieved through longitudinal studies of the individual institution, student, program, and courses. Churches may benefit from focusing longitudinal studies on the church as a whole, individual Sunday School classes, as well as individual students and families. These efforts are costly in many ways including time, money, and effort, but attrition comes with even higher costs. For many institutions, progress can now be made in retention identification because it has become a presidential priority as well as the focus of a standing committee (Sandel and Sydow [1997], i11sydow.html).

Unfortunately, this issue has not become the same mandate for the church that it is in the academic setting.

Researching retention rates can uncover unique needs and problems since retention rates are as individual as the institutions themselves (*Retention and persistence in postsecondary education* 2001, persistence.htm). This is especially true during the freshman year. "The first-to-second year attrition rate is perhaps the most important determiner of an institution's graduation rate" (Gaither 1999, 36). Churches who take seriously efforts to help new Christians and new members get started well are more likely to see results. In addition, institutional assessment (in an academic or church setting) is never finished because a new set of students enrolls while others drop out every year, and every set of students comes with unique needs. "Creating that staying environment will continue to involve the identification of factors that cause students to drop out, then responding through every means possible to retain them" (Sandel and Sydow [1997], i11sydow.html). Initiating a strategy, process, and instruments which address retention and attrition can enable the church to make great strides in this effort.

Orientation Strategies

One of the most common intervention strategies found in academic institutions and in some churches is an orientation program. For the college or university, the transition from high school to postsecondary education requires adjustments that a good program of orientation can address. For the church, the transition from nonChristian to Christian and from membership in one church to another church can be strengthened through strategies of new member orientation. "Getting students started right . . . begins with anticipating and meeting their transition and adjustment needs when they enter"

(Gaither 1999, 39). Some KBC churches, like Living Hope Baptist Church in Bowling Green, have required new member orientation, automatically enroll the new member in a Sunday School class, and assign a host family to the new member or family. Entering freshmen may need help with their "very high expectations regarding their grades, social life, teaching, activities, organizations, job-oriented courses, cultural events, and caring personnel" (Stodt and Klepper 1987, 56). In a similar way, new adult church and class members may join with high expectations about their spiritual growth, relationships, and involvement. These expectations can be addressed effectively in an orientation strategy.

Institutions "that provide adequate personal and programmatic support though orientation, advising, and careful attention to introductory course experiences realize lower dropout rates" (Gaither 1999, 36). Some of the orientation information essential for students of academic institutions includes the following:

> (1) descriptions of college program offerings; (2) the college's expectations for students; (3) information about assistance and services for examining interests, values, and abilities; (4) encouragement to establish working relationships with faculty; (5) information about services that help with adjustment to college; and (6) financial aid information. (Brawer [1996], ed393510.html)

For the church, orientation information may include basic church and Christian doctrines (often included in church constitutions); church practices and organization (often included in church bylaws); church mission, purpose, and values; member expectations; and beyond.

Some institutions have realized the value of developing an extended orientation course, perhaps lasting for a whole semester. This can be quite a challenge. "Decisions have to be made regarding the length of the course, credit or noncredit bearing, grades or pass-fail, course content and objectives, faculty selection and training,

whether it is to be voluntary or required, promotion and marketing, and obtaining acceptance and support to actually offer the course" (Stodt and Klepper 1987, 53). Students participating in the Duquesne New Student Seminar with classes limited to fifteen students (1) shared a greater sense of community with fellow students; (2) were more comfortable talking to university professors and were more capable of solving problems; (3) better understood the university's structure, educational philosophy, and goals; (4) were more familiar with the *where* and *how* to obtain academic and personal help; (5) were more knowledgeable about personal public-speaking skills; (6) were more positive about their overall experience at the university; and (7) obtained a higher grade point average at the end of the first year (Stodt and Klepper 1987, 57-59). Other than expected attendance in a Sunday School class, few KBC churches invest more than two to six weekly sessions in their orientation strategies.

Mentoring Strategies

"Mentoring, which is an intimate, one-on-one form of relating and discipling, has been around for centuries" (Rabey and Rabey 2000, 190). Two types of mentoring have been shown to have impact upon retention: faculty and peer mentoring. "Peer mentoring programs . . . have been found to be effective in retaining students" (Brawer [1996], ed393510.html). Peer mentors provide social and academic support, encourage students to think critically, and assist them with academic choices" (Mueller 1993). "A mentor is simply a companion in your situation" (Rabey and Rabey 2000, 190). "The principles Jesus used with the Twelve provide a model for our mentoring other leaders in Sunday School" (Herring and Garner 1997, 29). Such efforts in the adult and youth classes of KBC churches could pay big persistence dividends. Neighbour suggests six

things a mentor does which could impact an adult class: listens, intercedes, models, teaches, sets the pace, and involves the mentee with other Christians (Neighbour 2001, 19-26).

In an educational institution setting, faculty mentors "provide support with study habits, career choices . . . and balance of family issues" and "share their life experiences, professionally, personally, etc." (www.usuhs.mil 2001, description_programs.html). Programs have been designed especially for at-risk students "to improve academic success, retention, and assist students" through a focus on providing "structured trusting mentoring relationships to students that facilitate academic and personal growth" (Prince George's Community College 2001, mentoring.htm). Faculty mentors in the church could naturally be drawn from two sources: church staff and Sunday School class teachers. The author has personally benefited from faculty mentorship in churches during his teenage and early ministry years. An additional point about mentoring which has relevance for the adult Sunday School class is about the importance of mentoring (coaching) the teacher. "Good coaches enable the [Sunday School] to work because they equip and support the shepherds" (Firebaugh 1999, 73). This involves relationship-building, encouragement, and accountability.

What are the benefits of an emphasis on mentoring? Canisius College began a mentoring program in 1980 by training the mentors and then connecting seven or eight new students with the mentor and an upper-class student who met during orientation and an average of four more times during the fall semester and twice during the spring semester (Stodt and Klepper 1987, 47). The results were significant. At the end of the first semester, those who had been mentored (1) were nearly 50% less likely to attain a

grade point average below 2.0 and (2) dropped out at a much lower rate (2.7% vs. 10.6%) than did those not in the mentoring program (Stodt and Klepper 1987, 48). Churches wishing to address retention and attrition issues may benefit from establishing a mentoring strategy.

Enrollment Management Conclusion

As never before, educational and religious institutions will benefit from understanding issues related to attrition and retention. And yet, educators "seem not to want to address the issue of non-participation directly" (Harton 1984, 8). It would be valuable for leaders to identify at-risk students. While some quick-return efforts can be made prior to the implementation of full intervention strategies, adult Sunday School classes will benefit from developing a clear understanding of their students and the impact of the learning environment of the class and the church. Once such efforts have taken place, then significant long-term gains in persistence can be realized. The focus on the student and the learning environment in these retention efforts is long overdue and has many benefits far beyond greater attendance numbers and wise stewardship (Harton 1984, 9).

It should be noted that the best intervention strategies are multi-strategies involving a combination of strategies shared in this paper and others. The best intervention strategies have the following characteristics: (1) highly structured; (2) extended, intensive contact with students most likely to drop out; (3) interlocks with other programs and services; (4) a strategy of engagement; (5) qualified staff; (6) a critical role for faculty members; and (7) a focus on the affective as well as cognitive needs of students (Gaither 1999, 41-42). "If participants and non-participants can be identified

and their characteristics delineated, assumptions can be made and tested concerning . . . motivation for learning" (Harton 1984, 5). Two early responses for the church to the issues of retention and attrition, are acknowledging the gravity of these issues and understanding the issues better through an assessment study and strategy. This research project is designed to enable Kentucky Baptist Convention (KBC) churches and their adult Sunday School classes to address the gravity and understanding of these issues.

Profile of the Current Study

The following is a profile of the current study whose purpose was to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in KBC churches. An instrument, utilizing a Likert response scale, was created addressing learning environment factors. The instrument was examined by an expert panel and field tested, making appropriate adjustments. Leaders of thirty churches were contacted from a random proportional stratified sample of large, medium, and small churches. Those willing to participate were invited to an informational meeting, and if unable to attend the meeting they received an individual consultation.

Participating pastors, church staff, and Sunday School directors were asked to take three actions. First, they were asked to administer the instrument to willing adult Sunday School classes. The pastor or director returned completed instruments by mail or in person to the researcher. Second, participating pastors and directors were asked to provide a list of the names and addresses of no attenders and low attenders. Third, the pastors, staff members, and directors were asked to provide two brief letters (pre-written by researcher) on church stationery explaining the purpose/protocols of the instrument.

One of the letters was to be read by teachers to participating classes. The researcher mailed instruments along with the second pastor letter and a self-addressed stamped envelope to low/no attenders. Two follow-up mailings were made.

The population of this study consisted of all adult Sunday School class teachers and members of Kentucky Baptist Convention (KBC) churches who were members of the Long Run Baptist Association (LRBA). The sample for this research consisted of the adult Sunday School class teachers and members from nineteen LBRA churches. Instruments were completed by teachers, members and, guests of adult Sunday School classes. This study was delimited to English-speaking KBC churches which were members of the LRBA as reported to the KBC as of June 2002. The sample was also delimited to adult Sunday School classes meeting at the church on a Sunday morning which had the same teacher since September 2001. Finally, the data drawn from this sample did not necessarily generalize to Southern Baptist churches in other states, to churches of other denominations in Kentucky, or even to KBC churches in other associations. The data from this sample did not necessarily generalize to other Sunday School age groups than adults or to adult Sunday School classes with teachers who began serving after September 2001.

CHAPTER 3

METHODOLOGICAL DESIGN

In this study, the following methodological design was pursued. Six research questions were investigated in the quest to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches:

1. What is the strength of spiritual (divine involvement) learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

2. What is the strength of physical learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

3. What is the strength of social learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

4. What is the relationship between learning environment factors for adult Sunday School class high attenders, average attenders, low attenders, and no attenders in Kentucky Baptist Convention churches?

5. What is the relationship between adult Sunday School class member retention and attrition and demographics factors?

6. In what ways do learning environment factors vary by demographics factors?

Design Overview

The following is an overview of the methodological design to identify and analyze the impact of learning environment factors on the retention and attrition of

members of adult Sunday School classes in Kentucky Baptist Convention churches. Two instruments, utilizing a Likert response scale, were created addressing adult learning assumptions and learning environment factors: one for class members and one for teachers. The instruments were examined by an expert panel and then field tested in a church. Appropriate adjustments were made, including changes to 26 of the statements and the addition of two demographics questions relating to growth of the class numerically and spiritually/maturationally. In addition, the final page of the teacher's instrument was removed from the class member version. The field test pointed out the need to highlight statements 69 to 72 because of the number of times they were skipped, but no other changes were deemed necessary.

Pastors and Sunday School directors of churches were contacted which had been selected from a random proportionally stratified sample of 6 large, 12 medium, and 12 small churches. Those willing to participate were invited to one of three informational meetings. If unable to attend one of the meetings, church leaders received an individual consultation.

Participating pastors, church staff, and Sunday School directors were asked to take three actions. First, they were asked to administer the instruments to willing adult Sunday School classes on the second or third Sunday of August 2002. The pastors and directors were asked to return completed instruments by mail or in person to the researcher. Second, participating pastors and directors were asked to provide a list of the names and addresses of no attenders and low attenders. Third, the pastors were asked to sign and provide two brief letters on church stationery explaining the purpose and protocols of the research and research instrument. One was written to be read by the

class teacher to class participants on the day the instrument was administered. The second letter was written to no attenders and low attenders to be mailed with a class member instrument for completion and return. These two letters were pre-written by the researcher for the pastors' convenience and due to research ethics mandates. The researcher mailed instruments along with the pastor's letter and a self-addressed stamped envelope. Two follow-up mailings were made to increase the number of completed instruments. In order to preserve confidentiality, all records of names and contact information of low and no attenders in the possession of the researcher were permanently destroyed after the third mailing.

Population

The purpose of this study was to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. The population of this study consisted of all adult Sunday School class teachers and members of Kentucky Baptist Convention churches of the Long Run Baptist Association. Long Run Baptist Association was defined as the cooperating collection of 154 Southern Baptist churches located in and around the greater Louisville area of Kentucky.

Sample

The sample for this study to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches consisted of the adult Sunday School class teachers and members from nineteen English-speaking churches in the Long Run

Baptist Association. The churches were drawn from a random proportionally stratified sample of churches. Thirty churches were sought, and 19 agreed to participate: 4 large, 8 medium, and 7 small churches.

Instruments were completed by teachers, class members, and guests of adult Sunday School classes. Assuming an average of 5 adult classes per church and 10 persons (including the teacher) in attendance in each class, this had the potential to result in 950 instruments from members and teachers. With an expected return of greater than 90%, this had the potential to be more than 855 completed instruments with about 95 of that number from teachers. Assuming an average of 5 low/no attenders per class, this could have resulted in 475 potential mailed instruments. Since each instrument was mailed with a letter from the member's pastor or Sunday School director, a return rate of 20% (95 instruments) was considered attainable. The returned instruments from low/no attenders would represent approximately 10% of the 950 total surveys completed by teachers and members.

Delimitations of the Sample

An examination of the delimitations of the sample was essential in the effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention (KBC) churches. This study was delimited to 19 English-speaking KBC churches who were members of the Long Run Baptist Association and who turned in the Annual Church Profile of church statistics to the KBC for the year 2000-2001 by June 2002. In addition, the sample was delimited to classes meeting at the church on a Sunday morning and did not consider adult small group Bible studies meeting in homes or other locations

or on days other than Sunday. The sample was further delimited to classes which had the same teacher since September 2001.

Limitations of Generalization

In the effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches, limitations of generalization were considered. The data drawn from this sample will not necessarily generalize to Southern Baptist Convention churches in other states, to churches of other denominations in Kentucky, or even to Kentucky Baptist Convention churches in other associations. The data from this sample will not necessarily generalize to adult Sunday School classes in churches whose primary language is not English. The data from this sample will not necessarily generalize to adult small group Bible studies meeting in homes or other locations or on days other than Sunday. The data from this sample will not necessarily generalize to other Sunday School age groups than adults. The data from this sample also will not necessarily generalize to adult Sunday School classes with teachers who began serving after September 2001.

Instrumentation

Based upon understanding gained from the precedent literature, two instruments, utilizing a Likert response scale, were created addressing learning environment factors of adult Sunday School classes in Kentucky Baptist Convention churches. The instruments, one for teachers and one for class members, were divided into two sections. The first addressed spiritual, human, and physical learning

environment factors. Adults completing the instrument were asked to respond to 72 statements utilizing a Likert response scale: strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. These statements were related to 24 triangulated learning environment factors. Thomas Hutchison gave the author permission to adapt some of the 118 statements from his research instrument, *Adult Class Survey for Churches*, in his Marquette University Doctor of Philosophy dissertation (Hutchison 1997, 186-92).

The second section of the instrument utilized in this research effort sought the following demographics information: gender, age, marital status, education level, Christianity tenure, church membership tenure, worship attendance frequency, class involvement, class membership tenure, class attendance frequency, close friends in this class, class numerical growth opinion, class spiritual/maturational growth opinion, and most frequently used teaching style. In addition, the teacher's instrument sought the following teacher, class, and church demographics factors: teacher's tenure teaching this class and total teaching tenure, class gender and attendance (number of persons present) today, average total weekly church Sunday School attendance, and church location.

Following approval by the dissertation supervisor, the instrument was examined by an expert panel. Panelists evaluated the instruments, the questions, the wording, and comprehensiveness. Appropriate adjustments to the instruments were made and dissertation committee approval sought prior to field testing the instruments in a LRBA church. The field test instruments were then subjected to evaluation and Cronbach alpha testing. Following field testing, a minor adjustment to the instruments' instructions at the top of the fourth page was made.

The researcher provided group and individual instruction for pastors and directors who administered the instruments to adult classes on a Sunday morning. The researcher also mailed instruments to low/no attenders. Each instrument contained a required research ethics statement of consent to utilize the respondent's answers in the research along with a line for the individual to sign his/her initials.

Procedures

The effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches of the Long Run Baptist Association required the following procedural process. Two instruments, utilizing a Likert response scale, were created addressing learning environment factors: one for class members and one for teachers. The first part of July 2002, an expert panel was asked to examine the instrument in an effort to address its thoroughness and clarity. After appropriate adjustments were made, the instrument was field tested in a church with a number of adult classes toward the end of July 2002. After examination of the results of the field test, necessary adjustments were addressed.

The field test church produced 118 instruments. Of those, 4 were not signed and could not be used according to research ethics mandates. Nine instruments were completed by low/no attenders, and 105 were completed by high/average attenders. Chronbach alpha reliability testing of the instrument produced a score of .8625 (.9006 for low/no attenders; .8602 for high/average attenders). These scores were considered acceptable. Chronbach alpha testing of the triangulated categories, dropping scores when 1 (or more) of the 3 variables was missing, produced a score of .8285 (.8696 for low/no

attenders; .8262 for high/average attenders). These scores were also considered acceptable. Because a number of individuals failed to complete statements 69 through 72, instructions not to skip these statements were added to the top of the fourth page before further use.

During the last two weeks of July 2002, pastors, church staff, and Sunday School directors of KBC churches which were members of the LRBA (greater Louisville area) were contacted by phone and asked to participate in the research. The churches were selected from a random proportionally stratified sample of churches. Pastors, staff, and directors willing to participate were invited to informational meetings. Church leaders interested but unable to attend the meeting received individual consultations.

Participating pastors, staff, and Sunday School directors were asked to take three actions. First, they were asked to administer the instrument to willing adult Sunday School classes who had been taught by the same adult teacher since September 2001 on the pastor's choice of either the second or third Sunday of August 2002. Teachers and class members willing to complete the instrument were asked to do so during the first part of the Sunday School hour and return them with class records. The church leader collected completed instruments and returned them by mail or in person to the researcher by late September 2002.

Second, participating pastors and directors were asked to provide by August 20, 2002, a list of the names and addresses of adult class low/no attenders (who had attended 0 to 10 times since September 2001). Third, the pastor was asked to sign and provide two brief letters on church stationery explaining the purpose and protocols of the research and research instrument: (1) to the teacher to be read to class participants

immediately prior to completion of the instrument in class and (2) to low/no attenders to be mailed with an instrument to complete and return by mail. Both letters were pre-written by the researcher for the pastors' convenience and due to research ethics requirements.

The researcher mailed instruments from the third week of August 2002 through September along with the pastor's letter and a self-addressed stamped envelope. Persons receiving the instrument by mail were asked to complete and return the instrument within seven days. Two follow-up mailings were made: a postcard followed by another copy of the instrument in a self-addressed stamped envelope. In order to preserve confidentiality, all records of class member names and information in the possession of the researcher were permanently destroyed after the third mailing.

Leaders from 21 churches initially chose to participate; 2 later dropped out. A total of 1,375 surveys were put into the hands of church leaders for use in adult classes in the remaining 19 churches. Several of the church leaders later stated that they had overestimated expected attendance. Even though church leaders were instructed to dispose of unused instruments, 221 blank instruments were returned. Three church leaders identified one or more classes who chose not to participate but no numbers were stated. A total of 813 instruments were completed in class and returned. This was 59.1% of total number of instruments supplied to churches, or 70.5% of the 1,154 instruments supplied when blank instruments were discounted. According to conversations with church leaders participating in the study, more than ninety percent of persons asked to complete instruments agreed to do so.

In addition to instruments completed in class, a total of 434 instruments were mailed to persons identified by church leaders as no/low attenders. Of those, 78 were returned, or 18.0% of identified individuals. One was unsigned and could not be used. Two were invalid due to the individuals completing no information except for demographics. Three returned in the same envelope were considered invalid due to all statements receiving a score of 3. Twenty-two were returned blank. Fifty were usable, splitting evenly between no/low attenders and high/average attenders. This was 11.5% of those mailed and 64.1% of those returned.

A total of 891 instruments were returned. Of these, 101, or 11.3%, were not initialed and could not be used due to research ethics mandates. After dropping invalid instruments, this produced a total of 772 usable surveys returned from classes or by mail. This was 48.6% of the 1,588 surveys, or 86.6% of returned surveys. Of the 772 usable instruments, a total of 10 were completed by individuals who responded as first-time or repeat guests. Due to the advance constraints, these 10 instruments were not included, leaving 762 instruments. Twenty were completed by persons who did not identify their class involvement. Chronbach alpha scores were .9126 for this "unidentified" group and .8784 for the combined remainder of the instruments; for the triangulated learning environment factors, the Chronbach alpha scores were .8660 for this "unidentified" group and .8581 for the remainder. While there was no way to verify their involvement in class, a decision was made to include these surveys in the results.

Chronbach alpha reliability testing of the 762 instruments from the 19 participating churches produced a score of .8801. Of the 762 instruments, 41 were completed by persons identifying themselves as low/no attenders. The two groups

produced scores of .9025 for low/no attenders and scores of .8775 for high/average attenders. Chronbach alpha testing of the triangulated learning environment factors, dropping scores when one (or more) of the three variables was missing, produced a score of .8600 (.8676 for low/no attenders; .8590 for high/average attenders).

CHAPTER 4

ANALYSIS OF FINDINGS

This chapter reports the findings of the research effort to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. The following research questions are pursued in this study:

1. What is the strength of spiritual (divine involvement) learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

2. What is the strength of physical learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

3. What is the strength of social learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

4. What is the relationship between learning environment factors for adult Sunday School class high attenders, average attenders, low attenders, and no attenders in Kentucky Baptist Convention churches?

5. What is the relationship between adult Sunday School class member retention and attrition and demographics factors?

6. In what ways do learning environment factors vary by demographic factors?

Following consideration of compilation protocol, these six questions give direction to the findings and displays presented in Appendices 3-6 and in this chapter in the section entitled *Learning Environment Displays and Findings*. Evaluation of the design of this research is presented in the final section of this chapter.

Compilation Protocol

Instruments were distributed to and completed by adult Sunday School classes (teachers and members) in 19 Kentucky Baptist Convention churches of the Long Run Baptist Association. These churches included 7 small, 8 medium, and 4 large churches. In addition, instruments were mailed to low/no attenders of these churches each with a letter from his/her pastor, Minister of Education, or Sunday School director along with a self-addressed stamped envelope. Two follow-up mailings were made: a thank you reminder postcard and an additional survey with return envelope. Participation was strictly voluntary, and confidentiality was assured.

Received instruments were scanned utilizing a Fujitsu model 4097D scanner and Cardiff TELEforms Elite version 7.1 software. Scanned instruments questioned by the software were hand verified by the researcher. A deadline of October 25, 2002, was set for receiving completed instruments. Once that date passed, all collected data were compiled from the TELEforms software into Microsoft® Excel 2000 and imported into SPSS Graduate Pack 11.0 for Windows. The SPSS software generated the statistics used in this chapter, and many are reported in figures and Microsoft® Word tables. Results of triangulated questions are combined in some displays and are referred to as learning environment factors. The statistics included Chronbach alpha, frequencies, percentiles, means, modes, medians, standard deviations, cross tabulations, ANOVA, and other analyses. These statistics are reported in a variety of intentional combinations.

Learning Environment Displays and Findings

This section is divided into eight subsections. The first subsection, entitled *Overall Learning Environment Responses*, presents overall findings and displays from all

762 usable instruments. The next six subsections of findings and displays respond to each of the six research questions. They are entitled *Question 1: Strength of Spiritual Learning Environment Factors*; *Question 2: Strength of Physical Learning Environment Factors*; *Question 3: Strength of Social Learning Environment Factors*; *Question 4: Learning Environment Factors for High, Average, Low, and No Attenders*; *Question 5: Retention and Attrition Relationships with Demographics*; and *Question 6: Learning Environment Factor Variances by Demographics*. The final subsection examines miscellaneous findings.

Overall Learning Environment Responses

The first set of findings and displays focus on overall (all 762 instruments were included) responses to each of the 72 statements (Table 1) and to each of the 24 triangulated learning environment factors (Table 2). Means, standard deviations, and the numbers of the responses are reported. Statements are sorted by means from highest to lowest. The letter, R, indicates the 30 statements asked negatively resulting in scores that were reversed for proper comparison.

Table 1. Combined scores of instrument statements arranged from highest to lowest mean

Rank	Instrument Statement	All Instruments								
		Category	*n*	M	SD	1	2	3	4	5
1	38	Social	745	4.32	.618	3	9	16	435	282
2	36	Social	744	4.30	.669	4	8	40	401	291
3	64	Social	735	4.26	.555	1	8	12	491	223
4	11R	Social	746	4.22	.775	14	10	46	405	271
5	65R	Social	737	4.22	.856	20	17	35	372	293
6	39	Divine	741	4.21	.602	1	11	33	481	215
7	63	Social	745	4.18	.600	3	13	22	516	191
8	16	Divine	756	4.15	.696	8	15	41	481	211

Note: M = mean; SD = standard deviation; R = reverse scores

Table 1—*Continued.* Combined scores of instrument statements arranged from highest to lowest mean

Rank	Instrument Statement	All Instruments								
		Category	*n*	M	SD	1	2	3	4	5
9	1	Divine	748	4.15	.741	12	7	64	437	228
10	58	Social	741	4.14	.601	1	12	47	503	178
11	62	Social	738	4.14	.659	7	10	44	490	187
12	43	Social	737	4.14	.669	5	9	64	461	198
13	10	Divine	754	4.14	.685	7	12	54	479	202
14	8	Physical	757	4.12	.783	15	21	40	466	215
15	5R	Physical	745	4.12	1.033	23	47	79	266	330
16	42	Social	743	4.10	.621	3	14	49	515	162
17	54	Social	720	4.08	.580	4	11	39	539	127
18	57	Social	736	4.07	.922	20	49	20	414	233
19	67R	Social	739	4.05	.837	16	25	69	423	206
20	49	Physical	701	4.04	.525	1	16	30	563	91
21	12R	Social	751	4.04	.771	13	17	78	459	184
22	9	Social	749	4.02	.748	8	30	63	484	164
23	15R	Physical	745	4.01	.901	18	40	71	405	211
24	2R	Physical	756	4.00	.892	16	34	102	385	219
25	4	Social	753	3.98	.852	14	43	66	448	182
26	17	Social	753	3.95	.782	8	30	111	445	159
27	23	Social	758	3.95	.783	7	50	59	498	144
28	20	Social	728	3.94	.734	5	42	63	500	118
29	6	Divine	745	3.94	.794	11	24	122	433	155
30	22R	Physical	758	3.94	.841	13	38	98	438	171
31	13R	Physical	744	3.94	.851	14	41	87	438	164
32	32	Social	739	3.91	.791	10	39	92	468	130
33	29	Social	734	3.90	.826	7	44	117	414	152
34	71R	Social	687	3.90	.879	20	27	102	391	147
35	21	Divine	743	3.89	.752	5	32	128	451	127
36	30	Social	742	3.88	.811	12	40	103	459	128
37	61R	Social	736	3.88	.866	19	38	97	440	142
38	55R	Physical	736	3.87	.784	15	31	98	484	108
39	31R	Social	739	3.84	.810	11	41	122	447	118
40	33R	Physical	738	3.82	.809	12	45	112	463	106
41	66R	Physical	736	3.76	.920	23	51	129	409	124
42	56R	Physical	738	3.76	.947	31	64	60	476	107
43	72R	Physical	685	3.76	1.195	36	112	38	293	206
44	46	Social	742	3.74	.708	7	23	197	445	70
45	27R	Social	740	3.72	1.008	22	98	84	400	136
46	59	Social	735	3.70	.829	12	59	144	439	81
47	68	Social	747	3.67	.827	9	55	202	391	90
48	47	Physical	727	3.66	.806	7	65	166	421	68
49	53	Social	739	3.65	.889	16	99	76	488	60
50	69R	Physical	694	3.65	.999	23	79	135	338	119
51	35	Social	732	3.62	.833	9	78	159	424	62
52	50R	Social	740	3.62	.998	24	105	105	402	740
53	18	Social	739	3.60	.885	15	79	169	400	76
54	26	Social	739	3.53	.828	10	90	179	419	41

Note: M = mean; SD = standard deviation; R = reverse scores

Table 1—*Continued.* Combined scores of instrument statements arranged from highest to lowest mean

Rank	Instrument Statement	All Instruments								
		Category	*n*	M	SD	1	2	3	4	5
55	24	Social	746	3.49	.867	16	100	172	419	39
56	25R	Physical	743	3.49	.985	28	116	133	399	67
57	40R	Social	732	3.48	.975	21	119	156	362	74
58	7	Social	726	3.46	.941	18	117	163	368	60
59	14R	Physical	737	3.45	1.232	40	187	76	273	161
60	51	Physical	735	3.38	.989	25	142	149	364	55
61	41	Physical	738	3.37	1.060	43	129	146	350	70
62	19	Social	747	3.34	1.095	46	152	128	347	74
63	70R	Social	690	3.33	.941	20	134	172	329	35
64	37R	Physical	714	3.31	1.302	66	186	65	253	144
65	44	Social	742	3.23	.960	25	164	207	309	37
66	45R	Social	740	3.11	1.073	51	184	186	268	51
67	3R	Physical	745	3.10	1.148	53	219	153	241	79
68	60	Physical	721	3.03	.888	17	191	294	189	30
69	52	Physical	734	3.00	1.209	71	260	64	276	63
70	34R	Social	726	2.86	.916	21	277	232	174	22
71	48R	Physical	744	2.35	.848	62	474	103	97	8
72	28R	Physical	749	1.95	.671	145	533	32	38	1

Note: M = mean; SD = standard deviation; R = reverse scores

The top five means in Table 1 are responses to these statements: The class atmosphere is warm and friendly; The teacher comes to class well prepared; The teacher listens to student comments and questions made in class; The number of class members present each week is just too large; Because of a personality conflict with a class member or teacher, I have attended class less frequently. All 5 are social statements.

The bottom five means in Table 1 are responses to these statements: The seating and furnishings in the classroom are arranged in the same way each week; Class members sit in the same seats every week; Students seem to do the same type of learning activities each week in class; The seating in the classroom is arranged in one or more circles or semicircles; The teacher encourages class members to take notes. Four of the bottom five statements are physical; 1 is social.

Table 2. Ranked means of triangulated learning environment factors arranged for all instruments

Learning Environment Factors	All Instruments n = 664-723														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Peers: General	12.52	1.468	-	-	1	-	2	3	16	27	47	325	101	87	88
Peers: Relation.-bldg. in class	12.31	1.445	-	-	1	1	2	9	10	38	71	334	116	80	61
Divine Involve.: Transform. Lives	12.30	1.529	-	2	-	-	5	6	11	40	96	284	136	74	68
Teacher: General	12.23	1.542	-	-	-	-	-	7	22	71	78	276	111	78	71
Divine Involve.	12.19	1.669	1	-	2	2	3	7	21	62	94	264	121	82	71
Psychological factors	11.84	1.541	-	-	1	2	3	10	25	87	110	261	103	64	30
Peers:Relation.-bldg.out.of class	11.84	1.758	1	-	-	-	12	21	35	76	95	262	110	63	52
Room size	11.78	1.670	-	-	-	4	7	13	44	77	95	301	80	55	47
Teacher: Social Interaction	11.70	1.800	2	1	1	2	9	14	37	72	120	224	85	57	40
Teacher: Class. Management	11.66	1.640	1	-	1	2	5	16	29	107	134	230	97	69	25
Participation: Conflicts	11.58	2.066	1	1	1	9	20	28	56	74	77	244	97	48	62
Aesthetics and tidiness	11.46	1.825	-	1	3	4	13	18	48	96	105	209	99	44	28
Odors, seating, and noise	11.27	1.864	-	1	2	6	11	41	56	105	128	186	110	40	24
Participation: General	11.22	1.673	-	-	2	2	8	34	53	121	149	202	81	37	16
Expectation	11.11	1.600	1	-	1	3	6	25	59	143	199	177	64	34	16
Lighting, writing, and reading	11.06	1.472	-	-	1	3	8	27	35	141	188	171	75	15	5
Participation: Meeting length	11.02	1.535	-	-	-	1	11	33	56	128	158	200	54	20	8
Group size	10.65	1.860	-	1	2	7	23	63	93	135	129	165	58	29	10
Demographics., cultural, and personality	10.61	2.018	2	1	9	23	23	44	79	120	118	232	37	15	15
Temperature, vent., and humidity	10.33	2.062	-	-	3	21	37	95	88	115	116	145	49	29	11
Part.: Teach. Methods	10.29	1.733	-	-	3	14	14	77	91	200	133	106	37	20	5
Proxemics, territoriality	10.18	1.457	-	1	2	2	22	55	118	241	163	80	28	7	2
Flexibility	9.07	1.786	4	10	16	27	43	133	112	194	90	29	5	1	-
Physical Arrangement	8.19	1.736	7	9	8	67	119	239	81	93	28	23	2	2	2

Note: M = mean; SD = standard deviation

Findings are displayed in Table 2 based on overall (all 762 instruments were included) responses to each of the 24 triangulated learning environment factors. Means and standard deviations are reported along with the numbers of responses. Learning environment factors are sorted by means. The top five means in Table 2 relate to these learning environment factors ranked in order: *Peers: General*; *Peers: Relationship-Building in Class*; *Divine Involvement: Transformed Lives*; *Teacher: General*; and *Divine Involvement*. The top five overall factors include 3 social and both spiritual factors.

The bottom five means in Table 2 relate to these factors, with the lowest first: *Physical Arrangement*; *Flexibility*; *Proxemics and Territoriality*; *Participation: Teaching Methods*; and *Temperature, Ventilation, and Humidity*. The bottom five overall factors include 4 physical factors and 1 social factor. The highest 2 physical factors do not appear until eighth and twelfth overall.

Question 1: Strength of Spiritual Learning Environment Factors

The second set of findings display responses to the first research question: What is the strength of spiritual (divine involvement) learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches? In order to understand the data for this question, two tables are needed to display the findings. The first table, Table 3, displays findings that compare the means of learning environment factors for high/average attenders (retention) and for low/no attenders (attrition). Data displays show the ranking of factors according to strength of factor mean. Explanation of the data follows this table. Then, Table 4

presents findings specifically in response to the first research question. Spiritual (divine involvement) learning environment factors are compared for high/average and low/no attenders and ranked by means of the factors and by means of corresponding statements for high/average attenders.

Table 3. Ranking of learning environment factors for retention and attrition

Rank	High/Average Attenders		Low/No Attenders	
	Factor	Mean	Factor	Mean
1	Peers: General	12.57	Teacher: General	12.33
2	Divine Involvement: Transformed Lives	12.35	Peers: General	12.00
3	Peers: Relationship-Building in Class	12.34	Peers: Relationship-Building in Class	11.92
4	Teacher: General	12.25	Teacher: Classroom Management	11.75
5	Divine Involvement	12.23	Aesthetics and Tidiness	11.74
6	Psychological Factors	11.90	Divine Involvement	11.59
7	Peers: Relationship-Building outside of Class	11.88	Teacher: Social Interaction	11.49
8	Room size	11.81	Divine Involvement: Transformed Lives	11.47
9	Teacher: Social Interaction	11.73	Room size	11.37
10	Participation: Conflicts	11.68	Peers: Relationship-Building outside of Class	11.36
11	Teacher: Classroom Management	11.66	Participation: Meeting Length	11.35
12	Aesthetics and Tidiness	11.45	Lighting, Writing, Reading	11.34
13	Participation: General	11.27	Odors, Seating, and Noise	11.31
14	Odors, Seating, and Noise	11.26	Expectation	11.30
15	Expectation	11.10	Psychological Factors	11.09
16	Lighting, Writing, Reading	11.04	Participation: General	10.67
17	Participation: Meeting Length	11.00	Group Size	10.26
18	Group Size	10.69	Temperature, Ventilation, and Humidity	10.24
19	Demographic, Cultural, and Personality	10.65	Participation: Conflicts	10.15
20	Temperature, Ventilation, and Humidity	10.35	Demographic, Cultural, and Personality	10.13
21	Participation: Teaching Methods	10.31	Proxemics and Territoriality	10.08
22	Proxemics and Territoriality	10.19	Participation: Teaching Methods	10.05
23	Flexibility	9.07	Flexibility	8.97
24	Physical Arrangement	8.17	Physical Arrangement	8.45

Table 3 holds some interesting data. High/average attenders have higher mean strengths for all of the rankings except for the last 1: *Physical Arrangement*. Also, the bottom 4 factors are slightly differently ranked. Six of the top ten factors are shared but differently ranked. Three factors are several rankings higher for high/average attenders. *Participation: Conflicts* was tenth for high/average attenders and nineteenth for low/no attenders. *Psychological Factors* is sixth for high/average attenders and fifteenth for low/no attenders. A third factor (*Peers: Relationship-Building in Class*) is third for high/average attenders and eleventh for low/no attenders. Low/no attenders rank 2 factors significantly higher. They are *Teacher: Classroom Management* and *Aesthetics and Tidiness*. These factors are ranked fourth and fifth by low/no attenders and eleventh and twelfth by high/average attenders, respectively.

Table 4 compares high/average and low/no attenders by spiritual factors. The statistics presented include mean, standard deviation, median, mode, high score, and low score. Individual statements and their learning environment factors are presented.

Table 4. Spiritual learning environment factors for retention and attrition

Learning Environment Factor/Statement	High/Average Attenders							Low/No Attenders						
	n	**M**	**SD**	**Me**	**Mo**	**H**	**L**	***n***	**M**	**SD**	**Me**	**Mo**	**H**	**L**
Divine Involvement: Transformed Lives	677	12.35	1.502	12	12	15	4	38	11.47	1.827	12	12	15	7
♦ Statement 39	696	4.23	.576	4	4	5	2	40	4.03	.920	4	4	5	1
♦ Statement 10	684	4.15	.685	4	4	5	1	40	3.95	.677	4	4	5	3
♦ Statement 6	688	3.96	.790	4	4	5	1	40	3.50	.784	4	4	5	1
Divine Involvement	674	12.23	1.647	12	12	15	3	39	11.59	1.888	12	12	15	7
♦ Statement 16	687	4.17	.666	4	4	5	1	39	3.93	.985	4	4	5	1
♦ Statement 1	696	4.15	.749	4	4	5	1	41	4.17	.667	4	4	5	2
♦ Statement 21	689	3.92	.745	4	4	5	1	41	3.51	.756	4	4	5	2

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Statements for the *Divine Involvement: Transformed Lives* learning environment factor include the following: The class helps participants understand how the Bible applies to life; Class participants understand the Bible better because of class time; and As a result of the class, members help meet the practical needs (financial, physical, etc.) of others. Statements for the *Divine Involvement* factor include the following: God regularly helps me apply His truth to my life as a result of class Bible lessons; As a result of God's involvement in class, I act in more loving ways toward others; and My life has been changed this year through class Bible study.

These spiritual factor means rank third (12.35) and fifth (12.23) overall (see Table 2). High/average attenders rank them second and fifth while low/no attenders ranked them eighth and sixth (see Table 3). The means for both factors are higher for high/average attenders. The 3 statements for *Divine Involvement: Transformed Lives* rank sixth, thirteenth, and twenty-ninth overall. The 3 statements for *Divine Involvement* are ranked eighth, ninth, and thirty-fifth overall. One statement for low/no attenders has a slightly higher (.02) mean than for high/average attenders: As a result of God's involvement, I act in more loving ways toward others.

In addition to these data, Table A18 in Appendix 4 presents the impact of retention and attrition on the learning environment factors. Six factors are impacted at a significance of 95% or more (.050 or less), including both spiritual factors, *Divine Involvement* and *Divine Involvement: Transformed Lives*.

Question 2: Strength of Physical Learning Environment Factors

The third set of findings deal with the second research question: What is the

strength of physical learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches? Table 5 compares high/average and low/no attenders by physical factors and statements. A variety of statistics are examined including mean, standard deviation, median, mode, and high and low score. Physical factors are arranged in order of mean strength for high/average attenders with the corresponding statements also arranged in order by mean strength. It should be noted that of the 24 factors, 4 of the bottom five overall factor means are for physical factors. For high/average attenders, 4 of the bottom five means are for physical factors while only 3 of the bottom five means are for physical factors for low/no attenders (Table 3). Mean scores are mixed between high/average attenders (4 highest) and low/no attenders (4 highest) for the 8 physical factors.

Table 5. Physical learning environment factors for retention and attrition

Learning Environment Factor/Statement	High/Average Attenders							Low/No Attenders						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Room Size	668	11.81	1.661	12	12	15	6	40	11.38	1.705	12	12	15	7
♦ Statement 22	698	3.96	.839	4	4	5	1	41	3.66	.883	4	4	5	1
♦ Statement 13	687	3.95	.860	4	4	5	1	40	3.95	.783	4	4	5	1
♦ Statement 55	679	3.89	.761	4	4	5	1	41	3.63	1.043	4	4	5	1
Aesthetics and Tidiness	619	11.45	1.847	12	12	15	4	34	11.74	1.620	12	12	15	9
♦ Statement 8	698	4.11	.801	4	4	5	1	41	4.27	.549	4	4	5	3
♦ Statement 47	672	3.66	.809	4	4	5	1	39	3.62	.847	4	4	5	2
♦ Statement 69	644	3.65	1.011	4	4	5	1	36	3.69	.786	4	4	5	2
Odors, Seating, and Noise	654	11.26	1.870	12	12	15	4	39	11.31	1.894	12	12	15	7
♦ Statement 5	687	4.13	1.037	4	5	5	1	40	4.13	.911	4	5	5	2
♦ Statement 56	680	3.75	.949	4	4	5	1	41	3.85	1.014	4	4	5	1
♦ Statement 41	682	3.37	1.053	4	4	5	1	40	3.33	1.163	4	4	5	1

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table 5—*Continued.* Physical learning environment factors for retention and attrition

Learning Environment Factor/Statement	High/Average Attenders							Low/No Attenders						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Lighting, Writing, and Reading	616	11.04	1.452	11	11	15	5	38	11.34	1.760	11.5	12	15	6
♦ Statement 49	648	4.04	.525	4	4	5	1	38	4.08	.587	4	4	5	2
♦ Statement 15	686	4.01	.901	4	4	5	1	41	4.00	.975	4	4	5	1
♦ Statement 60	665	3.01	.887	3	3	5	1	40	3.38	.838	4	3	5	2
Temperature, Ventilation, and Humidity	655	10.35	2.074	10.5	12	15	5	38	10.24	1.895	10	12	14	7
♦ Statement 66	678	3.77	.916	4	4	5	1	41	3.56	.976	4	4	5	1
♦ Statement 25	686	3.49	.994	4	4	5	1	39	3.44	.821	4	4	5	1
♦ Statement 3	689	3.09	1.159	3	4	5	1	40	3.20	.966	3	4	5	2
Proxemics and Territoriality	664	10.19	1.439	10	10	15	4	39	10.08	1.723	10	9	14	7
♦ Statement 2	696	4.01	.887	4	4	5	1	41	3.80	.954	4	4	5	1
♦ Statement 33	680	3.84	.798	4	4	5	1	40	3.55	1.011	4	4	5	1
♦ Statement 48	687	2.32	.830	2	2	5	1	40	2.75	1.056	3	2	5	1
Flexibility	615	9.07	1.752	9	10	14	3	35	8.97	2.345	10	11	12	3
♦ Statement 72	636	3.76	1.193	4	4	5	1	35	3.74	1.336	4	5	5	1
♦ Statement 51	678	3.39	.980	4	4	5	1	41	3.24	1.113	4	4	5	1
♦ Statement 28	691	1.95	.656	2	2	4	1	40	2.00	.716	2	2	4	1
Physical Arrangement	629	8.18	1.741	8	8	15	3	39	8.45	1.735	8	8	14	6
♦ Statement 14	680	3.45	1.237	4	4	5	1	41	3.41	1.204	4	4	5	1
♦ Statement 37	660	3.32	1.306	4	4	5	1	38	3.16	1.326	3	4	5	1
♦ Statement 52	680	2.99	1.214	3	4	5	1	40	3.18	1.196	3.5	2	5	1

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

The statements for *Room Size* include the following: The space is too small for the number of persons in attendance; The space is too large for the number of persons in attendance; and The size of the room is uncomfortable. *Room size* is the physical factor with the highest overall means, ranking eighth (Table 2). High/average attenders rank *Room size* eighth while low/no attenders rank it fifth (Table 3). The 3 statements rank thirtieth, thirty-first, and thirty-eighth overall (Table 1). Statement 13 has identical

means for both groups. In Table 5, statement 22 has the greatest difference between the groups (.30).

The statements for *Aesthetics and Tidiness* include the following: The room is decorated nicely and appropriately for our class; The room really needs a fresh coat of paint; and The room is kept clean and uncluttered. This factor has the second highest physical factor mean score, ranking twelfth overall (Table 2). Low/no attenders have a higher mean and rank this factor fifth while high/average attenders rank it twelfth (Table 3). Low/no attenders rate 2 of 3 statements for *Aesthetics and Tidiness* higher. The 3 statements rank fourteenth, forty-eighth, and fiftieth overall. Statement 8 is the highest physical statement overall (Table 1).

The statements for *Odor, Seating, and Noise* include these: Strong odors in the classroom make learning difficult; The classroom chairs are uncomfortable; and It is often difficult to hear in the classroom. This is the third highest physical factor, with an overall ranking of thirteenth (Table 2); it ranks fourteenth by high/average attenders and thirteenth by low/no attenders (Table 3). It is the second factor for which low/no attenders have a higher mean. Little difference in means exists between the groups for the statements. The 3 statements rank fifteenth, forty-second, and sixty-first overall. Statement 5 is the second highest physical statement overall (Table 1).

The statements for *Lighting, Writing, and Reading* include these: There is adequate light in the classroom; Glare from the windows or lighting makes learning uncomfortable; and The teacher encourages class members to take notes. This factor ranks as the fourth highest physical factor and the sixteenth overall (Table 2). It ranks sixteenth by high/average attenders and twelfth by no/low attenders (Table 3). This

factor is the third factor for which low/no attenders report a higher mean (by .30). The only statement with a higher mean for high/average attenders is 15 (by .01). Statement 60 has the greatest difference (.37) favoring low/no attenders. The 3 statements rank twentieth, twenty-third, and sixty-eighth overall (Table 1). Statement 49 is the third highest physical statement overall.

The statements for *Temperature, Ventilation, and Humidity* include the following: The temperature in the classroom is often too hot; The temperature in the classroom is frequently too cold; and Class members are sometimes bothered by heat/air conditioning blowing in the classroom. The factor ranks fifth lowest overall (Table 2) and ranks twentieth by high/average attenders and eighteenth by low/no attenders (Table 3). High/average attenders scored higher for the first 2 statements. Statement 66 favors high/average attenders with a difference of .19. The 3 statements rank forty-first, fifty-sixth, and sixty-seventh overall (Table 1).

The statements for *Proxemics and Territoriality* include these: Class members have to sit too close to one another; It feels like members are seated too far apart; and Class members sit in the same seats every week. This factor has the third lowest overall mean score (Table 2) and ranks twenty-second by high/average attenders and twenty-first by low/no attenders (Table 3). High/average attenders score this factor higher (by .11). With a difference of .43, statement 48 strongly favors low/no attenders and is the second lowest statement overall. The 3 statements rank twenty-fourth, fortieth, and seventy-first overall (Table 1).

The statements for *Flexibility* include these: The seating and furnishings of the classroom can be easily arranged in different ways in order to allow a variety of

teaching/learning activities; The seating and furnishings in the classroom are arranged in the same way each week; and The classroom seating includes at least one pew or couch. *Flexibility* accounts for the second lowest mean score (Table 2). Both high/average and low/no attenders rank it next to last (Table 3). The overall lowest statement mean belongs to statement 28 (Table 1). The other 2 statements rank forty-third and sixtieth overall. Statement 51 has the greatest mean difference (.15) between groups, favoring high/average attenders.

The statements for *Physical Arrangement* include the following: Classroom seating is arranged in rows; The chairs in the classroom are arranged around one or more tables; and The seating in the classroom is arranged in one or more circles or semicircles. This learning environment factor has the lowest mean score overall (Table 2) as well as the lowest for high/average and for low/no attenders (Table 3). This is the fourth factor for which low/no attenders have a higher mean score. The 3 statements rank fifty-ninth, sixty-fourth, and sixty-ninth overall (Table 1).

Question 3: Strength of Social Learning Environment Factors

These findings are responses to the third research question: What is the strength of social learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches? In the table to follow, Table 6, social factors and statements are compared for retention (high/average attenders) and attrition (low/no attenders). Statistics are displayed including mean, standard deviation, median, mode, high score, and low score. Seven of the top 10 overall factors are social factors (Table 3). Low/no attenders score higher on only 4 of the 14

social factors: *Teacher: General*; *Teacher: Classroom Management*; *Expectation*; and *Participation: Meeting Length.* Means of 32 of the 42 statements are higher for high/average attenders. Social factor strength is significant.

Table 6. Social learning environment factors for retention and attrition

Learning Environment Factor/Statement	High/Average Attenders							Low/No Attenders						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Peers: General	642	12.57	1.442	12	12	15	5	38	12.00	1.801	12	12	15	7
♦ Statement 38	688	4.33	.602	4	4	5	1	40	4.18	.813	4	4	5	1
♦ Statement 43	681	4.16	.656	4	4	5	1	39	3.92	.774	4	4	5	2
♦ Statement 54	665	4.08	.585	4	4	5	1	39	3.97	.584	4	4	5	2
Peers: Relation.-Building in Class	668	12.34	1.422	12	12	15	5	39	11.92	1.768	12	12	15	8
♦ Statement 63	688	4.19	.587	4	4	5	1	40	4.13	.757	4	4	5	2
♦ Statement 42	687	4.11	.617	4	4	5	1	39	4.03	.743	4	4	5	2
♦ Statement 9	692	4.05	.720	4	4	5	1	41	3.76	.943	4	4	5	1
Teacher: General	658	12.25	1.539	12	12	15	8	39	12.33	1.595	12	12	15	8
♦ Statement 64	677	4.27	.556	4	4	5	1	41	4.32	.471	4	4	5	4
♦ Statement 57	680	4.07	.930	4	4	5	1	40	4.28	.640	4	4	5	3
♦ Statement 61	679	3.90	.851	4	4	5	1	40	3.68	1.163	4	4	5	1
Psychological Factors	646	11.90	1.483	12	12	15	6	34	11.09	2.151	11	11	15	5
♦ Statement 67	682	4.08	.810	4	4	5	1	41	3.80	1.100	4	4	5	1
♦ Statement 20	673	3.96	.724	4	4	5	1	37	3.76	.796	4	4	5	2
♦ Statement 31	684	3.86	.799	4	4	5	1	38	3.63	.913	4	4	5	1
Peers: Relationship Building outside of Class	670	11.88	1.747	12	12	15	3	39	11.36	1.871	12	12	15	7
♦ Statement 4	693	3.99	.835	4	4	5	1	41	4.00	.894	4	4	5	1
♦ Statement 17	694	3.97	.786	4	4	5	1	41	3.78	.759	4	4	5	1
♦ Statement 32	682	3.92	.782	4	4	5	1	39	3.62	.877	4	4	5	1
Teacher: Social Interaction	616	11.73	1.808	12	12	15	3	35	11.49	1.634	12	12	15	8
♦ Statement 29	678	3.91	.832	4	4	5	1	39	3.79	.732	4	4	5	2
♦ Statement 71	639	3.91	.870	4	4	5	1	36	3.86	.867	4	4	5	1
♦ Statement 30	685	3.90	.799	4	4	5	1	49	3.75	.840	4	4	5	1

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table 6—*Continued.* Social learning environment factors for retention and attrition

Learning Environment Factor/Statement	High/Average Attendance							Low/No Attendance						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Group Size	661	10.69	1.849	11	12	15	4	38	10.26	2.036	10	10	15	5
♦ Statement 11	688	4.24	.757	4	4	5	1	41	3.98	.961	4	4	5	1
♦ Statement 19	689	3.34	1.101	4	4	5	1	40	3.50	.987	4	4	5	1
♦ Statement 45	684	3.12	1.074	3	3	5	1	39	2.92	1.109	3	3	5	1
Participation: Conflicts	662	11.68	2.006	12	12	15	3	39	10.15	2.550	10	9	15	6
♦ Statement 65	680	4.23	.855	4	4	5	1	41	4.07	.959	4	4	5	1
♦ Statement 27	684	3.77	.962	4	4	5	1	39	2.97	1.405	3	4	5	1
♦ Statement 50	683	3.65	.957	4	4	5	1	40	3.10	1.446	3	2	5	1
Teacher: Classroom Management	661	11.66	1.642	12	12	15	3	40	11.75	1.676	12	12	15	7
♦ Statement 36	688	4.31	.666	4	4	5	1	40	4.25	.630	4	4	5	2
♦ Statement 62	682	4.13	.670	4	4	5	1	41	4.29	.461	4	4	5	4
♦ Statement 44	685	3.22	.953	3	4	5	1	40	3.20	1.159	3.5	4	5	1
Participation: General	648	11.27	1.649	11	12	15	5	39	10.67	2.094	11	11	15	6
♦ Statement 58	683	4.15	.600	4	4	5	1	41	4.02	.651	4	4	5	2
♦ Statement 35	676	3.63	.828	4	4	5	1	39	3.41	.910	4	4	5	1
♦ Statement 40	676	3.50	.967	4	4	5	1	39	3.23	1.087	3	4	5	1
Expectation	670	11.10	1.600	11	11	15	3	40	11.30	1.636	11	11	15	8
♦ Statement 46	684	3.74	.698	4	4	5	1	41	3.66	.911	4	4	5	1
♦ Statement 59	678	3.70	.843	4	4	5	1	40	3.85	.622	4	4	5	2
♦ Statement 68	689	3.66	.835	4	4	5	1	41	3.80	.601	4	4	5	3
Participation: Meeting Length	620	11.00	1.557	11	12	15	6	34	11.35	1.346	11	12	15	9
♦ Statement 12	691	4.05	.777	4	4	5	1	41	3.95	.740	4	4	5	1
♦ Statement 53	682	3.63	.897	4	4	5	1	40	3.85	.700	4	4	5	2
♦ Statement 70	641	3.31	.942	4	4	5	1	35	3.54	.886	4	4	5	2
Demographics, Cultural, Personality Factors	662	10.65	1.965	11	12	15	4	39	10.13	2.451	11	12	15	3
♦ Statement 18	682	3.62	.869	4	4	5	1	40	3.30	1.043	3.5	4	5	1
♦ Statement 26	682	3.54	.816	4	4	5	1	40	3.40	.955	4	4	5	1
♦ Statement 24	689	3.49	.868	4	4	5	1	39	3.46	.822	4	4	5	1
Participation: Teaching Methods	646	10.31	1.724	10	10	15	5	39	10.05	1.999	10	12	14	5
♦ Statement 23	699	3.96	.779	4	4	5	1	40	3.88	.723	4	4	5	2
♦ Statement 7	669	3.48	.940	4	4	5	1	41	3.29	.981	3	4	5	1
♦ Statement 34	671	2.86	.921	3	2	5	1	39	2.95	.857	3	3	5	1

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

The statements for *Peers: General* include the following: The class atmosphere is warm and friendly; The degree of mutual respect and trust among class participants is high; and The members of the class work well together. This factor has the highest learning environment factor mean overall (Table 2). High/average attenders rank it first while low/no attenders rank it second (Table 3). Statement 38 has the top overall statement mean while statement 43 ranks twelfth and statement 54 ranks seventeenth overall (Table 1). The retention (high/average attenders) factor mean is .57 greater than the mean for attrition (low/no attenders). High/average attenders scored all 3 statements higher. Statement 43 has the greatest difference (.24) between the means of high/average and low/no attenders.

The statements for *Peers: Relationship-Building in Class* include these: People notice when someone is absent; This class intentionally helps new people feel a part of the class; and Class participants know the personal needs and concerns of others in the class. The mean for *Peers: Relationship-Building in Class* ranks as the second learning environment factor mean overall (Table 2). High/average attenders as well as low/no attenders rank it third (Table 3). High/average attenders rate this factor .50 higher than low/no attenders. Statement 63 ranks seventh; statement 42 is sixteenth; and statement 9 is twenty-second overall (Table 1). All 3 statements are rated higher by high/average attenders. The greatest difference (.29) among the statements is recorded for statement 9.

The statements for *Teacher: General* include the following: The teacher listens to student comments and questions made in class; The teacher cares whether or not students learn; and The teacher sometimes makes participants uncomfortable by

asking them to pray. The mean for *Teacher: General* ranks fourth overall and is the third highest social learning environment factor (Table 2). High/average attenders ranked it fourth while low/no attenders ranked it first (Table 3). Statement 64 has the third highest overall mean (Table 1). This social learning environment factor is 1 of the 4 rated higher by low/no attenders. Statement 61 has the factor mean which keeps high/average attenders close.

The statements for *Psychological Factors* include these: My background sometimes makes me uncomfortable in class; I am satisfied with the way the Sunday School hour is spent each week; and Previous life experiences sometimes make learning in class more difficult for me. The mean of this factor, *Psychological Factors*, ranks seventh overall and is the fifth highest social learning environment factor (Table 2). Low/no attenders ranked *Psychological Factors* fifteenth while high/average attenders ranked it sixth (Table 3). High/average attenders scored higher means than low attenders on all 3 statements. These 3 statements rank nineteenth, twenty-eighth, and thirty-ninth overall (Table 1).

The statements for *Peers: Relationship-Building outside of Class* include the following: Class members share in ideas, planning, and/or hosting class fellowship activities; I regularly invite guests/prospects to class fellowships; and Close friendships are established among students in the class. The mean for *Peers: Relationship-Building outside of Class* ranks sixth overall and is the fourth highest social learning environment factor mean (Table 2). High/average attenders ranked this factor seventh while low/no attenders ranked it tenth (Table 3). Only statement 4 has a slightly higher mean (by .01)

for low/no attenders. The 3 statements rank twenty-fifth, twenty-sixth, and thirty-second overall (Table 1).

The statements for *Teacher: Social Interaction* include the following: The teacher talks informally with students one-on-one before and/or after class and/or between Sundays; This class is more a social hour; and The teacher fellowships with class members at times other than Sunday. The *Teacher: Social Interaction* mean ranks as the ninth highest learning environment factor mean overall (Table 2). Low/no attenders ranked it seventh while high/average attenders ranked it ninth (Table 3). The high/average attenders mean for this factor is .24 higher than that for low/no attenders. All 3 statements for high/average attenders have higher mean scores. The third statement has the greatest mean difference. The 3 statements rank thirty-third, thirty-fourth, and thirty-sixth overall (Table 1).

The statements for *Group Size* include the following: The number of class members present each week is just too large; I am satisfied with the number of class participants; and The number of class members present each week is just too few. This factor's mean ranks as the eighteenth learning environment factor mean overall, and it is the third lowest social factor mean (Table 2). High/average attenders rank it eighteenth while low/no attenders rank it seventeenth (Table 3). Statement 45 has the seventh lowest mean and is the second lowest social statement overall (Table 1). Statement 11 has the fifth highest overall mean. On the other hand, statement 19 is ranked sixty-second overall.

The statements for *Participation: Conflicts* include these: As a result of a personality conflict with a class member or teacher, I have attended class less frequently;

My class participation has been prevented regularly by family or work schedule conflicts; and My class participation has been prevented regularly by personal and/or family health problems. The mean for *Participation: Conflicts* ranks as the eleventh learning environment factor mean overall (Table 2). High/average attenders ranked it tenth while low/no attenders ranked it nineteenth (Table 3). Scores are higher on all statements for high/average attenders. The 3 statements rank fifth, forty-fifth, and fifty-second overall (Table 1).

The statements for *Teacher: Classroom Management* include the following: The teacher comes to class well prepared; The teacher leads the class with a clear sense of direction and purpose; and The group sticks to the point and rarely gets sidetracked. The mean for *Teacher: Classroom Management* ranks as the tenth learning environment factor mean overall (Table 2). High/average attenders ranked it eleventh while low/no attenders ranked it fourth (Table 3). This factor has the second (after *Teacher: General*) closest mean with the low/no attenders' score being only .09 higher. Statement 44 has the eighth lowest mean and is the third lowest social factor mean (Table 1). On the opposite end of the spectrum, statement 39 has the sixth highest mean overall. The middle statement's mean is the one that allows low/attenders to score higher on this factor.

Participation: General statements include the following: Teaching methods allow everyone to participate in the lesson each week; Class members regularly share in class leadership and ministry responsibilities; and The class is sometimes dominated by one or two class members. This factor's mean ranks as the fourteenth learning environment factor mean overall (Table 2). High/average attenders scored .40 higher on

this factor than low/no attenders. High/average attenders ranked *Participation: General* thirteenth while low/no attenders ranked it sixteenth (Table 3). The 3 statements rank tenth, fifty-first, and fifty-seventh overall (Table 1). High/average attenders scored higher on all 3 statements.

The statements for the social learning environment factor, *Expectation*, include the following: I look forward to attending the class; The teacher does not expect every student to make the same application; and The teacher has high positive expectations of class members. This factor's mean ranks as the fifteenth highest learning environment factor mean overall (Table 2). High/average attenders ranked it fifteenth while low/no attenders ranked it fourteenth (Table 3). Low/no attenders scored .18 higher on this factor than high/average attenders. Only statement 46 has a higher mean for high/average attenders (by .08). The 3 statements for this factor rank forty-fourth, forty-sixth, and forty-seventh overall (Table 1).

Participation: Meeting Length statements include the following: Class time is too long; Class usually starts and ends on time; and Class time is too short. This social factor's mean ranks as the seventeenth learning environment factor mean overall. Statement 70 has the tenth lowest mean and is the second lowest social factor mean (Table 2). High/average attenders ranked it seventeenth while low/no attenders ranked it eleventh (Table 3). Low/no attenders scored .35 higher for this factor than high/average attenders. High/average attenders only scored higher on statement 12. The 3 statements for *Participation: Meeting Length* rank twenty-first, forty-ninth, and sixty-third overall (Table 1).

The statements for *Demographic, Cultural, and Personality Factors* include the following: I am more alike than different from other class participants; My personality is fairly similar to that of other class participants; and My background is similar to the background of other class members. This factor's mean ranks nineteenth overall and is the fourth lowest social factor mean (see Table 2). High/average attenders ranked *Demographic, Cultural, and Personality Factors* nineteenth while low/no attenders ranked it twentieth (see Table 3). High/average attenders scored .52 higher on this factor. Thus, it is not surprising that high/average attenders scored higher on all 3 statements. The 3 statements for *Demographic, Cultural, and Personality Factors* ranked fifty-third, fifty-fourth, and fifty-fifth overall (see Table 1).

Participation: Teaching Methods statements include these: Most class members take part in class discussions and lesson activities; Teaching approaches in the class are varied regularly; and Students seem to do the same type of learning activities each week in class. This factor's mean ranks as the twenty-first learning environment factor mean overall and is the lowest social factor mean (Table 2). High/average attenders ranked *Participation: Teaching Methods* twenty-first while low/no attenders ranked it twenty-second, as is related in Table 3. High/average attenders scored .26 higher on this social learning environment factor. Statement 34 has the third overall lowest mean and is the lowest social statement mean (Table 1). The other 2 statements (statements 7 and 23) rank twenty-seventh and fifty-eighth overall. Low/no attenders score only statement 34 higher.

In addition to the data above, Table A18 in Appendix 4 presents the impact of retention and attrition on learning environment factors. Among the 6 factors that are

impacted at a significance of 95% or more (.050 or less), 1 social factor has a significance of .000: *Participation: Conflicts*. Three other social factors range from .002 to .031 in significance: *Peers: General*; *Psychological Factors*; and *Participation: General*. Thus, a total of 4 of the 14 social factors are impacted at an ANOVA level of significance.

Question 4: Learning Environment Factor Responses for High, Average, Low, and No Attenders

The next set of findings display responses to the fourth research question: What is the relationship between learning environment factors for adult Sunday School class high attenders, average attenders, low attenders, and no attenders in Kentucky Baptist Convention churches? Tables 7-10 examine learning environment factor responses separately of high, average, low, and no attenders, respectively. A variety of statistics are displayed in these four tables. The statistics include mean, standard deviation, and numbers of responses for each score. For best comparison, factors are listed in the order in which they are presented in the Expert Panel information in Appendix 1.

Following the four tables displaying factor responses, the top five learning environment factors for each attendance frequency are displayed in Table 11. After the summary of findings for Table 11, the bottom five learning environment factors for each attendance frequency are displayed in Table 12. Results for top and bottom five factors are ranked according to factor mean. The hope is that the simplicity of these two displays will bring clarity to the great amount of learning environment factor data provided in Tables 7-10.

Table 7. Learning environment factor responses of high attenders

Learning Environment Factor	High Attenders n = 416-468														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Divine Involvement	12.25	1.658	1	-	-	2	1	4	13	35	65	164	82	47	53
Divine Involvement: Transformed Lives	12.36	1.510	-	2	-	-	2	3	6	22	59	186	92	49	45
Physical Arrangement	8.25	1.717	2	5	7	43	71	160	49	62	16	18	2	-	2
Flexibility	9.06	1.767	1	5	12	18	28	87	71	119	51	19	4	1	-
Room size	11.81	1.664	-	-	-	3	3	9	21	55	65	188	50	34	34
Proxemics and territoriality	10.14	1.412	-	-	1	1	14	39	76	155	108	46	17	2	2
Aesthetics and tidiness	11.38	1.851	-	1	2	2	10	15	30	61	72	130	60	27	16
Lighting, writing, reading	11.04	1.482	-	-	1	1	7	17	21	92	120	100	53	9	2
Temperature, ventilation, and humidity	10.31	2.071	-	-	3	13	26	63	48	75	77	93	34	15	7
Odors, seating, and noise	11.40	1.812	-	-	-	4	5	26	32	60	83	122	75	27	18
Teacher: General	12.25	1.551	-	-	-	-	-	3	15	51	42	175	76	47	48
Teacher: Social Interaction	11.73	1.815	2	1	-	1	7	5	22	50	72	142	60	36	26
Teacher: Classroom Man.	11.66	1.611	1	-	1	1	-	9	21	71	87	146	64	43	15
Peers: General	12.57	1.433	-	-	1	-	-	2	7	19	29	204	70	59	56
Peers: Relation.-build. in class	12.37	1.394	-	-	-	1	2	3	4	22	46	218	71	53	41
Peers: Relation.-bld. outside of class	11.92	1.733	1	-	-	-	7	9	20	53	57	166	76	46	33
Group size	10.64	1.830	-	1	1	1	19	41	58	81	91	107	33	19	5
Psychological factors	11.92	1.482	-	-	-	1	2	4	15	56	62	180	67	43	20
Expectation	11.09	1.591	1	-	1	2	3	17	38	91	127	118	42	24	6
Participation: General	11.27	1.638	-	-	2	-	3	20	32	78	98	128	51	26	10
Participation: Teaching methods	10.36	1.715	-	-	2	7	9	46	57	127	84	74	27	12	3
Participation: Meeting length	10.93	1.596	-	-	-	1	10	25	39	79	95	120	39	14	2
Participation: Conflicts	12.04	1.898	1	1	-	1	11	7	21	35	48	174	68	38	54
Demographics, cultural, and personality factors	10.73	1.968	-	1	8	12	11	25	45	76	82	153	26	11	10

Note: M = mean; SD = standard deviation

Table 8. Learning environment factor responses of average attenders

Learning Environment Factor	Average Attenders $n = 192$-207														
	M	**SD**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Divine Involvement	12.17	1.624	-	-	2	-	-	1	6	20	21	83	32	26	16
Divine Involvement: Transformed Lives	12.35	1.486	-	-	-	-	2	1	2	11	29	78	36	21	21
Physical Arrangement	7.99	1.789	5	4	1	19	38	64	25	21	10	4	-	1	-
Flexibility	9.11	1.721	2	3	2	8	10	42	36	60	27	8	1	-	-
Room Size	11.80	1.655	-	-	-	1	2	3	16	19	22	89	24	20	10
Proxemics and Territoriality	10.30	1.493	-	1	1	-	6	10	28	73	48	23	9	4	-
Aesthetics and Tidiness	11.60	1.835	-	-	1	2	3	3	15	24	26	65	30	14	10
Lighting, Writing, and Reading	11.04	1.388	-	-	-	1	1	8	10	41	58	53	16	3	2
Temperature, Ventilation, and Humidity	10.44	2.083	-	-	-	8	7	24	29	31	33	41	13	11	4
Odors, Seating, and Noise	10.94	1.959	-	1	2	2	5	14	14	38	38	48	27	9	4
Teacher: General	12.26	1.514	-	-	-	-	-	2	6	16	26	78	27	29	17
Teacher: Social Interaction	11.74	1.797	-	-	1	1	2	7	9	14	38	70	19	18	13
Teacher: Classroom Management	11.65	1.713	-	-	-	1	4	6	6	29	36	65	26	22	7
Peers: General	12.56	1.468	-	-	-	-	1	1	5	5	10	97	25	24	27
Peers: Relationship-Building in Class	12.28	1.484	-	-	1	-	-	5	2	9	17	102	33	21	17
Peers: Relationship-Building outside of Class	11.77	1.776	-	-	-	-	3	9	12	17	28	76	27	15	15
Group Size	10.79	1.890	-	-	-	4	4	16	26	41	30	48	22	9	4
Psychological Factors	11.87	1.488	-	-	-	-	-	5	6	21	37	70	31	17	9
Expectation	11.13	1.623	-	-	-	1	3	6	15	41	58	43	18	8	7
Participation: General	11.25	1.677	-	-	-	1	3	9	16	33	37	61	27	8	5
Participation: Teaching Methods	10.18	1.741	-	-	-	6	4	23	25	62	41	20	8	7	2
Participation: Meeting Length	11.14	1.463	-	-	-	-	1	8	16	37	46	66	12	6	4
Participation: Conflicts	10.86	2.008	-	-	1	6	5	13	26	33	22	57	28	9	3
Demographics, Cultural, and Personality Factors	10.46	1.950	-	-	1	7	10	13	31	32	28	64	10	3	3

Note: M = mean; SD = standard deviation

Table 9. Learning environment factor responses of low attenders

Learning Environment Factor	Low Attenders n = 24-28														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Divine Involvement	11.64	1.985	-	-	-	-	1	2	1	2	5	9	2	5	1
Divine Involvement: Transformed Lives	11.48	1.578	-	-	-	-	-	2	2	2	4	10	6	1	-
Physical Arrangement	8.18	1.701	-	-	-	4	5	11	2	5	-	-	-	1	-
Flexibility	8.60	2.517	1	2	1	-	4	2	2	7	5	1	-	-	-
Room Size	11.78	1.601	-	-	-	-	-	1	2	1	5	12	3	1	2
Proxemics and Territoriality	10.18	1.611	-	-	-	-	-	4	8	5	3	7	-	1	-
Aesthetics and Tidiness	12.08	1.586	-	-	-	-	-	-	1	4	2	8	5	2	2
Lighting, Writing, and Reading	11.67	1.569	-	-	-	-	-	1	2	2	6	8	6	1	1
Temperature, Ventilation, and Humidity	10.12	1.840	-	-	-	-	3	2	5	4	5	6	-	1	-
Odors, Seating, and Noise	11.33	1.922	-	-	-	-	1	1	3	3	4	10	2	1	2
Teacher: General	12.32	1.679	-	-	-	-	-	1	-	2	4	10	6	-	5
Teacher: Social Interaction	11.68	1.600	-	-	-	-	-	1	1	3	6	7	4	2	1
Teacher: Classroom Management	11.89	1.397	-	-	-	-	-	-	1	3	7	9	4	3	1
Peers: General	11.93	1.752	-	-	-	-	1	-	2	-	4	14	2	1	3
Peers: Relationship-Building in Class	11.74	1.831	-	-	-	-	-	1	2	5	3	6	6	2	2
Peers: Relationship-Building outside of Class	11.19	1.942	-	-	-	-	2	1	1	4	6	8	2	2	1
Group Size	10.19	2.131	-	-	1	1	-	3	4	6	4	6	1	-	1
Psychological Factors	11.32	1.973	-	-	-	-	1	1	3	2	6	6	2	3	1
Expectation	11.14	1.533	-	-	-	-	-	2	1	6	8	6	3	2	-
Participation: General	10.75	2.030	-	-	-	1	1	2	3	3	8	6	2	1	1
Participation: Teaching Methods	9.89	2.079	-	-	1	1	1	4	5	4	4	6	2	-	-
Participation: Meeting Length	11.50	1.445	-	-	-	-	-	-	1	5	6	9	1	-	2
Participation: Conflicts	10.32	2.294	-	-	-	1	1	4	7	2	3	7	-	1	2
Demographics, Cultural, and Personality Factors	10.07	2.165	-	-	-	3	1	3	2	3	7	7	-	1	-

Note: M = mean; SD = standard deviation

Table 10. Learning environment factor responses of no attenders

Learning Environment Factor	No Attenders n = 9-13														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Divine Involvement	11.45	1.695	-	-	-	-	-	-	1	3	2	2	1	2	-
Divine Involvement: Transformed Lives	11.45	2.423	-	-	-	-	1	-	1	2	1	3	1	-	2
Physical Arrangement	9.20	1.687	-	-	-	-	2	2	1	3	1	1	-	-	-
Flexibility	9.90	1.595	-	-	-	1	-	-	2	2	5	-	-	-	-
Room Size	10.54	1.664	-	-	-	-	1	-	3	2	1	6	-	-	-
Proxemics and Territoriality	9.82	2.040	-	-	-	-	2	1	2	2	1	2	1	-	-
Aesthetics and Tidiness	10.90	1.449	-	-	-	-	-	-	1	4	2	2	-	1	-
Lighting, Writing, and Reading	10.55	2.018	-	-	-	1	-	-	1	3	3	2	-	1	-
Temperature, Ventilation, and Humidity	10.50	2.067	-	-	-	-	1	1	3	1	-	4	2	-	-
Odors, Seating, and Noise	11.25	1.913	-	-	-	-	-	-	4	1	-	3	3	1	-
Teacher: General	12.36	1.433	-	-	-	-	-	-	-	-	4	3	1	2	1
Teacher: Social Interaction	11.00	1.700	-	-	-	-	-	-	2	3	1	2	1	1	-
Teacher: Classroom Management	11.42	2.234	-	-	-	-	1	-	1	1	3	4	-	-	2
Peers: General	12.18	1.991	-	-	-	-	-	-	1	2	-	4	1	1	2
Peers: Relationship-Building in Class	12.33	1.614	-	-	-	-	-	-	1	-	2	4	2	2	1
Peers: Relationship-Building outside of Class	11.75	1.712	-	-	-	-	-	1	-	1	2	5	2	-	1
Group Size	10.45	1.864	-	-	-	-	-	2	2	2	1	2	2	-	-
Psychological Factors	10.44	2.603	-	-	1	-	-	-	1	3	1	1	1	1	-
Expectation	11.67	1.875	-	-	-	-	-	-	2	-	4	4	-	-	2
Participation: General	10.45	2.339	-	-	-	-	1	2	-	4	-	2	-	2	-
Participation: Teaching Methods	10.45	1.809	-	-	-	-	-	1	3	3	-	3	-	1	-
Participation: Meeting Length	11.00	1.054	-	-	-	-	-	-	-	4	3	2	1	-	-
Participation: Conflicts	9.73	3.197	-	-	-	1	3	1	1	1	1	1	-	-	2
Demographics, Cultural, and Personality Factors	10.25	3.108	1	-	-	-	-	3	-	1	1	5	-	-	1

Note: M = mean; SD = standard deviation

Table 11. Comparison of top five learning environment factors for each attendance frequency ranked by means

Rank	No			Low			Average			High		
	F	*n*	M	F	*n*	M	F	*n*	M	F	*n*	M
1	11	11	12.36	11	28	12.32	14	195	12.56	14	447	12.57
2	15	12	12.33	7	24	12.08	2	201	12.35	15	461	12.37
3	14	11	12.18	14	27	11.93	15	207	12.28	2	466	12.36
4	16	12	11.75	13	28	11.89	11	201	12.26	1	467	12.25
5	19	12	11.67	5	27	11.78	1	207	12.17	11	457	12.25

Note: F = Factor; M = mean; Factor 11 = *Teacher: General*; 14 = *Peers: General*; 15 = *Peers: Relationship-Building in Class*; 7 = *Aesthetics and Tidiness*; 2 = *Divine Involvement: Transformed Lives*; 16 = *Peers: Relationship-Building out of Class*; 13 = *Teacher: Classroom Management*; 1 = *Divine Involvement*; 19 = *Expectation*; and 5 = *Room Size*

Two of the top five factors in Table 11 are shar ed by all 4 attendance frequencies: *Teacher: General* and *Peers: General*. One of the top five learning environment factors is shared by no, average, and high attenders: *Peers: Relationship-Building in Class*. Interestingly, average attenders and high attenders share all five top factors in different order. Top five factor mean scores for high attenders also tend to be higher. Six social factors, 2 spiritual factors, and 2 physical factors make the top five for at least 1 attendance frequency. In Table A1 in Appendix 3, no attenders include 2 spiritual, 1 physical, and 7 social factors in the top ten while low attenders include 1 spiritual, 3 physical, and 6 social factors. Average attenders include 2 spiritual and 8 social factors in the top ten while high attenders include 2 spiritual, 1 physical, and 7 social factors.

Further examination of data from Tables A1 and A2 in Appendix 3 presents scores and rankings of learning environment factors by attendance frequency. With several exceptions, a general reading of Table A1 in Appendix 3 show scores increasing

as attendance frequency increases. One way of noting that increase is to note the mean scores of the first five factors by each attendance frequency. The range of scores, however, can also be noted by examining the scores of the last five factors in the table. Low attenders tend to differ more from the other 3 groups, as can be discerned in Table A2 in Appendix 3. For instance, low attenders rank *Aesthetics and Tidiness* second while no attenders rank it twelfth, average attenders rank it eleventh, and high attenders rank it thirteenth. Another instance is the eighth place ranking of *Lighting, Writing, and Reading* by low attenders while no attenders rank it thirteenth, average attenders rank it fifteenth, and high attenders rank it sixteenth. Generally, high and average attenders are more alike than any other 2 attendance frequencies.

Table 12. Comparison of bottom five learning environment factors for each attendance frequency ranked by means

Rank	No			Low			Average			High		
	F	*n*	M	F	*n*	M	F	*N*	M	F	*n*	M
24	3	10	9.20	3	28	8.18	3	192	7.99	3	437	8.25
23	23	11	9.73	4	25	8.60	4	199	9.11	4	416	9.06
22	6	11	9.82	21	28	9.89	21	198	10.18	6	461	10.14
21	4	10	9.90	24	27	10.07	6	203	10.30	9	454	10.31
20	24	12	10.25	9	26	10.12	9	201	10.44	21	448	10.36

Note: F = Factor; M = mean; Factor 3 = *Physical Arrangement*; 23 = *Participation: Conflicts*; 4 = *Flexibility*; 6 = *Proxemics and Territoriality*; 21 = *Participation: Teaching Methods*; 24; *Demographics, Cultural, and Personality Factors*; and 9 = *Temperature, Ventilation, and Humidity*

Two of the bottom five factors in Table 12 are shared by all attendance frequencies: *Physical Arrangement* and *Flexibility* (both physical factors). Two of the bottom five factors are also shared by no, average, and high attenders: *Participation: Teaching Methods* and *Temperature, Ventilation, and Humidity* (1 physical and 1 social

factor). Interestingly, all five bottom factors are shared in different order by average and high attenders. Average attenders record the lowest individual mean among all factors and attendance frequencies (7.99) for *Physical Arrangement*. Four physical and 3 social factors are included in the bottom five for attendance frequency.

In addition to these findings, data are available from an analysis of variance (ANOVA) computation for attendance frequency in Table A17 in Appendix 4. In that table, 4 of the 24 learning environment factors are at a significance of 95% or greater (.050 or less): *Divine Involvement: Transformed Lives*; *Odors, Seating, and Noise*; *Psychological Factors*; and *Participation: Conflicts*. One of the factors (a social one) has an ANOVA significance of .000: *Participation: Conflicts*. The other 3 factors (1 spiritual, 1 physical, and 1 social) range from .008 to .034: *Divine Involvement: Transformed Lives*; *Odors, Seating, and Noise*; and *Psychological Factors*.

Question 5: Relationship between Retention/Attrition and Demographics

Findings are presented in the next set of displays about the fifth research question: What is the relationship between adult Sunday School class member retention and attrition and demographics factors? Findings are cross tabulated in Tables 13 and 14 for retention and attrition (high/average attenders and low/no attenders) with individual gender and class gender. Tables 15 and 16 present data about retention and attrition with age and marital status. Tables 17-19 present data about educational level, Christianity tenure, and class tenure. Tables 20 and 21 examine retention and attrition (high/average attenders and low/no attenders) by numerical and spiritual/maturational growth opinion and teaching style. Tables 22 and 23 present data about close friends in class and church

location. Tables 24 and 25 display data about retention and attrition with class attendance (persons present) and church size. In addition to number of responses and totals, percentages of responses are offered. Where helpful, a variety of figures (bar and pie charts) are presented to emphasize and/or simplify data found in tables. Some figures present numbers of responses while others focus on percentages of responses. Explanation of the findings in the tables and figures is presented following each table and/or figure.

Table 13. Cross tabulation of retention and attrition with individual gender

	Female		Male		Total	
	n	%	*n*	%	*n*	%
Low/No Attenders	26	68.4	12	31.6	38	100.0
High/Average Attenders	418	61.4	263	38.6	681	100.0
Total	444	61.8	275	38.2	719	100.0

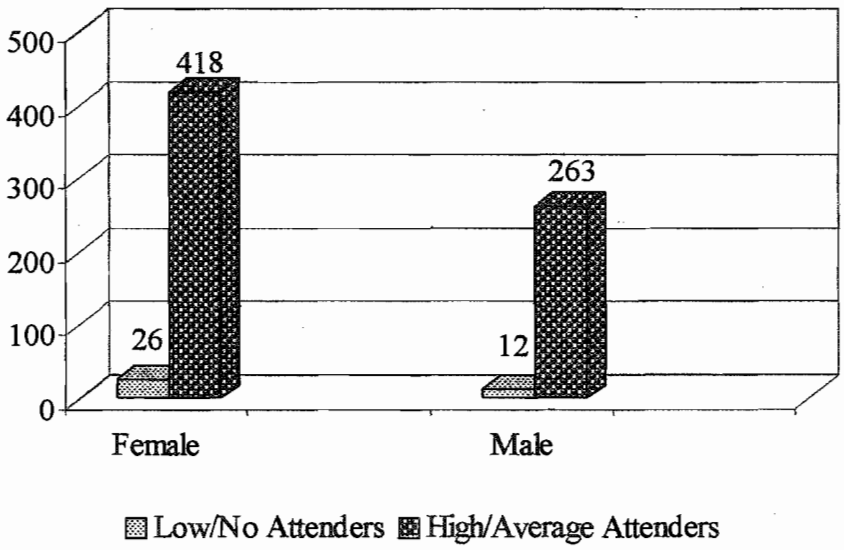

Figure 2. Retention and attrition responses by individual gender

Table 13 presents cross tabulation data about retention (high/average attenders) and attrition (low/no attenders) with individual gender. In Table 13, percentages of male and female respondents for both groups are fairly close with a lower percentage of male low/no attenders. Females make up slightly more than two-thirds (68.4%) of low/no attenders while females make up slightly less than two-thirds (61.4%) of high/average attenders. Figure 2 displays the higher number of responses by females for both low/no attenders and high/average attenders. More than twice as many female low/no attenders responded as did male low/no attenders.

Table 14. Cross tabulation of retention and attrition with class gender

	Mixed $n = 373$		Male $n = 35$		Female $n = 115$		Total $n = 523$	
	n	%	*n*	%	*n*	%	*n*	%
Low/No Attenders	9	81.8	-	0.0	2	18.2	11	100.0
High/Average Attenders	364	71.1	35	6.8	113	22.1	512	100.0
Total	373	71.3	35	6.7	115	22.0	523	100.0

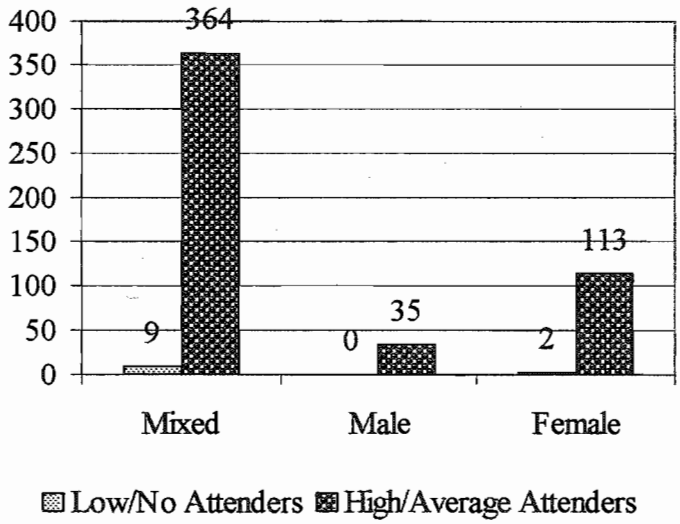

Figure 3. Retention and attrition responses by class gender

Table 14 presents cross tabulation data about retention (high/average attenders) and attrition (low/no attenders) with class gender. The largest percentage of both groups responding to the instrument attended mixed (or coed) classes. The smallest number of respondents was in all male classes. No low/no attenders were reported from male classes. Figure 3 points out that only 11 low/no attenders were present or were willing to respond in class when instruments were completed. More than 3 times as many respondents were in mixed classes as were in female classes.

Table 15. Cross tabulation of retention and attrition with age

		18-29	30-39	40-49	50-59	60-69	70+	Total
Low/No Attenders	*n*	7	6	3	10	5	8	39
	%	17.9	15.4	7.7	25.6	12.8	20.5	100.0
High/Average Attenders	*n*	42	84	95	134	144	188	687
	%	6.1	12.2	13.8	19.5	21.0	27.4	100.0
Total	*n*	49	90	98	144	149	196	726
	%	6.7	12.4	13.5	19.8	20.5	27.0	100.0

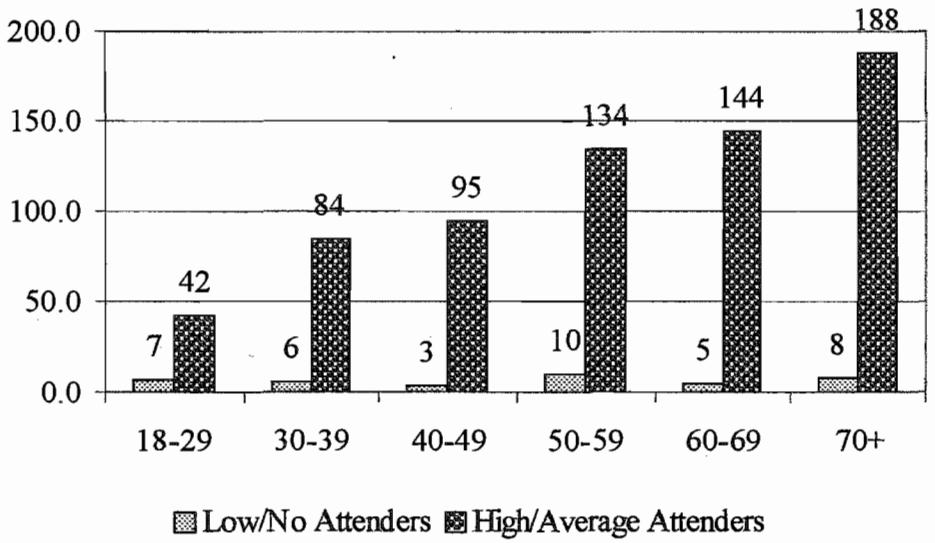

Figure 4. Retention and attrition responses by age

Table 15 presents cross tabulation data about retention and attrition (high/average and low/no attenders) with age. Data show a higher percentage of low/no attenders (33.3) under the age of 40 than high/average attenders (18.3%) and a lower percentage of low/no attenders (33.3%) over the age of 59 than high/average attenders (48.4%). Figure 4 clearly displays the increasing number of responses from high/average attenders as age increases. Low/no attenders are spread over the age groupings with the smallest group between 40 and 49 years of age.

Table 16. Cross tabulation of retention and attrition with marital status

		Divorced	Married	Separated	Single	Widowed	Total
Low/No Attenders	*n*	4	27	-	2	6	39
	%	10.3	69.2	-	5.1	15.4	100.0
High/Average Attenders	*n*	51	499	5	43	93	691
	%	7.4	72.2	0.7	6.2	13.5	100.0
Total	*n*	55	526	5	45	99	730
	%	7.5	72.1	.7	6.2	13.6	100.0

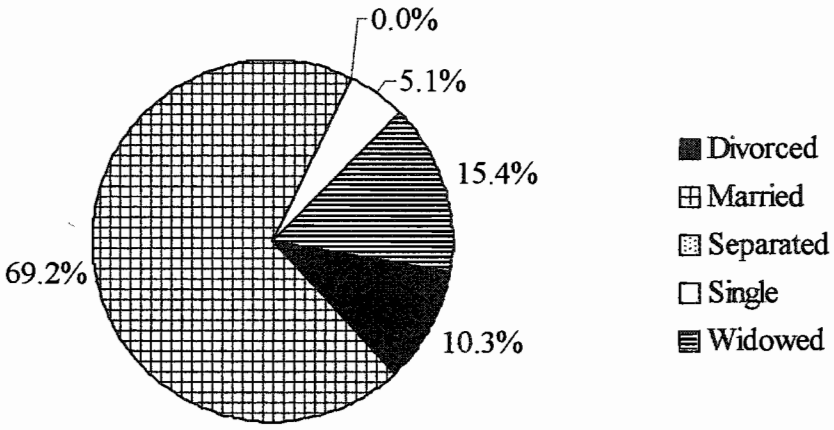

Figure 5. Marital status responses for low/no attenders

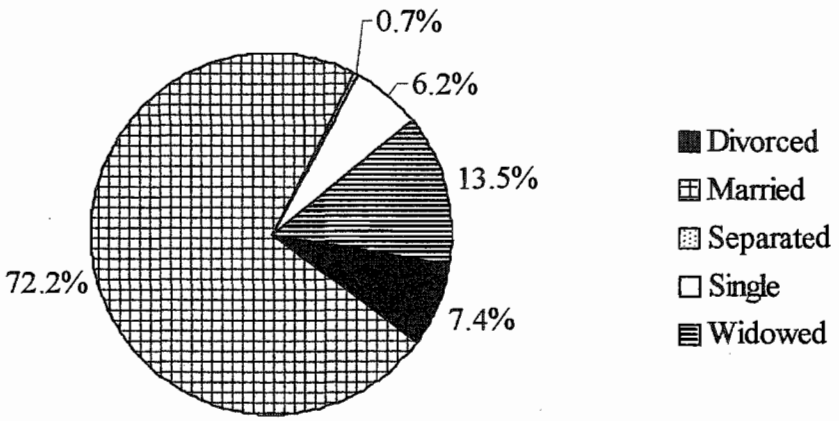

Figure 6. Marital status responses for high/average attenders

Table 16 presents cross tabulation data about retention and attrition (high/average and low/no attenders) with marital status. While numbers of responses are widely different, percentages of each marital status for both groups are similar. Figures 5 and 6 graphically display the percentages of the five marital statuses of each group (low/no attenders and high/average attenders). The highest number and highest percentage of responses in both groups are from those who were married: low/no attenders (69.2%) and high/average attenders (72.2%). Second highest for both groups are responses from those who were widowed: low/no attenders (15.4%) and high/average attenders (13.5%). The lowest number and percentage of responses are from those who are separated. In fact, none of the 5 survey respondents identifying themselves as separated are low/no attenders. Single respondents make up the second smallest marital status for both groups.

Table 17. Cross tabulation of retention and attrition with educational level

		DNCHS	GHS	SC	GC	SGW	CGD	Total
Low/No Attenders	*n*	3	17	9	6	3	1	39
	%	7.7	43.6	23.1	15.4	7.7	2.6	100.0
High/Average Attenders	*n*	86	266	177	79	24	52	684
	%	12.6	38.9	25.9	11.5	3.5	7.6	100.0
Total	*n*	89	283	186	85	27	53	723
	%	12.3	39.1	25.7	11.8	3.7	7.3	100.0

Note: DNCHS = did not complete high school; GHS = graduated high school/GED; SC = some college; GC = graduated college; SGW = some graduate work; CGD = completed graduate degree

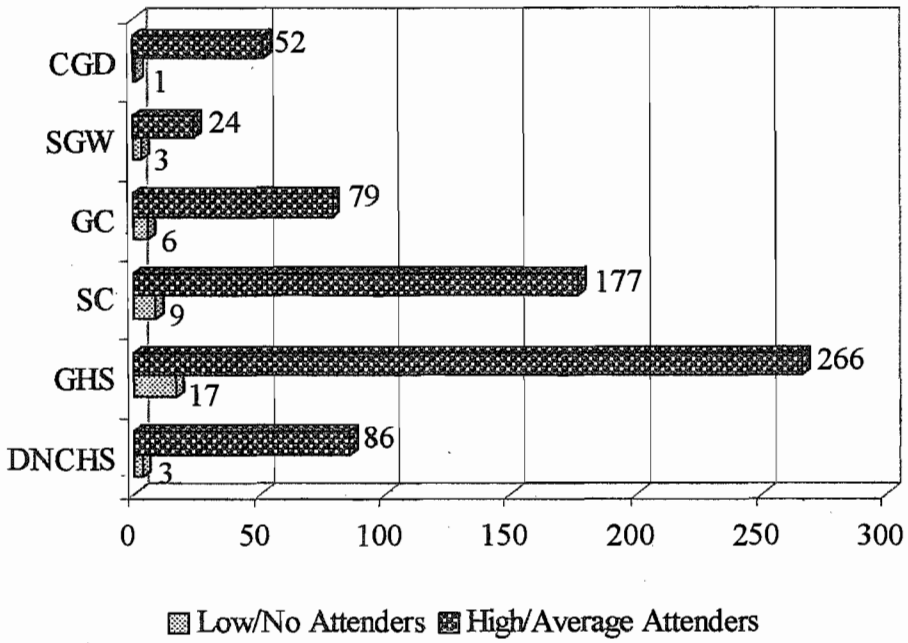

Figure 7. Retention and attrition responses by educational level

Table 17 presents data about retention and attrition with educational level. A higher percentage of high/average attenders (12.6%) report having not completed high school than low/no attenders (7.7%). Also, a higher percentage of high/average attenders

(7.6%) report having completed a graduate degree than low/no attenders (2.6%). Low/no attenders report higher percentages for graduating high school (by 4.7%), graduating college (by 3.9%) and completing some graduate work (by 4.2%) than do high/average attenders. Figure 7 displays response data showing that about two-thirds of both groups graduated high school or completed some college: 66.7% of low/no attenders and 64.8% of high/average attenders. The lowest number of respondents completed a graduate degree (low/no) and did some graduate work (high/average).

Table 18. Cross tabulation of retention and attrition with years as a Christian

		NC	<1	1-2	3-5	6-10	11-20	21-30	31+	Total
Low/No Attenders	*n*	-	-	1	1	2	9	9	17	39
	%	-	-	2.6	2.6	5.1	23.1	23.1	43.6	100.0
High/Average Attenders	*n*	1	4	14	29	30	91	117	404	690
	%	0.1	0.6	2.0	4.2	4.3	13.2	17.0	58.6	100.0
Total	*n*	1	4	15	30	32	100	126	421	729
	%	.1	.5	2.1	4.1	4.4	13.7	17.3	57.8	100.0

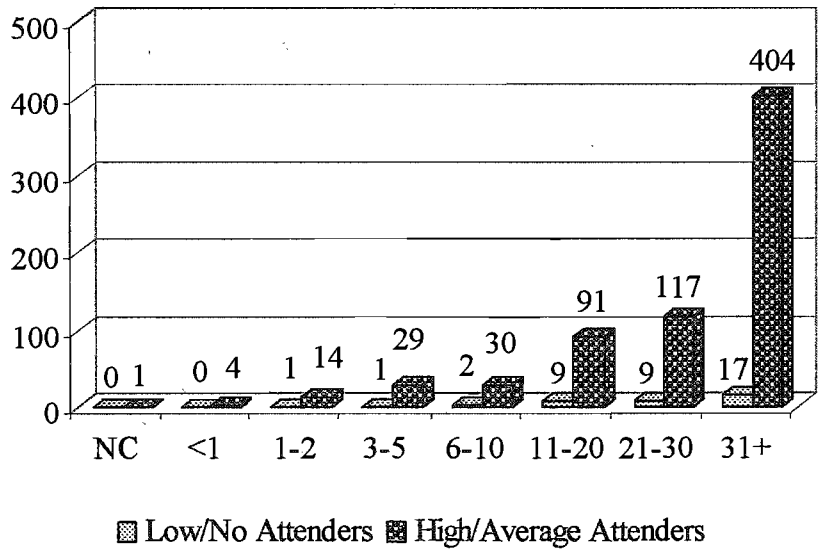

Figure 8. Retention and attrition responses by years as a Christian

Table 18 cross tabulates retention and attrition with Christianity tenure (years as a Christian). Figure 8 displays numbers of respondents which increase for both groups as years as a Christian increase. Percentages are higher for low/no attenders for all categories except those of not a Christian (NC), less than 1 year, and greater than 30 years. The great majority of both groups had been Christians for more than 10 years: 88.8% of high/average attenders and 89.8% of low/no attenders. As a result, both groups reported few who had been Christians for less than 11 years.

Table 19. Cross tabulation of retention and attrition with years as class member

		<1	1-2	3-5	6-10	11-20	21-30	31+	Total
Low/No Attenders	*n*	10	9	8	4	5	3	-	39
	%	25.6	23.1	20.5	10.3	12.8	7.7	-	100.0
High/Average Attenders	*n*	69	137	178	126	99	45	41	695
	%	9.9	19.7	25.6	18.1	14.2	6.5	5.9	100.0
Total	*n*	79	146	186	130	104	48	41	734
	%	10.8	19.9	25.3	17.7	14.2	6.5	5.6	100.0

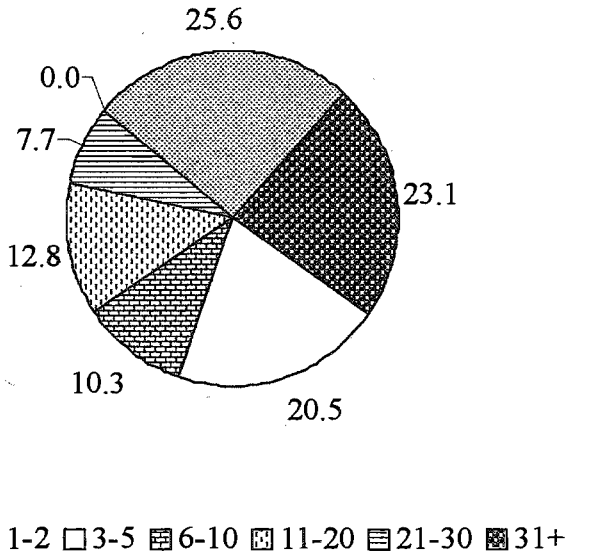

Figure 9. Years as a class member as a percentage of low/no attenders

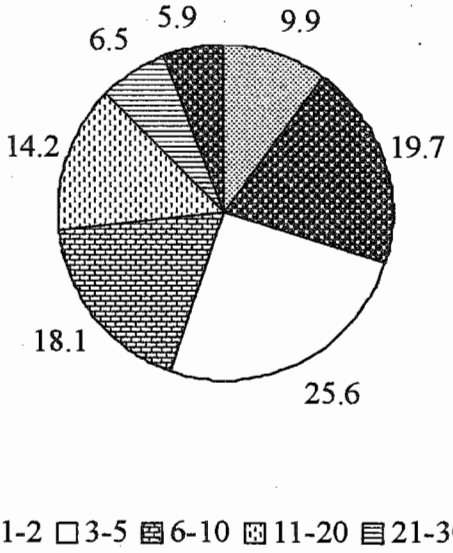

Figure 10. Years as a class member as a percentage of high/average attenders

Table 19 presents data about retention and attrition with years as a class member showing that high/average attenders generally reported longer class membership tenure. One way to observe this is to examine in Figures 9 and 10 the percentage of persons who had been class members for 2 years or less (the lowest 2 categories): 48.7% for low/no attenders and 29.6% for high/average attenders. Two of the obvious differences in the figures can be seen for those who had been class members for less than 1 year and for those who had been class members for 6 to 10 years. Another way to observe this is to notice in Table 19 the generally declining number of reporting low/no attenders as tenure increases. Numbers and percentages of high/average attenders increase through 3 to 5 years of tenure and then decline thereafter. On the other hand, 70.4% of high/average attenders and 51.3% of low/no attenders had been class members for 3 years or more.

Table 20. Cross tabulation of retention and attrition with class numerical and spiritual/maturation growth opinion

		Numerical			Spiritual/Maturational		
		Yes	No	Total	Yes	No	Total
Low/No Attenders	*n*	18	17	35	35	3	38
	%	51.4	48.6	100.0	92.1	7.9	100.0
High/Average Attenders	*n*	357	330	687	661	27	688
	%	52.0	48.0	100.0	96.1	3.9	100.0
Total	*n*	375	347	722	696	30	726
	%	51.9	48.1	100.0	95.9	4.1	100.0

Table 20 presents cross tabulation data about retention (high/average attenders) and attrition (low/no attenders) with class numerical and spiritual/maturational growth opinions. In Table 20, both groups of attenders are slightly positive about class numerical growth. Only a total of 28 more individuals responded positively than those who respond negatively. In contrast, both groups are significantly affirming of class spiritual/maturational growth taking place. High/average attenders are only slightly (4.0%) more positive than low/no attenders. Only 30 out of 726 respondents answered negatively.

Table 21. Cross tabulation of retention and attrition with teaching style

		Lecture	Question & Answer	Discussion	Not Listed	Total
Low/No Attenders	*n*	5	6	36	1	38
	%	13.2	15.8	68.4	2.6	100.0
High/Average Attenders	*n*	80	77	501	41	699
	%	11.4	11.0	71.7	5.9	100.0
Total	*n*	85	83	527	42	737
	%	11.5	11.3	71.5	5.7	100.0

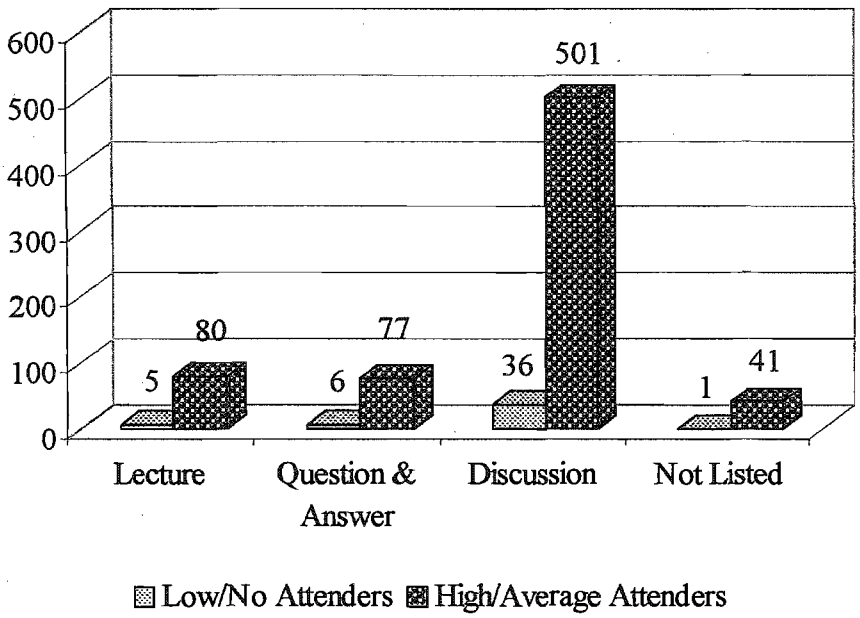

Figure 11. Retention and attrition responses by teaching style

Table 21 presents cross tabulation data about retention (high/average attenders) and attrition (low/no attenders) with class members as close friends. Table 21 displays similar percentages across the grid for both groups. For instance, 68.4% of low/no attenders responded with *discussion* while 71.7% of high/average attenders did the same. In Figure 11, the overwhelming response by both groups for the most frequently used teaching style is *discussion*. In fact, *discussion* is more than twice as frequent of a response as all other categories combined. The number of responses for *lecture* and for *question and answer* are fairly close for both groups. The least common response for both groups is *not listed* with only 42 responses combined. It should be noted that the responses for *not listed* include some for persons who ignored instructions by marking more than 1 response to this question.

Table 22. Cross tabulation of retention and attrition with close friends

		0	1	2	3	4	5	6+	Total
Low/No Attenders	*n*	9	9	6	4	5	4	2	39
	%	23.1	23.1	15.4	10.3	12.8	10.3	5.1	100.0
High/Average Attenders	*n*	53	67	113	105	71	44	231	684
	%	7.7	9.8	16.5	15.4	10.4	6.4	33.8	100.0
Total	*n*	62	76	119	109	76	48	233	723
	%	8.6	10.5	16.5	15.1	10.5	6.6	32.2	100.0

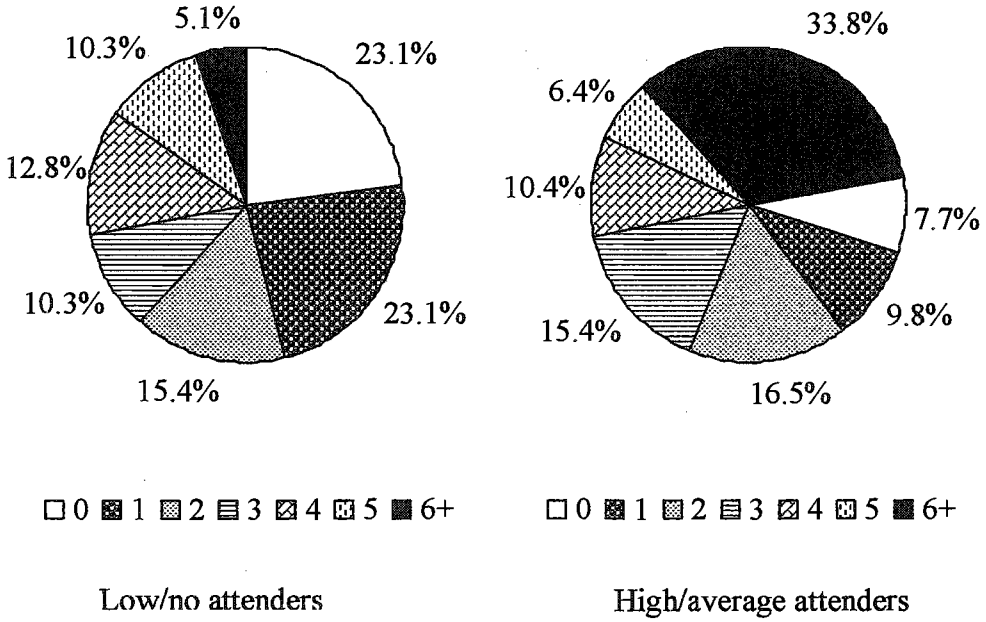

Figure 12. Close friends as a percentage of low/no attenders and high/average attenders

Table 22 presents cross tabulation data about retention and attrition with close friends in class. As number of friends increase, low/no attenders have a declining number of responses. The only exception is for those with 4 friends. High/average attender responses are mixed across the categories. The highest number and percentage reported are from those with 6 or more friends. In Figure 12, the data show that 46.2% of

low/no attenders reported no friends or 1 friend while only 17.5% of high/average attenders reported the same. On the other end of the spectrum, 33.8% of high/average attenders reported 6 or more friends while only 5.1% of low/no attenders reported the same. The middle range of friends is more similar for both groups than the high or low ends.

Table 23. Cross tabulation of retention and attrition with church location

		City	Suburban	Rural	Total
Low/No Attenders	*n*	3	6	3	12
	%	25.0	50.0	25.0	100.0
High/Average Attenders	*n*	166	292	79	528
	%	31.4	55.3	13.3	100.0
Total	*n*	169	298	73	540
	%	31.3	55.2	13.5	100.0

Note: Information was added to class member information from the teacher instrument; thus, all responses were from those completing instruments in class.

Table 23 presents cross tabulation data about retention and attrition with church location: city, suburban, and rural. In examination of church location in Table 23, more than half of the respondents identify the church location as *suburban*. Lower percentages of low/no attenders (25.0%) indicate that the church is in the *city* than do high/average attenders (31.4%). On the other hand, higher percentages of low/no attenders (25.0%) indicate the church location is *rural* than do high/average attenders (13.3%). More than twice as many high/average attenders responded with *city* as with *rural*. Unfortunately, data are low for low/no attenders: only a total of 12 low/no attenders responded in class.

Table 24. Cross tabulation of retention and attrition with class attendance

Persons Present		0-5	6-10	11-15	16-20	21-30	41+	Total
Low/No Attenders	*n*	-	2	1	3	2	4	12
	%	-	16.7	8.3	25.0	16.7	33.3	100.0
High/Average Attenders	*n*	57	64	81	87	112	117	518
	%	11.0	12.4	15.6	16.8	21.6	22.6	100.0
Total	*n*	57	66	82	90	114	121	530
	%	10.8	12.5	15.5	17.0	21.5	22.8	100.0

Note: Class attendance information added to member data from the teacher instrument; thus, all table responses were from instruments completed in class

Table 24 presents cross tabulation data about retention and attrition and class attendance (number of persons present). No responses were received from persons with class attendance between 31 and 40. The number of low/no attenders present in class vary across the class attendance categories. On the other hand, numbers and percentages of high/average attenders increase as the size of the class increases. More than 60% of both groups are in classes with an attendance of 16 or more persons. No responses are recorded from low/no attenders in classes with attendance of 5 or fewer; 57 high/average attenders responded from classes of that size.

Table 25. Cross tabulation of retention and attrition with church size

Sunday School Average Attendance		Small 0-49	Medium 50-199	Large 200+	Total
Low/No Attenders	*n*	3	19	19	41
	%	7.3	46.3	46.3	100.0
High/Average Attenders	*n*	80	306	315	701
	%	11.4	43.7	44.9	100.0
Total	*n*	83	325	334	742
	%	11.2	43.8	45.0	100.0

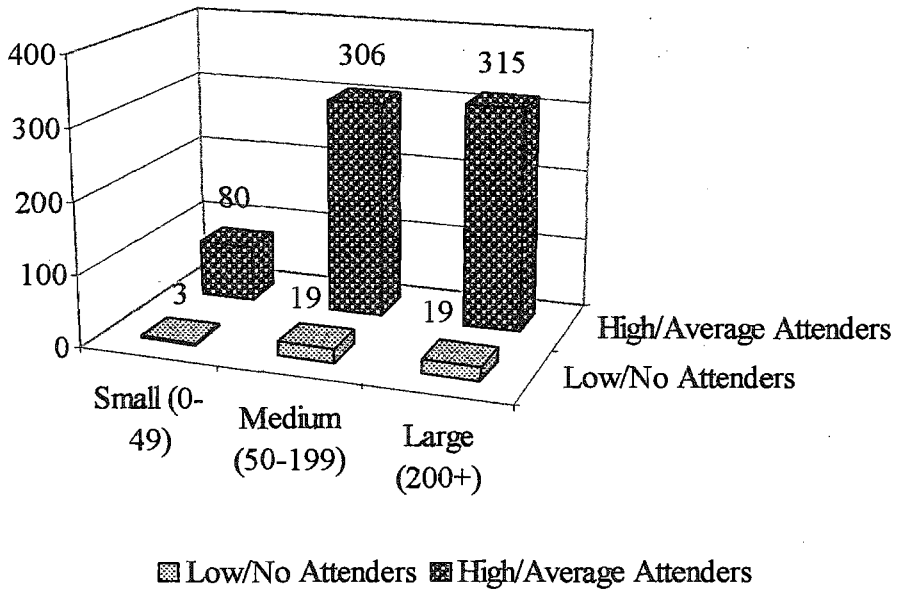

Figure 13. Retention and attrition responses by church size

Table 25 presents cross tabulation data about retention and attrition (high/average and low/no attenders) and church size. Percentages of low/no attender responses and those of high/average attenders are nearly the same across the table. Figure 13 shows numbers of responses are least for both groups (low/no and high/average attenders) from those in small churches averaging fewer than 50 in Sunday School attendance. Reponses are fairly balanced, slightly favoring large churches averaging more than 200 in Sunday School, between those identifying medium churches and large churches. A combined total of 88.8% of low/no and high/average responses were from medium and large churches.

Question 6: Learning Environment Factor Variances by Demographics

The next set of statistics display findings relative to the sixth research question: In what ways do learning environment factors vary by demographic factors? In

Appendix 5, triangulated response (learning environment factor) distributions are presented in tabular form in Appendix 1 order along with means and standard deviations. In this section, overview/summary tables are presented of top and bottom five learning environment factors by each demographic variable drawn from tables in Appendix 5. Following each overview/summary table, explanation is offered.

The first summary/overview table, Table 26, compares the top and bottom five learning environment factors by church size with data drawn from Tables A24-A26 in Appendix 5. Table 27 compares the top and bottom five factors by class attendance with data drawn from Tables A27-A29 in Appendix 5. Also, Table 28 compares the top and bottom learning environment factors by class gender with data drawn from Tables A30 and A31 in Appendix 5. Additional information is presented in Table 29 that compares the top and bottom five factors by age with data drawn from Tables A32-A34 in Appendix 5.

Table 30 compares the top and bottom five learning environment factors by educational level with data drawn from Tables A35-A37 in Appendix 5. Table 31 compares the top and bottom five learning environment factors by marital status with data drawn from Tables A38-A40 in Appendix 5. In continuing to respond to the sixth research question, Table 32 compares the top and bottom five learning environment factors by salvation length with data drawn from Tables A41-A44 in Appendix 5. Table 32 compares the top five and the bottom five learning environment factors by membership length with data drawn from Tables A45-A48 in Appendix 5. Finally, Table 33 compares the top and bottom five learning environment factors by number of close friends in class with data drawn from Tables A49-A52 in Appendix 5.

Table 26. Comparison of top and bottom five learning environment factors for each church size ranked by means

Rank	Top Five								
	Small Churches			Medium Churches			Large Churches		
	Factor	*n*	Mean	Factor	*n*	Mean	Factor	*n*	Mean
1	14	83	12.57	14	306	12.60	14	308	12.42
2	1	83	12.46	15	318	12.34	2	323	12.29
3	2	84	12.39	2	315	12.28	15	323	12.26
4	15	82	12.39	11	309	12.25	11	323	12.20
5	11	82	12.32	1	328	12.22	1	319	12.09
	Bottom Five								
24	3	77	7.87	3	300	8.38	3	303	8.09
23	4	74	8.77	4	293	8.85	4	297	9.37
22	17	81	9.74	21	303	10.21	6	322	10.04
21	6	84	10.18	6	316	10.29	9	333	10.06
20	21	83	10.29	9	307	10.43	21	313	10.28

Note: Factor 14 = *Peers: General*; 1 = *Divine Involvement*; 15 = *Peers: Relationship-Building in Class*; 2 = *Divine Involvement: Transformed Lives*; 11 = *Teacher: General*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 17 = *Group Size*; 21 = *Participation: Teaching Methods*; 6 = *Proxemics and Territoriality*; 9 = *Temperature, Ventilation, and Humidity*

In Table 26, all top five factors are shared by all 3 church sizes. The top factor for all 3 is *Peers: General*. The factor with the greatest difference in ranking in Table 26 is *Divine Involvement*, which ranks second for small churches and fifth for medium and large churches. All five top factors have means in a fairly narrow range, between 12.09 and 12.60. Also, only 4 of the bottom five factors are shared by all church sizes. The one difference is that small churches include *Group Size* in the bottom five while medium and large churches include *Temperature, Ventilation, and Humidity*. The bottom 2 factors, *Physical Arrangement* and *Flexibility*, are ranked the same by all church sizes; means are similar. The means of bottom five factors range from 7.87 to 10.43. A comparison of factor means in Tables A24-A26 in Appendix 5 reveals that 12 of the highest factor means (one tie) are from persons in small churches. Nine of the highest

factor means (one tie) are from persons in medium churches while persons in large churches score only 4 of the highest.

Table A14 in Appendix 4 examines the impact of church size upon factors. Eight factors are impacted at an ANOVA significance of 95% or more (.050 or less). Four physical and 1 social factor have a significance of .000: *Flexibility*; *Aesthetics and Tidiness*; *Temperature, Ventilation, and Humidity*; *Odors, Seating, and Noise*; and *Group Size*. Two physical factors and 1 social factor range from .006 to .029: *Physical Arrangement*; *Room Size*; and *Teacher: Classroom Management*.

Table 27. Comparison of top and bottom five learning environment factors for class attendance size

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	0-5	F	1	14	15	11	2	Bottom Five	3	4	6	17	9
		n	91	86	89	91	90		85	83	89	86	88
		M	12.33	12.26	12.18	12.13	12.07		7.76	9.23	10.03	10.08	10.25
	6-10	F	14	2	1	15	11		3	4	9	6	17
		n	112	112	112	113	114		111	109	112	114	110
		M	12.71	12.46	12.41	12.37	12.32		8.24	9.42	10.35	10.52	10.56
	11-15	F	14	1	11	15	1		3	4	9	6	21
		n	155	158	154	157	156		154	146	157	158	158
		M	12.50	12.33	12.29	12.18	12.15		8.32	9.58	9.76	10.23	10.23
	16-20	F	14	15	2	11	1		3	4	6	21	9
		n	62	73	71	74	73		63	65	73	71	72
		M	12.58	12.36	12.18	11.93	11.86		8.32	9.83	9.92	10.07	10.32
	21-30	F	14	13	2	11	15		4	3	6	21	9
		n	58	58	58	54	61		53	53	58	50	56
		M	12.66	12.48	12.41	12.39	12.31		7.68	8.64	9.72	9.92	10.41
	41+	F	2	14	16	15	13		3	4	9	6	21
		n	37	37	38	37	36		37	35	37	38	36
		M	13.16	12.86	12.79	12.57	12.50		7.68	8.09	10.14	10.37	10.86

Note: F = Factor; M = Mean; R = Rank; Factor 1 = *Divine Involvement*; 14 = *Peers: General*; 15 = *Peers: Relationship-Building in Class*; 11 = *Teacher: General*; 2 = *Divine Involvement: Transformed Lives*; 13 = *Teacher: Classroom Management*; 16 = *Peers: Relationship-Building outside of Class;* 3 = *Physical Arrangement*; 4 = *Flexibility*; 6 = *Proxemics and Territoriality*; 17 = *Group Size*; 9 = *Temperature, Ventilation, and Humidity*; 21 = *Participation: Teaching Methods*

Table 27 summarizes top and bottom five differences between learning environment factors by classes attendance (see Tables A27-A29 in Appendix 5). Many similarities are exhibited. Classes of all sizes share 3 of the top five factors: *Divine Involvement: Transformed Lives*; *Peers: General*; and *Peers: Relationship-Building in Class* (1 spiritual and 2 social factors). *Peers: General* ranks first or second for every class size. All class sizes from 0 to 20 include *Divine Involvement* in the top five factors. All class sizes from 0 to 30 include *Teacher: General* in the top five. The 2 largest class sizes (21 to 30 and 41 and more) include *Teacher: Classroom Management* in the top five factors. The class with 41 or more persons in attendance includes *Peers: Relationship-Building outside of Class*. Interestingly, the highest mean scores for the top five factors are found in the one largest class size (41 or more). Classes with an attendance between 6 and 10 and classes with an attendance between 21 and 30 tend to have the next highest factor mean scores. Mean scores range from a low of 12.07 to a high of 13.16.

Every class size shares four of the bottom five factors in Table 27: *Physical Arrangement*; *Flexibility*; *Proxemics and Territoriality*; and *Temperature, Ventilation, and Humidity*. The smallest classes (attendance between 0 and 10) share a fifth factor: *Group Size*. The larger classes (with an attendance of 11 or more) share a fifth factor: *Participation: Teaching Methods*. *Physical Arrangement* has the lowest mean for every class size except attendance between 21 and 20 persons where *Physical Arrangement* was next to last. Mean scores range from a low of 7.68 to a high of 10.86.

A comparison of factor means in Tables A27-A29 in Appendix 5 reveals that the 1 participating class with 41 or more persons in attendance has 13 of the highest

factor means while classes with 5 to 10 person in attendance are second with 6 of the highest factor means. If the 1 largest class is set aside from consideration, classes with 5 to 10 persons have 13 of the highest factor means followed by classes with 21 to 30 person with 9 of the highest factor means. Classes with 0 to 5 and those with 11 to 15 person in attendance score none of the highest factor means. An examination of that same data shows that classes with 0 to 5 in attendance have 9 of the lowest factor means.

Table 28. Comparison of top and bottom five learning environment factors by class gender

Rank	Top Five Mixed			Top Five Male			Top Five Female		
	Factor	*n*	Mean	Factor	*n*	Mean	Factor	*n*	Mean
1	14	352	12.61	14	32	11.84	14	107	12.69
2	2	359	12.47	1	34	11.79	2	112	12.46
3	15	361	12.32	23	34	11.74	15	113	12.45
4	11	355	12.32	15	35	11.68	1	116	12.22
5	1	369	12.28	11	35	11.63	11	113	12.19
	Bottom Five Mixed			Bottom Five Male			Bottom Five Female		
24	3	343	8.20	3	32	8.31	3	106	8.13
23	4	335	9.08	4	31	9.03	4	106	9.49
22	6	358	10.16	6	34	9.82	9	109	10.06
21	9	357	10.18	24	35	10.11	21	112	10.22
20	21	347	10.39	21	33	10.12	6	116	10.31

Note: Factor 14 = *Peers: General*; 2 = *Divine Involvement: Transformed Lives*; 1 = *Divine Involvement*; 15 = *Peers: Relationship-Building in Class*; 23 = *Participation: Conflicts*; 11 = *Teacher: General*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 6 = *Proxemics and Territoriality*; 9 = *Temperature, Ventilation, and Humidity*; 24 = *Demographic, Cultural, and Personality Factors*; 21 = *Participation: Teaching Methods*

Next, Table 28 summarizes top and bottom five factor differences (see Tables A30 and A31 in Appendix 5) between learning environment factors by class gender: mixed, male, and female classes. Several notable findings are presented. All 3 class genders share 4 of the top five learning environment factors (1 spiritual factor and 3 social factors): *Peers: General*; *Divine Involvement*; *Peers: Relationship-Building in*

Class; and *Teacher: General*. Similarly, all 3 class genders share 4 of the bottom five learning environment factors (3 physical factors and 1 social factor): *Physical Arrangement*; *Flexibility*; *Proxemics and Territoriality*; and *Participation: Teaching Methods*.

Male classes replace *Divine Involvement: Transformed Lives* in their top five factors with *Participation: Conflicts*. In addition, male classes drop *Temperature, Ventilation, and Humidity* out of the bottom five factors and replace it with *Demographic, Cultural, and Personality Factors*. Male class top five factor means tend to be lower than those of mixed or female classes. The number of male class responses is notably smaller than mixed or female class responses. Male top five scores range from a low of 11.63 to a high of 11.84. Male bottom five scores range from a low of 8.31 to a high of 10.12.

Also, in Table 28, mixed (coed) classes and female classes share all top five and bottom five factors. In fact, the top 3 and bottom 2 factors have the exact same ranking. Other than *Physical Arrangement*, bottom five male class means tend to be lower than mixed or female classes. Mixed and female class means are fairly parallel with the greatest difference for *Flexibility* where a difference of 0.41 is reported. Female class top five scores range from a low of 12.19 to high of 12.69. Female bottom five scores range from a low of 8.13 to a high of 10.31. Mixed class top five scores range from 12.28 to 12.61. Mixed class bottom five factor mean scores range from 8.20 to 10.39.

A comparison of learning environment factor means in Tables A30-A31 in Appendix 5 reveals that 11 of the highest factor means (one tie) are scored by female

classes closely followed by mixed classes with 10 of the highest factor means (one tie). Female classes have the highest means for 4 of the physical factors and 7 of the social factors while mixed classes have the highest means for 2 of the spiritual, 2 of the physical, and 6 of the social factors. Male classes are far behind with only 4 of the highest factor means: 3 physical and 1 social. On the other end of the spectrum, male classes have 18 of the lowest factor means while mixed and female classes each have 3 of the lowest factor means.

Table 29. Comparison of top and bottom five learning environment factors by age

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	18-29	F	11	14	15	18	5	Bottom Five	3	4	24	21	17
		n	49	47	49	45	49		48	48	49	49	49
		M	12.24	11.89	11.71	11.69	11.57		7.42	9.02	9.29	9.86	10.02
	30-39	F	11	14	15	1	2		3	4	24	21	17
		n	92	91	92	90	91		90	88	90	88	93
		M	12.42	12.37	12.28	12.18	12.18		8.13	9.58	9.90	10.16	10.25
	40-49	F	14	15	2	11	1		3	4	9	6	24
		n	95	98	99	99	98		96	93	99	99	99
		M	12.66	12.47	12.41	12.35	12.35		8.04	9.24	10.03	10.07	10.45
	50-59	F	14	11	15	1	2		3	4	6	21	9
		n	142	142	142	141	141		141	139	142	143	144
		M	12.80	12.55	12.50	12.42	12.41		8.13	9.15	10.37	10.61	10.61
	60-69	F	14	2	1	15	11		3	4	6	9	21
		n	138	144	145	145	141		130	135	145	142	140
		M	12.52	12.47	12.33	12.32	12.16		8.60	8.71	10.06	10.31	10.39
	70+	F	14	2	15	1	5		3	4	21	6	9
		n	172	182	183	191	181		161	156	169	179	171
		M	12.42	12.31	12.22	12.05	11.97		8.22	8.93	10.03	10.17	10.29

Note: F = Factor; M = Mean; R = Rank; Factor 11 = *Teacher: General*; 14 = *Peers: General*; 15 = *Peers: Relationship-Building in Class*; 2 = *Divine Involvement: Transformed Lives*; 1 = *Divine Involvement*; 18 = *Psychological Factors*; 5 = *Room Size*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 24 = *Demographic, Cultural, and Personality Factors*; 9 = *Temperature, Ventilation, and Humidity*; 6 = *Proxemics and Territoriality*; 21 = *Participation: Teaching Methods*; 17 = *Group Size*

Table 29 summarizes top and bottom five differences between learning environment factors by age (see Tables A32-A34 in Appendix 5). All age groups share only 2 of the top five factors (both social factors): *Peers: General* and *Peers: Relationship-Building in Class*. One of the top five factors, a social factor, is found in all groups except the oldest (70 years of age or older): *Teacher: General*. Two of the top five factors, both spiritual factors, are found in all age groups except the youngest (18 to 29 years old): *Divine Involvement* and *Divine Involvement: Transformed Lives*. *Room Size* is included as the fifth factor for the youngest and the oldest groups. The youngest group includes *Psychological Factors* as the fourth factor. Interestingly, the middle 4 groups (30 to 69 years old) include the exact same top five, each in a unique order. The top factor for the youngest 2 groups (18 to 39 years old) is *Teacher: General*, and the second highest factor is *Peers: General*. On the other hand, the top factor for those 40 and older is *Peers: General*.

Top five scores for the youngest age group (ages 18 to 29) tend to be lower than other age groups. Top five scores for ages 50 to 59 tend to be higher than other age groups. Scores increase as age increases up to ages 50 to 59, and then they decrease slightly as age increases. Overall, scores for the top five factors range from 11.57 to 12.80. The smallest number of instruments was completed by those the youngest age group (ages 18 to 29), and the largest number of instruments was completed by the oldest age group (70 years old or older).

The lowest 2 factors (*Physical Arrangement* and *Flexibility*) are shared in the same order by all age groups. The 4 oldest age groups (40 and older) share 2 physical factors: *Proxemics and Territoriality* and *Temperature, Ventilation, and Humidity*. One

social factor (*Participation: Teaching Methods*) is present in the bottom five of the 3 oldest age groups (50 and older) and the 2 youngest age groups (ages 18 to 39). The 3 youngest age groups (ages 18 to 49) share 1 of the bottom five factors: *Demographic, Cultural, and Personality Factors*. Those 18 to 39 years old include 1 factor: *Group Size*.

Scores for the bottom five are not as consistent as those from the top five. On average, scores from the youngest age group (ages 18 to 29) tend to be lower than other age groups. More of the bottom five scores from ages 50 to 59 are higher. Bottom five scores range from a low of 7.42 to high of 10.61.

In Table A6 of Appendix 4, where the impact of age is presented, 17 factors are impacted at an ANOVA significance of 95% or more (.050 or less). Three of the factors (all social factors) include *Participation: General*; *Participation: Meeting Length*; and *Demographic, Cultural, and Personality Factors* with a significance of .000. Seven (1 spiritual, 1 physical, and 5 social) factors range between .001 and .007: *Divine Involvement: Transformed Lives*; *Physical Arrangement*; *Aesthetics and Tidiness*; *Teacher: General*; *Teacher: Classroom Management*; *Peers: General*; and *Group Size*. Seven factors (1 spiritual, 2 physical, and 4 social) range from .012 and .035: *Divine Involvement*; *Flexibility*; *Lighting, Writing, and Reading*; *Teacher: Social Interaction*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; and *Participation: Teaching Methods*. Thus, both spiritual, 3 of the 8 physical, and 12 of the 14 social factors are included.

A comparison of learning environment factor means in Tables A32-A34 in Appendix 5 reveals that ages 50 to 59 score 13 of the highest factor means (one tie): 1

spiritual, 4 physical, and 8 social. Ages 60 to 69 have 4 of the highest means while ages 70 and above and 40 to 49 each have 3 of the highest means and age 30 to 39 have 2 of the highest means. Ages 18 to 29 score none of the highest factor means while scoring 16 of the lowest factor means (one tie): 2 spiritual, 1 physical, and 13 social. Ages 40 to 49 have 4 of the lowest factor means while ages 60 to 69 have 4 of the lowest factor means and ages 70 and above have 2 of the lowest factor means.

Table 30. Comparison of top and bottom five learning environment factors by educational level

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	DNC	F	14	1	2	15	13	Bottom Five	4	3	6	21	9
		n	74	87	84	81	81		78	71	83	77	79
		M	12.31	12.29	12.13	12.10	11.88		8.64	8.65	9.96	10.05	10.15
	GHS	F	14	2	15	1	11		3	4	6	21	9
		n	268	273	277	276	275		254	252	276	266	272
		M	12.52	12.35	12.35	12.27	12.14		8.22	8.84	10.12	10.35	10.41
	SC	F	14	11	1	15	2		3	4	21	6	9
		n	179	181	184	186	185		180	176	178	183	181
		M	12.47	12.46	12.29	12.28	12.25		8.14	9.25	10.25	10.34	10.48
	GC	F	14	11	2	15	18		3	4	9	24	21
		n	82	84	84	86	83		85	80	86	86	83
		M	12.49	12.18	12.08	12.08	11.83		7.96	9.45	9.99	10.08	10.28
	SGW	F	11	15	14	2	23		3	4	21	6	17
		n	26	25	27	25	26		25	23	27	26	25
		M	12.73	12.48	12.33	12.28	12.04		7.88	8.83	9.59	9.73	10.12
	CGD	F	14	2	15	11	1		3	4	9	6	22
		n	54	55	54	54	52		53	53	54	54	54
		M	13.06	12.93	12.76	12.65	12.50		8.00	9.74	10.24	10.39	10.57

Note: DNC = did not complete high school; GHS = graduated high school; SC = some college; GC = graduated college; SGW = some graduate work; CGD = completed graduate degree; M = Mean; R = Rank; F = Factor; Factor 14 = *Peers: General*; 11 = *Teacher: General*; 1 = *Divine Involvement*; 2 = *Divine Involvement: Transformed Lives*; 15 = *Peers: Relationship-Building in Class*; 13 = *Teacher: Classroom Management*; 18 = *Psychological Factors*; 23 = *Participation: Conflicts*; 4 = *Flexibility*; 3 = *Physical Arrangement*; 6 = *Proxemics and Territoriality*; 21 = *Participation: Teaching Methods*; 9 = *Temperature, Ventilation, and Humidity*; 24 = *Demographic, Cultural, and Personality Factors*; 17 = *Group Size*; 22 = *Participation: Meeting Length*

Table 30 summarizes top and bottom five differences between factors by educational level (see Tables A35-A37 in Appendix 5). All 6 educational levels share 3 of the top five factors: *Peers: General*; *Peers: Relationship-Building in Class*; and *Divine Involvement: Transformed Lives*. In fact, the top factor is *Peers: General* by all levels except some graduate work where it ranks third. In addition, all education levels except did not complete high school share *Teacher: General*. Four of the 6 levels share *Divine Involvement*: did not complete high school, graduated high school, some college, and completed graduate degree. *Teacher: Classroom Management* makes the top five for those who did not complete high school, *Psychological Factors* for those who graduated college, and *Participation: Conflicts* for those with some graduate work. Graduated high school, some college, and completed graduate degree have the same top five factors in different order. Top five scores range from 11.83 to 13.06. Those who completed a graduate degree reported highest top five means. Those who graduated college reported some of the lowest scores.

All educational levels share 2 bottom-five factors: *Flexibility* and *Physical Arrangement*. *Physical Arrangement* is ranked last for all levels except did not complete high school which ranked it next to last. In addition, *Participation: Teaching Methods* is included by all educational levels except completed a graduate degree. All levels except graduated college include *Proxemics and Territoriality* in the bottom five, and all levels except for some graduate work include *Temperature, Ventilation, and Humidity* in the bottom five. Graduated college and completed a graduate degree include *Demographic, Cultural, and Personality Factors* and *Participation: Meeting Length* in the bottom five, respectively. Bottom five means range from 7.88 to 10.57. Those with some graduate

work reported the lowest bottom five factor means. Those who completed a graduate degree reported 3 of the highest bottom five factor means.

In Table A8 in Appendix 4, where the impact of educational level is presented, 9 factors are impacted at a significance of 95% or more (.050 or less). One social factor has a significance of .000: *Participation: Meeting Length.* The other 8 factors (2 spiritual, 2 physical, and 4 social) have a significance between .001 and .038: *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Flexibility*; *Aesthetics and Tidiness*; *Teacher: General*; *Peers: Relationship-Building outside of Class*; *Participation: Teaching Methods*; and *Participation: Conflicts.*

A comparison of learning environment factor means in Tables A35-A37 in Appendix 5 reveals that 13 of the highest factor means are scored by those who have completed a graduate degree: 2 spiritual, 3 physical, and 8 social. Those with some college had 5 of the highest factor means while those who did not complete high school had 3, those who had completed some graduate work had 2, and those who had graduated high school/completed a G.E.D. had 1. Those who had graduated college had none of the highest factor means. All educational levels have at least 1 of the lowest factor means. Those who had graduated college had 8 of the lowest learning environment factor means: 2 spiritual, 2 physical, and 4 social. Those who had completed some graduate work had 6 of the lowest factor means: 3 physical and 3 social. Those who did not complete high school had 5 of the lowest factor means: 2 physical and 3 social. Those who had graduated high school/completed a G.E.D. had 4 of the lowest factor means while those who had some college and those who had completed a graduate degree each had 1 of the lowest factor means.

Table 31. Comparison of top and bottom five learning environment factors by marital status

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	D	F	14	15	2	1	11	Bottom Five	3	4	21	6	9
		n	52	53	53	55	56		51	53	53	54	53
		M	12.81	12.75	12.75	12.71	12.38		8.43	9.28	10.51	10.59	10.66
	Ma	F	14	11	15	2	1		3	4	6	9	21
		n	505	513	518	520	516		492	487	520	514	500
		M	12.51	12.31	12.30	12.29	12.19		8.21	9.14	10.15	10.32	10.33
	Se	F	11	13	17	1	14		3	23	24	21	4
		n	4	4	5	5	4		5	4	5	5	4
		M	13.50	12.00	11.80	11.80	11.75		7.60	8.25	8.40	9.00	9.25
	Si	F	15	14	5	11	2		3	4	24	21	17
		n	45	43	44	43	44		42	41	45	44	43
		M	12.31	12.19	12.14	12.00	11.75		7.74	8.32	9.09	10.02	10.23
	W	F	14	2	1	15	5		3	4	9	6	21
		n	83	89	99	92	91		79	77	85	87	86
		M	12.53	12.44	12.26	12.18	11.89		8.14	8.87	9.91	10.11	10.23

Note: D = divorced; Ma = married; Se = separated; Si = single; W = widowed; F = Factor; M = Mean; R = Rank; Factor 14 = *Peers: General*; 11 = *Teacher: General*; 15 = *Peers: Relationship-Building in Class*; 13 = *Teacher: Classroom Management*; 2 = *Divine Involvement: Transformed Lives*; 17 = *Group Size*; 5 = *Room Size*; 1 = *Divine Involvement*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 23 = *Participation: Conflicts*; 21 = *Participation: Teaching Methods*; 6 = *Proxemics and Territoriality*; 24 = *Demographic, Cultural, and Personality Factors*; 9 = *Temperature, Ventilation, and Humidity*

Table 31 compares top and bottom five factors by marital status (see Tables A38-A40 in Appendix 5). Many previous comparisons of top five factors have shown multiple factors shared by all demographic variables. Only 1 top-five factor is shared by all 5 marital statuses: *Peers: General*. Even that factor is ranked from first to fifth. All marital statuses except separated share two of the top five factors: *Peers: Relationship-Building in Class* and *Divine Involvement: Transformed Lives*. All marital statuses except single share one top-five factor: *Divine Involvement*. All marital statuses except widowed share one top-five factor: *Teacher: General*. In addition, those who responded

as single and as widowed share 1 top-five factor: *Room Size*. Two of the top five factors are unique to the small number of those who are separated: *Teacher: Classroom Management* and *Group Size*. Top five scores range from 11.75 to 13.50. Those who are divorced have 4 of the highest top five factor means. Those who are separated have 4 of the lowest top five factors means followed by those who are single. Over 500 participants are married. The next highest group of scores belong to those identifying themselves as widowed.

In Table 31, 3 factors are displayed which are shared by all marital statuses: *Physical Arrangement*; *Flexibility*; and *Participation: Teaching Methods*. *Physical Arrangement* is the bottom factor in every case. In addition, those who are divorced, married, and widowed share 2 factors: *Proxemics and Territoriality* and *Temperature, Ventilation, and Humidity*. Those who are separated and those who are single share one factor: *Demographic, Cultural, and Personality Factors*. One of the bottom five factors is unique to those who are separated: *Participation: Conflicts*. One of the bottom five factors is unique to those who are single: *Group Size*. Interestingly, *Group Size* is included in the top five for those who are separated while included in the bottom five for those who are single.

Bottom five mean scores range from 7.60 to 10.66. Clearly those who are separated, followed closely by those who are single, report the lowest bottom five scores. In a similar way, the highest bottom five scores are clearly given by those who are divorced, followed by those who are married.

A comparison of learning environment factor means in Tables A38-A40 in Appendix 5 reveals that divorced persons score 12 of the highest factor means. Separated

and widowed persons each score 4 of the highest factor means while married and single persons each score 2 of the highest means. Separated persons score 16 of the lowest factor means.

Table 32. Comparison of top and bottom five learning environment factors by salvation length

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	NC	F	15	14	13	11	5	Bottom Five	3	4	24	17	19
		n	1	2	2	2	2		1	1	2	2	2
		M	12.00	12.00	12.00	12.00	12.00		9.00	9.00	9.50	10.00	10.00
	<1	F	15	14	1	18	17		3	4	6	2	16
		n	4	4	4	4	4		4	4	4	3	4
		M	13.50	13.50	13.00	12.50	12.50		8.00	9.25	10.25	10.67	11.00
	1-2	F	15	14	2	11	1		3	4	17	9	23
		n	15	12	15	14	14		14	14	15	15	15
		M	12.87	12.58	12.53	12.50	12.29		8.14	9.14	10.07	10.07	10.27
	3-5	F	1	14	15	2	16		3	4	24	6	9
		n	30	30	29	30	31		31	29	31	31	31
		M	12.63	12.57	12.55	12.37	12.29		7.84	8.59	9.94	10.00	10.26
	6-10	F	1	11	14	2	15		3	24	4	21	17
		n	33	33	32	33	33		33	32	32	33	33
		M	12.76	12.76	12.28	12.00	11.85		8.18	9.56	9.63	9.97	10.24
	11-20	F	14	15	11	1	2		3	4	6	24	21
		n	96	98	98	98	98		91	91	98	97	97
		M	12.36	12.28	12.17	12.09	12.07		7.99	9.32	10.15	10.21	10.26
	21-30	F	14	1	2	11	15		3	4	6	21	9
		n	125	126	123	128	129		119	125	127	123	125
		M	12.60	12.40	12.36	12.30	12.29		8.09	8.90	10.02	10.41	10.62
	31+	F	14	2	15	11	1		3	4	9	6	21
		n	386	406	404	395	411		377	366	394	402	387
		M	12.52	12.36	12.30	12.19	12.09		8.28	9.06	10.22	10.24	10.27

Note: NC = not a Christian; F = Factor; M = Mean; R = Rank; Factor 15 = *Peers: Relationship-Building in Class*; 1 = *Divine Involvement*; 14 = *Peers: General*; 11 = *Teacher: General*; 2 = *Divine Involvement: Transformed Lives*; 13 = *Teacher: Classroom Management*; 18 = *Psychological Factors*; 5 = *Room Size*; 17 = *Group Size*; 16 = *Peers: Relationship-Building outside of Class*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 24 = *Demographic, Cultural, and Personality Factors*; 6 = *Proxemics and Territoriality*; 9 = *Temperature, Ventilation, and Humidity*; 21 = *Participation: Teaching Methods*; 19 = *Expectation*; 23 = *Participation: Conflicts*

Table 32 compares top and bottom five learning environment factors by the number of years persons had been saved (see Tables A41-A44 in Appendix 5). Two quick statistics stand out in the display. First, the great majority of participants (more than 600) in this study had been Christians for more than 10 years. Second, very few persons who were not saved or who had been saved in the last 10 years were included in the study (less than 100). All salvation lengths share 2 of the top five learning environment factors: *Peers: General* and *Peers: Relationship-Building in Class*. *Peers: General* ranks as first by those who had been Christians for 11 or more years, second by those who had been Christians for less than 6 years or were not Christians, and third by those who had been Christians between 6 and 10 years. All salvation lengths except for Christians for less than 1 year share one of the top five learning environment factors, *Teacher: General*. All salvation lengths except those who were not a Christian share 1 of the top five factors, *Divine Involvement*. All salvation lengths of 1 year or more share another of the top five learning environment factor: *Divine Involvement: Transformed Lives*.

In addition, all five of the top learning environment factors are shared in different order by those who had been saved between 1 and 2 years and by those who had been saved for 6 or more years. Included in the top five factors for those who were not a Christian are *Teacher: Classroom Management* and *Room Size*. Included in the top five learning environment factors for those who had been Christians for less than 1 year are *Psychological Factors* and *Group Size*. Included in the top five for those who had been Christians between 3 and 5 years is the social factor, *Peers: Relationship-Building outside of Class*.

Top five learning environment factor means in Table 32 range from a low of 11.85 to a high of 13.50. The 4 participants identifying themselves as Christians for less than 1 year have the highest top five scores, followed by those who had been Christians between 1 and 2 years. The 2 individuals who were not Christians, followed by those who had been Christians between 11 and 20 years, recorded the lowest top five scores. Insufficient data were received from those who were not Christians and from those who had been Christians for less than 1 year to be able to make any substantial judgments about the significance of their scores.

All salvation lengths share 2 of the bottom five learning environment factors: *Physical Arrangement* and *Flexibility*. One of the bottom five factors, *Proxemics and Territoriality*, is shared by 5 of the 8 salvation lengths (less than 1, 3 to 5, 11 to 20, 21 to 30, and 31 plus). Salvation lengths greater than 5 years share another of the bottom five factors: *Participation: Teaching Methods*. Christians from 1 to 5 years and from 21 to 31 years plus reported the bottom five physical factor, *Temperature, Ventilation, and Humidity*. One social learning environment factor among the bottom five factors (*Demographic, Cultural, and Personality Factors*) was reported both by those who were not Christians and by those who had been Christians between 3 years and 20 years, inclusive.

In Table 32, those who were not a Christian, those who had been Christians between 1 and 2 years, and those who had been Christians between 6 and 10 years reported 1 other social learning environment factor, *Group Size*. Finally, 4 of the bottom five factors were reported only by 1 salvation length: *Expectation* (a social factor) by those not a Christian; *Divine Involvement: Transformed Lives* (a spiritual factor); *Peers:*

Relationship-Building outside of Class (a social factor) by those who had been Christians for less than 1 year; and *Participation: Conflicts* (a social factor) by those who had been Christians between 1 and 2 years.

Bottom five learning environment factor mean scores displayed in Table 32 range from a low of 7.84 to a high of 11.00. Again, the paucity of data by those not a Christian and those less than 1 year makes interpretation of the data questionable. If these 2 salvation lengths are set aside, the highest bottom five factor scores are reported by those with the greatest salvation lengths of 21 or more years. Those who had been saved between 3 and 10 years report the lowest bottom five learning environment factor scores.

Table A10 in Appendix 4 presents the impact of salvation length on learning environment factors. In that table, 3 of the 24 factors are impacted at an ANOVA level of significance of 95% or more (.050 or less). The factors include *Aesthetics and Tidiness* (a physical factor) at .010; *Participation: General* (a social factor) at .025; and *Demographic, Cultural, and Personality Factors* (a social factor) at .002.

Additional data are available in a comparison of learning environment factor means in Tables A38-A40 in Appendix 5. Those tables reveal that Christian for less than 1 year had 14 of the highest factor means while those not a Christian had 5, those Christian for 1 to 2 years and 6 to 10 years each had 3, and those Christian for 3 to 5 years had 1. On the opposite end of the spectrum, those not a Christian scored 10 of the lowest learning environment factor means while those Christian for 1 to 2 years and 3 to 5 years each had 4, those 6 to 10 years had 3, those 11 to 20 years had 2, and those less than 1 year had 1 of the lowest learning environment factor means.

Table 33. Comparison of top and bottom five learning environment factors by church membership tenure

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	NCM	F	14	15	11	2	7	Bottom Five	3	4	24	21	6
		n	24	26	27	26	26		23	25	26	27	27
		M	12.54	12.46	12.11	12.08	12.04		7.83	9.16	9.46	10.30	10.30
	<1	F	14	15	5	1	11		3	4	24	21	6
		n	45	48	47	47	46		45	44	47	47	48
		M	12.71	12.33	12.09	11.96	11.96		8.53	9.34	10.04	10.45	10.50
	1-2	F	14	11	15	1	2		3	4	24	6	21
		n	65	66	66	67	66		61	66	65	66	65
		M	12.69	12.55	12.48	12.40	12.30		8.49	9.21	10.28	10.38	10.48
	3-5	F	14	15	1	11	2		3	4	6	9	17
		n	112	113	117	118	118		110	107	119	115	113
		M	12.35	12.23	12.22	12.21	12.17		7.98	9.07	9.78	10.03	10.34
	6-10	F	11	14	2	1	15		3	4	21	9	6
		n	114	110	110	114	114		109	105	107	113	113
		M	12.43	12.41	12.27	12.19	12.04		8.09	9.16	10.09	10.19	10.29
	11-20	F	14	15	2	11	1		3	4	6	21	9
		n	118	123	121	119	120		118	122	119	118	120
		M	12.78	12.49	12.48	12.44	12.27		8.25	9.00	10.08	10.31	10.32
	21-30	F	14	2	1	15	16		3	4	9	6	17
		n	69	73	73	74	73		70	71	72	71	74
		M	12.49	12.47	12.34	12.16	12.11		8.26	8.92	10.28	10.31	10.43
	31+	F	2	15	14	1	11		3	4	21	9	6
		n	147	147	142	151	140		135	121	140	143	147
		M	12.41	12.35	12.33	12.10	12.04		8.12	9.04	10.08	10.25	10.26

Note: NCM = not church member; F = Factor; M = Mean; R = Rank; Factor 14 = *Peers: General*; 11 = *Teacher: General*; 15 = *Peers: Relationship-Building in Class*; 5 = *Room Size*; 1 = *Divine Involvement*; 2 = *Divine Involvement: Transformed Lives*; 7 = *Aesthetics and Tidiness*; 16 = *Peers: Relationship-Building outside of Class*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 24 = *Demographic, Cultural, and Personality Factors*; 6 = *Proxemics and Territoriality*; 21 = *Participation: Teaching Methods*; 9 = *Temperature, Ventilation, and Humidity*; 17 = *Group Size*

Table 33 compares top and bottom five learning environment factors by church membership tenure (see Tables A45-A48 in Appendix 5). Unlike Table 32, data are spread throughout each of the 8 tenures in Table 33. Two of the top five factors are included by every membership tenure: *Peers: General* and *Peers: Relationship-Building in Class*. Three of the top five factors are included in all membership tenures

except 1: *Teacher: General* (not in 21 to 30 years); *Divine Involvement: Transformed Lives* (not in less than 1 year); and *Divine Involvement* (not in those not a church member). Three of the top five factors are included by only 1 church membership tenure: *Aesthetics and Tidiness* (by not a church member); *Room Size* (by less than 1 year); and *Peers: Relationship-Building outside of Class* (by 21 to 30 years).

Top five scores in Table 33 range from 11.96 to 12.78. Those who had been Christians between 1 and 2 years and those between 11 and 20 years reported the highest top five scores. Those who had been Christians for less than 1 year reported the lowest top five scores.

Three of the bottom five factors in Table 33 are shared by all church membership tenures: *Physical Arrangement*; *Flexibility*; and *Proxemics and Territoriality* (all physical factors). One of the bottom five factors is shared by all membership tenures except for 3 to 5 years: *Participation: Teaching Methods*. Another of the bottom five factors, *Temperature, Ventilation, and Humidity*, is shared by all membership tenures greater than 2 years. One of the bottom five factors, *Demographic, Cultural, and Personality Factors*, is included by those not a church member and by membership tenures less than 3 years. A final factor, *Group Size*, is included in the bottom five by membership tenures of 3 to 5 years and 21 to 30 years.

Bottom five learning environment factor scores in Table 33 range from a low of 7.83 to a high of 10.50. The highest bottom five means are scored by a membership tenure of less than 1 year, followed by 1 to 2 years. The lowest bottom five scores are more difficult to discern. Some of the lowest are recorded by those with membership tenures of 3 to 5 years and of 31 years or more.

A comparison of learning environment factor means in Tables A45-A48 in Appendix 5 reveals that church members for less than 1 year had 7 of the highest factor means. They are followed by church members for 11 to 20 years who had 6, not a church member and 1 to 2 years who each had 4, and 21 to 30 years who had 3. Three to 5 years had 6 of the lowest factor means while 6 to 10 years had 5, 31 plus had 4, and not a church member and less than 1 year had 3.

Table 34. Comparison of top and bottom five learning environment factors by number of close friends in class

Rank			1	2	3	4	5		24	23	22	21	20
Top Five	0	F	11	14	18	15	5	Bottom Five	3	4	24	21	17
		n	62	60	60	61	62		61	56	62	63	62
		M	12.15	11.63	11.43	11.43	11.39		7.90	8.89	9.31	9.98	10.19
	1	F	11	14	1	15	5		3	4	24	6	21
		n	76	77	76	76	77		72	71	75	77	71
		M	12.14	12.10	11.89	11.74	11.70		7.97	8.90	9.83	9.86	10.06
	2	F	14	15	1	2	11		3	4	21	6	9
		n	112	116	118	116	114		114	111	115	118	115
		M	12.40	12.26	12.17	12.09	12.05		8.02	9.04	10.09	10.14	10.18
	3	F	14	2	15	1	11		3	4	6	21	24
		n	102	105	105	106	103		98	101	104	101	102
		M	12.70	12.58	12.54	12.35	12.34		8.19	9.13	10.15	10.39	10.40
	4	F	14	15	11	2	1		3	4	21	6	9
		n	71	73	71	77	75		67	68	72	70	72
		M	12.77	12.70	12.58	12.49	12.47		7.91	9.31	10.17	10.27	10.39
	5	F	1	14	2	15	11		3	4	6	9	21
		n	46	46	46	47	47		47	45	47	46	48
		M	12.91	12.87	12.72	12.64	12.53		8.72	9.11	10.28	10.63	10.71
	6+	F	14	2	15	1	16		3	4	9	6	21
		n	211	219	223	226	223		204	196	212	222	211
		M	12.77	12.67	12.50	12.37	12.32		8.41	9.04	10.20	10.27	10.53

Note: F = Factor; M = Mean; R = Rank; Factor 11 = *Teacher: General*; 14 = *Peers: General*; 1 = *Divine Involvement*; 15 = *Peers: Relationship-Building in Class*; 2 = *Divine Involvement: Transformed Lives*; 18 = *Psychological Factors*; 5 = *Room Size*; 16 = *Peers: Relationship-Building outside of Class*; 3 = *Physical Arrangement*; 4 = *Flexibility*; 24 = *Demographic, Cultural, and Personality Factors*; 21 = *Participation: Teaching Methods*; 6 = *Proxemics and Territoriality*; 9 = *Temperature, Ventilation, and Humidity*; 17 = *Group Size*

Table 34 compares top five and bottom five learning environment factors by number of close friends in class (see Tables A49-A52 in Appendix 5). Participants are fairly balanced across the number of friends, with the highest number of persons reporting 6 or more friends. Two of the top five factors are shared by every number of friends: *Peers: General* and *Peers: Relationship-Building in Class*. All groups except 6 or more include 1 of the top five factors, *Teacher: General*. All groups except 0 friends include 1 top-five factor, *Divine Involvement*. All groups except 0 and 1 share another of the top five factors, *Divine Involvement: Transformed Lives*. *Room Size* is included in the top five by those with 0 or 1 friend. One group each lists 2 factors: *Psychological Factors* (by 0) and *Peers: Relationship-Building outside of Class* (by 6 or more). The range of scores for the top five is from 11.39 to 12.91. Lowest scores are reported for 0 friends. Those with 5 friends report the highest scores. Scores tend to increase to 5 friends and then drop.

Three bottom five learning environment factors are shared by every number of friends: *Physical Arrangement*; *Flexibility*; and *Participation: Teaching Methods*. Persons with 1 or more friends include the bottom five factor, *Proxemics and Territoriality*. Persons with 2 friends and persons with 4 or more friends share one of the bottom five factors: *Temperature, Ventilation, and Humidity*. Persons with 0, 1, or 3 friends include another of the bottom five factors, *Demographic, Cultural, and Personality Factors*. Only those with 0 friends list a final bottom five factor: *Group Size*. Table 34 displays bottom five scores from a low of 7.90 to a high of 10.71. The lowest bottom five scores were reported by those with 0 friends or 1 friend. Bottom five

scores tend to increase up to those with 5 friends (which had the highest scores), and then they drop off slightly.

Table A19 in Appendix 4 displays data about the impact of the number of close friends in class upon learning environment factors. Thirteen factors are impacted at an ANOVA significance of 95% or more (.050 or less). Eight factors (2 spiritual and 6 social) have a significance of .000: *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; *Participation: General*; and *Demographic, Cultural, and Personality Factors*. Five other factors (2 physical and 3 social) with a significance ranging from .001 to .037 include *Physical Arrangement*; *Aesthetics and Tidiness*; *Teacher: Social Interaction*; *Psychological Factors*; and *Expectation.*

A comparison of learning environment factor means in Tables A49-A52 in Appendix 5 reveals that persons with 5 close friends in class have 14 of the highest factor means. These include 2 spiritual, 5 physical, and 7 social factors. Persons with 3, 4, and 6 plus close friends each have 3 of the highest factor means, and those with 0 friends have 1. On the other end of the spectrum, persons with 0 friends have 17 of the lowest factor means. These include 2 spiritual, 5 physical, and 10 social factors. Those respondents with 1 friend have 5 of the lowest learning environment factor means while those respondents with 2 friends have 3 of the lowest learning environment factor means. Interestingly, 23 of the highest learning environment factor means were reported for those with 3 friends or more while those with 2 friends or fewer reported all 24 of the lowest factor means.

Miscellaneous Findings

In addition to findings related to the six research questions, other data were discovered. This section displays and presents some of the findings. The first section compares learning environment means by participating church corresponding with data in Tables A53-A59 in Appendix 6. The next section presents cross tabulations of demographic data. The final section looks at miscellaneous one-way ANOVA scores.

Comparison of Learning Environment Factor Means by Church

More complete data are displayed in Tables A53-A56 in Appendix 6 about learning environment factor means and number of responses by participating church. In those tables, factors are listed in Appendix 1 order. In this section, two comparison tables, Tables 35 and 36, present top and bottom five factors by participating church. Following each of the tables, explanation is offered.

Table 35. Comparison of top five learning environment factors by participating church

Rank		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
1	F	2	14	10	15	23	14	14	14	11	11
	n	8	66	4	14	11	44	130	96	58	23
	M	14.50	12.82	13.25	12.21	13.00	12.55	12.59	12.40	11.98	12.65
2	F	14	13	5	14	14	15	2	2	14	14
	n	8	68	4	15	11	47	133	99	50	24
	M	14.25	12.44	13.25	11.93	12.45	12.49	12.49	12.34	11.94	12.38
3	F	12	7	2	11	11	1	15	11	15	1
	n	8	67	4	14	11	50	134	98	57	24
	M	14.25	12.42	13.25	11.93	12.45	12.42	12.39	12.29	11.89	12.33

Note: C = Church; F = Factor; M = Mean; Factor 1 = *Divine Involvement*; 2 = *Divine Involvement: Transformed Lives*; 5 = *Room Size*; 7 = *Aesthetics and Tidiness*; 10 = *Odors, Seating, and Noise*; 11 = *Teacher: General*; 12 = *Teacher: Social Interaction*; 13 = *Teacher: Classroom Management*; 14 = *Peers: General*; 15 = *Peers: Relationship-Building in Class*; 23 = *Participation: Conflicts*

Table 35—*Continued.* Comparison of top five learning environment factors by participating church

Rank		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
4	F	11	11	14	18	1	2	11	1	18	2
	n	8	67	4	11	11	49	132	98	58	24
	M	14.25	12.34	13.00	11.82	12.45	12.20	12.33	12.28	11.83	12.13
5	F	1	1	11	5	10	11	1	15	2	15
	n	8	71	4	13	11	46	131	97	57	23
	M	14.13	12.32	12.75	11.62	12.18	12.00	12.18	12.26	11.82	12.04

Rank		C11	C12	C13	C14	C15	C16	C17	C18	C19
1	F	1	2	14	2	5	14	11	14	1
	n	7	20	46	39	27	32	19	40	18
	M	12.14	12.70	12.91	12.69	12.41	12.53	12.00	12.90	12.94
2	F	22	14	15	14	14	15	1	15	2
	n	6	20	45	41	23	35	25	42	19
	M	11.67	12.70	12.67	12.46	12.39	12.34	11.88	12.83	12.68
3	F	18	15	2	1	15	16	15	7	15
	n	5	20	45	42	26	35	23	35	18
	M	11.60	12.35	12.62	12.17	12.15	12.14	11.83	12.83	12.67
4	F	7	1	11	15	11	2	5	5	14
	n	5	20	48	42	26	34	21	40	18
	M	11.60	12.25	12.42	12.14	12.04	12.12	11.81	12.83	12.67
5	F	12	11	10	16	1	1	7	11	11
	n	6	19	45	41	27	34	23	40	19
	M	11.50	12.11	12.27	12.10	12.04	11.91	11.74	12.63	12.32

Note: C = Church; F = Factor; M = Mean; Factor 1 = *Divine Involvement*; 2 = *Divine Involvement: Transformed Lives*; 5 = *Room Size*; 7 = *Aesthetics and Tidiness*; 10 = *Odors, Seating, and Noise*; 11 = *Teacher: General*; 12 = *Teacher: Social Interaction*; 14 = *Peers: General*; 15 = *Peers: Relationship-Building in Class*; 16 = *Peers: Relationship-Building outside of Class*; 18 = *Psychological Factors*; 22 = *Participation: Teaching Methods*; 23 = *Participation: Conflicts*

Much variety is presented in Tables 35 and 36. In Table 35, many of the 24 learning environment factors are included in the top five for 1 or more of the 19 participating churches. Three factors are in the top five for only 1 church: *Teacher: Classroom Management* (for Church 2); *Participation: Conflicts* (for Church 5); and *Participation: Meeting Length* (for Church 11). *Teacher: Social Interaction* and *Peers: Relationship-Building outside of Class* make the top five for 2 churches each. *Odors, Seating, and Noise* and *Psychological Factors* make the top five for 3 churches each.

Aesthetics and Tidiness makes the top five for 4 churches while *Room Size* makes the top five for 5 churches.

Furthermore, 12 churches include *Divine Involvement: Transformed Lives* in their top five factors. Fourteen churches include *Divine Involvement* and *Peers: Relationship-Building in Class* in their top five factors. Sixteen churches include *Teacher: General* in their top five factors. Seventeen churches include *Peers: General* in their top five factors. No learning environment factor makes the top five for all 19 participating churches. Top five scores range from a low of 11.50 (Church 11) to a high of 14.50 (Church 1). Church 1 has the highest top five scores while Church 11 has the lowest overall top five scores. Fourteen of the 24 factors are included in the top five for at least 1 participating church.

Examination of the rankings in Tables A57-A59 of Appendix 6 affirms what has already been stated above. A great diversity of scores exists from church to church. Rankings vary greatly as well. The most consistency is for *Physical Arrangement* which is ranked last or next to last by all churches.

Additional data about the impact of participating church on learning environment factors are available in Table A22 in Appendix 4. In that ANOVA table, 21 of the 24 factors are of an ANOVA significance of 95% or greater (.050 or less). These include 1 spiritual, 7 physical, and 13 social factors. Only *Divine Involvement* (spiritual factor), *Proxemics and Territoriality* (physical factor), and *Psychological Factors* (social factor) are not included in the 21 learning environment factors impacted at an ANOVA level of significance. No other demographic variable in this research has as great of an impact upon the learning environment factors as participating church.

Table 36. Comparison of bottom five learning environment factors by participating church

Rank		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
24	F	3	3	4	3	3	4	3	3	3	4
	n	7	66	4	13	11	40	126	92	52	23
	M	7.29	8.41	7.00	7.54	7.55	8.05	8.53	7.50	8.29	8.70
23	F	4	4	3	4	17	3	4	4	4	3
	n	8	65	4	12	10	42	122	92	52	22
	M	8.50	8.46	7.50	8.92	8.20	8.50	9.85	8.34	9.77	9.23
22	F	24	21	17	24	4	21	6	9	9	17
	n	8	64	4	16	11	46	131	95	58	22
	M	8.75	9.84	9.25	9.00	8.55	10.00	10.08	9.80	9.86	9.82
21	F	17	6	24	17	21	6	10	6	21	6
	n	7	68	4	16	10	46	129	98	55	24
	M	10.71	10.12	9.25	9.88	9.60	10.09	10.40	9.98	10.04	10.29
20	F	6	9	6	19	6	17	21	21	6	21
	n	6	68	4	15	11	46	130	93	59	24
	M	11.00	10.65	9.50	10.00	10.18	10.57	10.41	10.17	10.17	10.29

Rank		C11	C12	C13	C14	C15	C16	C17	C18	C19
24	F	4	3	3	3	3	3	4	3	3
	n	6	19	45	41	26	33	21	37	17
	M	7.50	8.53	7.93	7.85	8.35	7.76	7.81	8.62	7.76
23	F	3	4	4	4	4	9	3	4	4
	n	6	19	42	40	26	36	21	36	14
	M	8.33	9.53	9.69	9.43	9.19	9.75	8.71	9.25	9.00
22	F	20	6	9	9	17	6	9	21	17
	n	7	21	44	41	27	34	19	39	18
	M	9.43	10.00	10.00	9.68	10.11	9.82	8.95	9.90	9.22
21	F	21	9	8	24	7	4	21	6	7
	n	7	20	45	39	27	31	20	40	15
	M	9.71	10.30	10.42	10.26	10.37	9.87	9.90	10.50	9.80
20	F	17	24	6	6	21	21	24	24	22
	n	6	21	45	42	25	35	22	42	15
	M	9.83	10.48	10.51	10.36	10.40	10.49	9.91	10.81	10.07

Note: C = Church; F = Factor; M = Mean; Factor 3 = *Physical Arrangement*; 4 = *Flexibility*; 6 = *Proxemics and Territoriality*; 7 = *Aesthetics and Tidiness*; 8 = *Lighting, Writing, and Reading*; 9 = *Temperature, Ventilation, and Humidity*; 10 = *Odors, Seating, and Noise*; 17 = *Group Size*; 19 = *Expectation*; 20 = *Participation: General*; 21 = *Participation: Teaching Methods*; 22 = *Participation: Meeting Length*; 24 = *Demographic, Cultural, and Personality Factors*

Like the top five in Table 35, many of the 24 factors in Table 36 make the bottom five list for 1 or more church. While no factor makes the top five for all the churches, 2 of the bottom five factors are shared by all 19 churches: *Physical*

Arrangement and *Flexibility*. Fourteen churches include *Proxemics and Territoriality* in their bottom five. Twelve churches list *Participation: Teaching Methods* in their bottom five. Nine churches list *Group Size* in their bottom five factors. Eight churches include *Temperature, Ventilation, and Humidity* as well as *Demographic, Cultural, and Personality Factors* in the bottom five. Two churches score *Aesthetics and Tidiness* in their bottom five factors. Four factors (*Lighting, Writing, and Reading*; *Odors, Seating, and Noise*; *Expectation*; and *Participation: Meeting Length*) are each listed by 1 church in the bottom five. Bottom five scores range from a low of 7.00 for Church 3 to a high of 11.00 for Church 1. Bottom five scores are mixed but generally lowest for Church 3. None of the 19 churches clearly stand out as having the highest bottom five scores; the closest is Church 7. A total of 13 of the 24 factors make the bottom five for 1 or more of the churches. Interestingly, some of the factors make both lists: *Aesthetics and Tidiness*; *Odors, Seating, and Noise*; and *Participation: Meeting Length.*

Cross Tabulation of Gender Distribution with Other Demographic Data

Findings of gender distribution are displayed in Tables 37-41. Table 37 displays findings by age, marital status, and educational level. Table 38 displays gender distribution by years as a Christian and as a church member. Also, Table 39 examines findings by worship attendance frequency, class involvement, and class tenure. Table 40 displays gender distribution by class attendance frequency and class members as close friends. Finally, Table 41 examines findings by class numerical growth opinion, class spiritual growth opinion, and most frequently used teaching style. Figures are added to present graphically some of the data.

Table 37. Gender distribution by age, marital status, and educational level

	Male *n*	Male %	Female *n*	Female %
Age				
18-29	25	51.0	24	49.0
30-39	42	45.7	50	54.3
40-49	43	43.9	55	56.1
50-59	59	40.7	86	59.3
60-69	53	35.8	95	64.2
70+	56	28.0	144	72.0
Marital Status				
Divorced	13	24.1	41	75.9
Married	232	43.5	301	56.5
Separated	4	80.0	1	20.0
Single	25	55.6	20	44.4
Widowed	7	7.1	91	92.9
Educational Level				
Did Not Complete High School	33	35.9	59	64.1
Graduated High School/GED	98	34.3	188	65.7
Some College	75	40.5	110	59.5
Graduated College	35	41.2	50	58.8
Some Graduate Work	18	66.7	9	33.3
Completed Graduate Degree	22	40.7	32	59.3

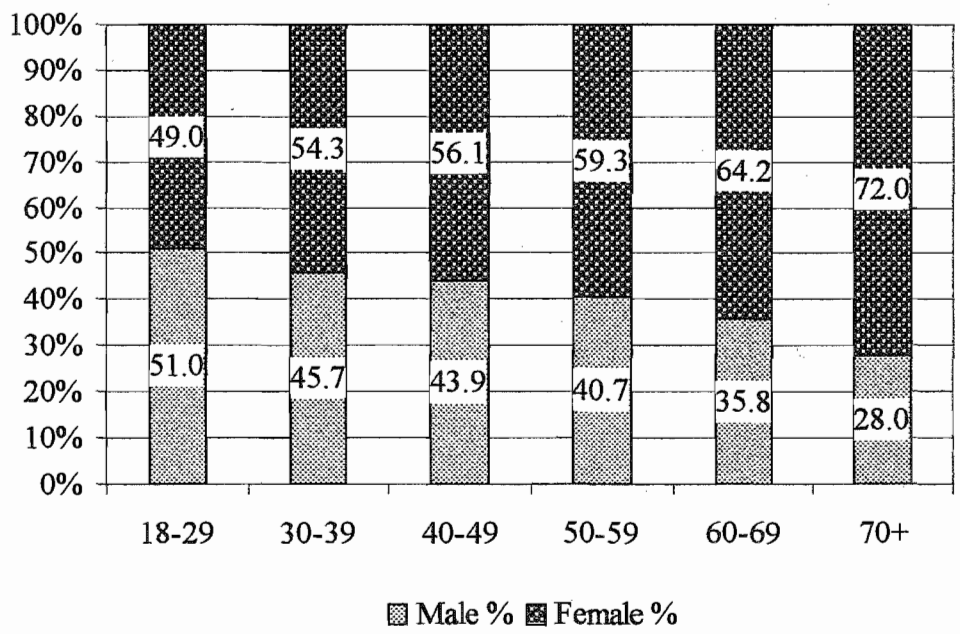

Figure 14. Gender distribution by age

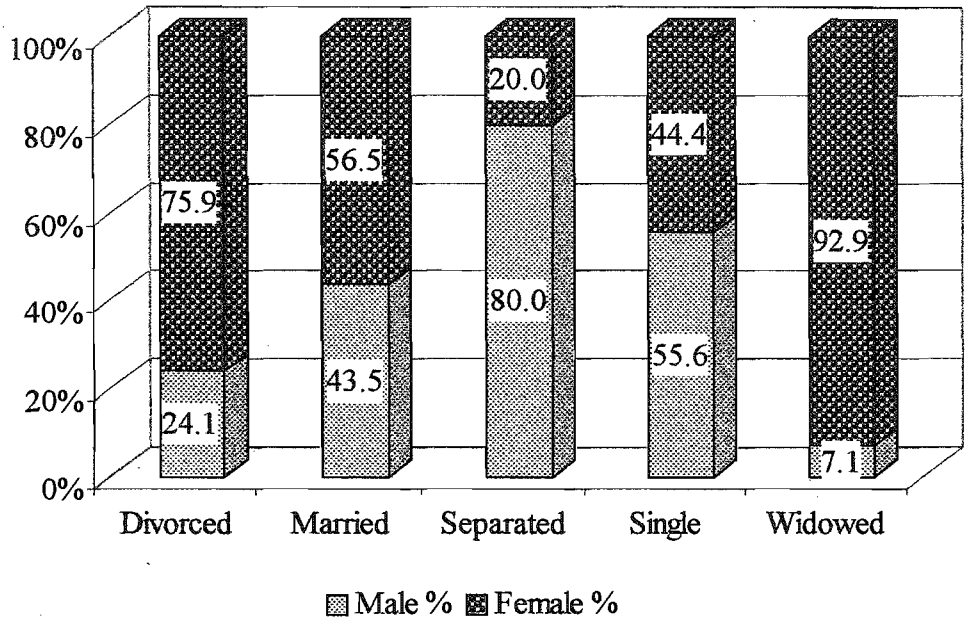

Figure 15. Gender distribution by marital status

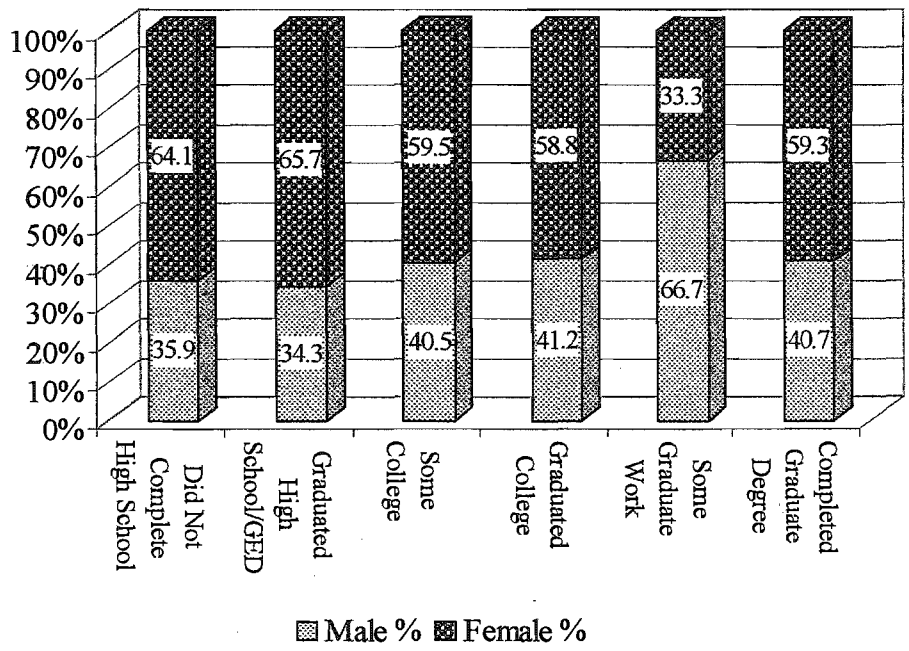

Figure 16. Gender distribution by educational level

In Table 37, 62.0% are female. Figure 14 shows that as respondents age, more of them are female, and naturally percentages of females tend to increase. Males are fairly balanced across ages. Assuming midpoints of each age range and age 75 for the oldest group, average reported age is in the fifties. A total of 533 persons (approximately 72.5%) responding to the instrument are married. Most of the widowed responses are from females. Over 75% of all divorced responses are from females. Figure 15 shows that separated and single respondent percentages favored males. Also in Table 37, more than half of responses come from persons who had graduated from high school or completed some college. Figure 16 shows that females responded more frequently to all but 1 category of educational level: some graduate work. Overall, males are slightly more educated than females.

Table 38. Gender distribution by Christianity tenure and church membership tenure

	Male *n*	**Male** %	**Female** *n*	**Female** %
How long have you been a Christian?				
Not a Christian	2	100.0	-	0.0
Less than 1 year	3	75.0	1	25.0
1-2 years	5	33.3	10	66.7
3-5 years	14	46.7	16	53.3
6-10 years	18	54.5	15	45.5
11-20 years	49	50.0	49	50.0
21-30 years	54	41.9	75	58.1
31+ years	135	31.9	288	68.1
How long have you been a member of this church?				
Not a member	14	51.9	13	48.1
Less than 1 year	21	44.7	26	55.3
1-2 years	25	35.7	45	64.3
3-5 years	54	44.6	67	55.4
6-10 years	53	45.7	63	54.3
11-20 years	48	39.0	75	61.0
21-30 years	28	35.9	50	64.1
31+ years	39	25.5	114	74.5

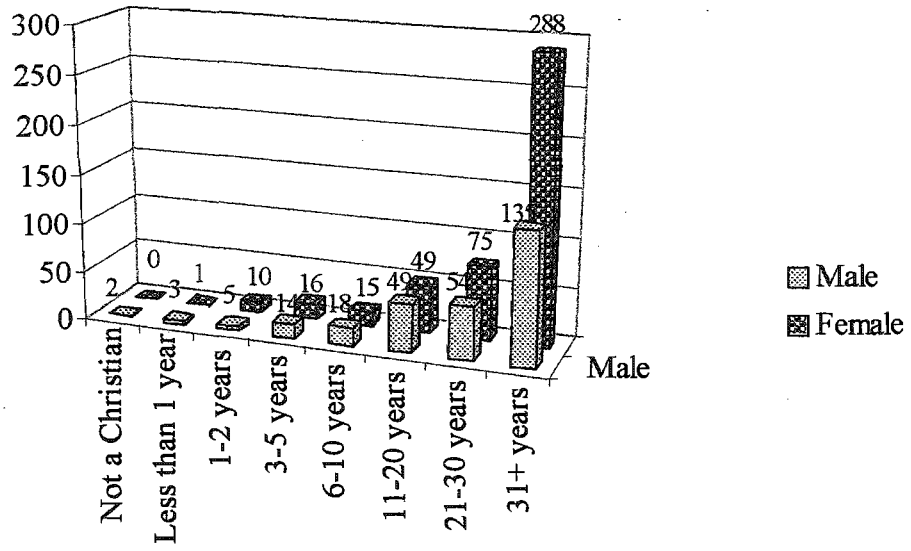

Figure 17. Gender distribution by Christianity tenure

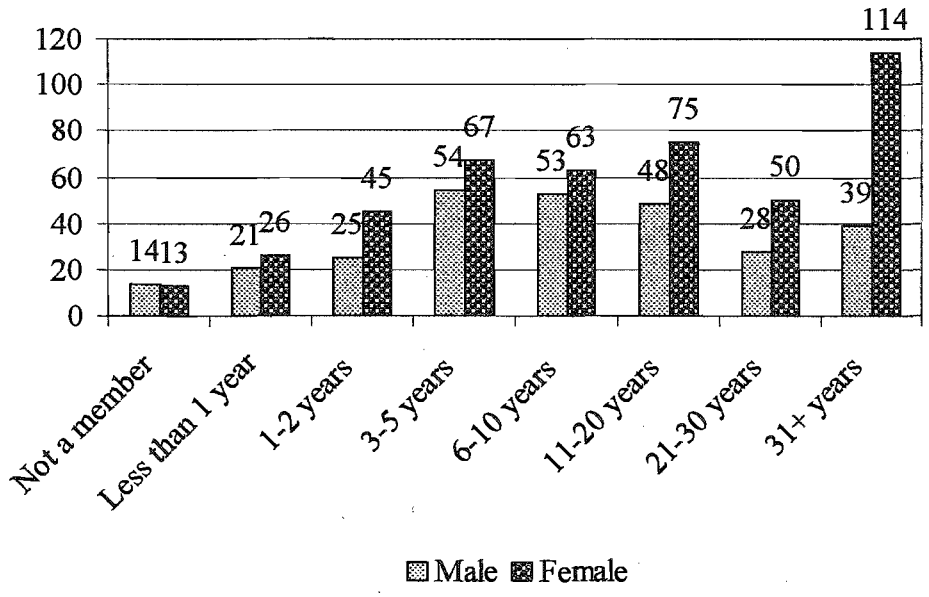

Figure 18. Gender distribution by church membership tenure

In Table 38, information is presented about years as a Christian and years as a church member. Figure 17 graphically demonstrates that numbers of responses tend to

increase as the numbers of years as a Christian increase for both groups: males and females. Very few respondents are recent Christians, and only 2 respondents are not Christians. More than twice as many females as males have been Christians for 31 years or longer.

Related to years as a Christian, Table 38 shows fewer years as a church member of "this church" than as a Christian. Female percentages are highest for church members for 31 years or more. Male percentages are highest for those not a Christian. Figure 18 shows that the highest number of females had been church members for more than 31 years. On the other hand, the highest number of males have been church members for 3 to 5 years. The lowest number of male and female respondents is of those who are not a Christian.

Table 39. Gender distribution by worship frequency, class involvement, and class tenure

	Male ***n***	**Male** **%**	**Female** ***n***	**Female** **%**
Worship attendance frequency				
None	5	41.7	7	58.3
1 Sunday per month	8	30.8	18	69.2
2-3 Sundays per month	67	34.7	126	65.3
4+ Sundays per month	196	39.8	296	60.2
Class involvement (guests removed)				
Teacher	59	60.2	39	39.8
Class Member	217	34.8	406	65.2
Class tenure				
Less than 1 year	32	39.5	49	60.5
1-2 years	60	42.6	81	57.4
3-5 years	77	41.2	110	58.8
6-10 years	58	44.6	72	55.4
11-20 years	33	33.0	67	67.0
21-30 years	11	23.9	35	76.1
31+ years	7	17.1	34	82.9

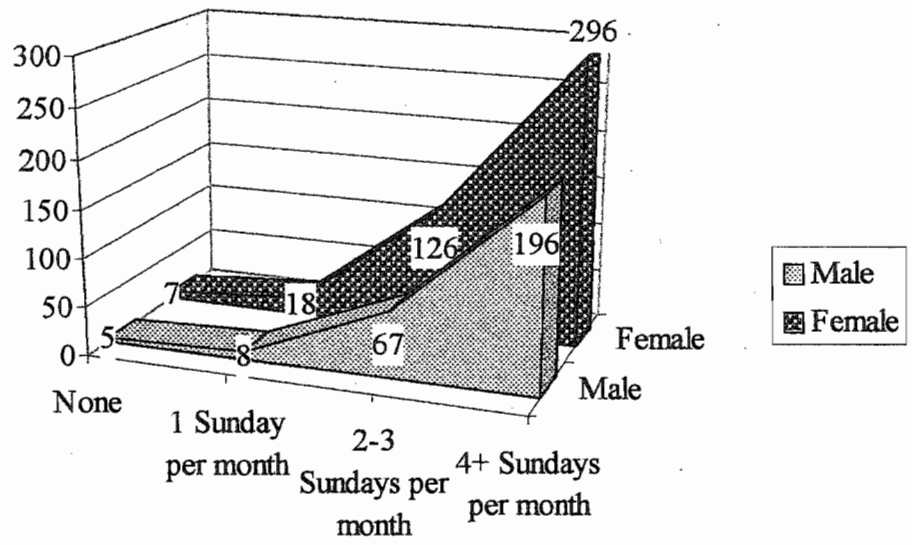

Figure 19. Gender distribution by worship attendance frequency

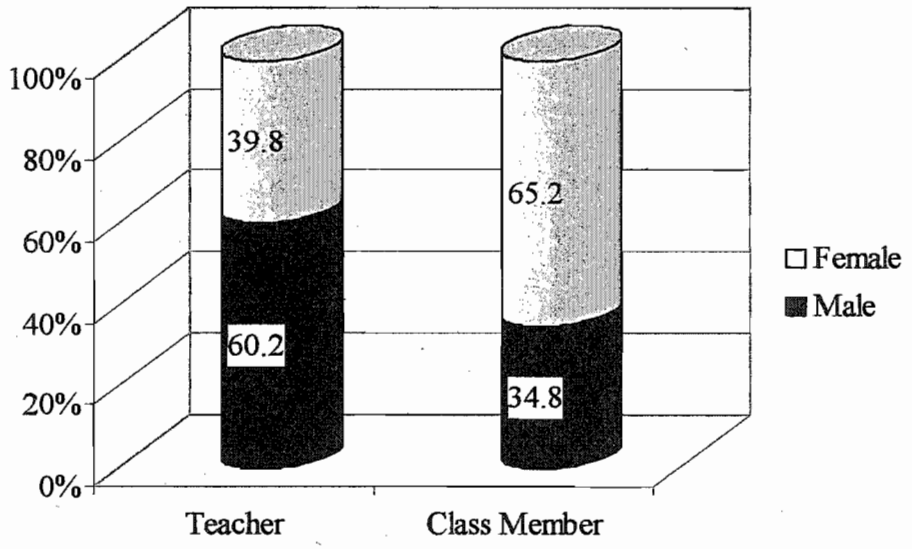

Figure 20. Gender distribution percentages by class involvement

In Table 39, data are reported about worship attendance frequency, class involvement, and class tenure. More females attended worship of every frequency. Females percentages are highest for 1 Sunday per month. Figure 19 presents data

showing the most frequent response was 4 or more Sundays per month. Few (38) attended worship infrequently (1 Sunday or less). Also in Table 39, class involvement is presented. By research design, instruments completed by guests are not included. Figure 20 shows more reporting teachers are male (60.2%) and almost twice as many class members are female (65.2%). Teacher to pupil ratio is about 1 to 6.

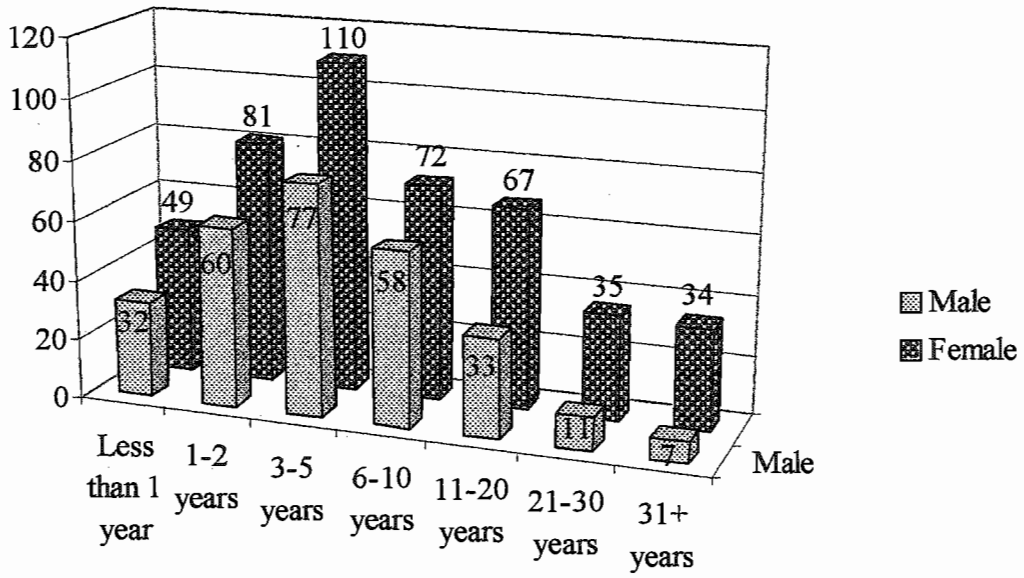

Figure 21. Gender distribution by class membership tenure

The final section of Table 39 reveals data about number of years as a class member that look significantly different from number of years as a Christian or as a church member. In no category are males above 50%. The greatest difference can be seen in those who have been class members for 31 or more years, with 82.9% female. Except for members for less than 1 year, the percentage of females increases as the period of class member tenure increases. Correspondingly, the greater the tenure, the lower the

percentage of males is. Figure 21 displays data showing the greatest number of females and males indicates 3 to 5 years as a class member. The fewest number of females and males indicates 31 or more years as a class member. Eighty-one indicate that they have been class members for less than 1 year.

Table 40. Gender distribution by class attendance frequency and class members as close friends

	Male *n*	Male %	Female *n*	Female %
Class attendance frequency				
None	4	33.3	8	66.7
1 Sunday per month	8	30.8	18	69.2
2-3 Sundays per month	71	34.3	136	65.7
4+ Sundays per month	192	40.5	282	59.5
Class members as close friends				
0 Friends	30	47.6	33	52.4
1 Friend	36	47.4	40	52.6
2 Friends	44	37.6	73	62.4
3 Friends	37	35.6	67	64.4
4 Friends	24	32.4	50	67.6
5 Friends	22	45.8	26	54.2
6+ Friends	80	34.8	150	65.2

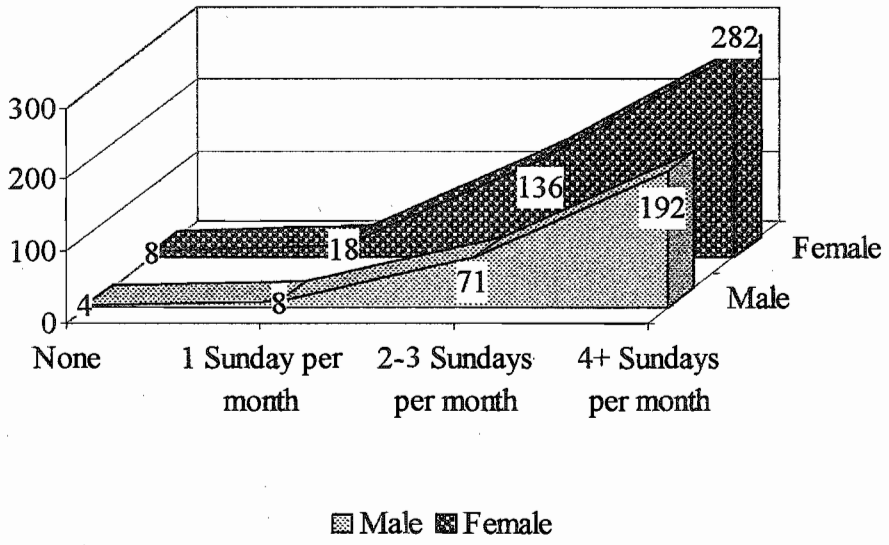

Figure 22. Gender distribution by class attendance frequency

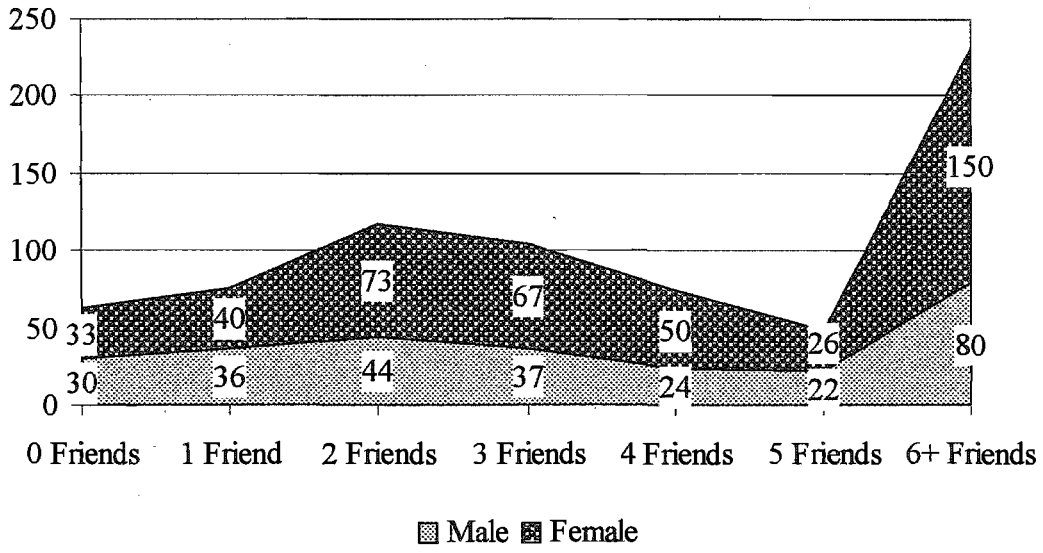

Figure 23. Gender distribution by number of close friends in class

Table 40 also presents male and female responses about class attendance frequency. Not unexpectedly, class attendance frequency looks very similar to worship attendance frequency. Only 38 (5.3%) persons indicate that they attended 1 Sunday per month or less. Figure 22 displays data showing that more than twice as many individuals attending 1 Sunday per month or less indicated they were female. A total of 155 more females responded as average or high attenders than did males.

Statistics about close friends are presented next in Table 40. Figure 23 shows that the largest response for males (80) and females (150) was from those indicating 6 or more close friends. The next highest response for males (44) and females (73) is for 2 friends, but these numbers are nearly half of those with 6 or more friends. The least response for both groups is not from those indicating 0 friends but those with 5 friends (combined total of 48). Zero friends is the third lowest response for males and the second lowest response for females.

Table 41. Gender distribution by class numerical and spiritual growth opinion and most frequent teaching style

	Male *n*	Male %	Female *n*	Female %
Class numerical growth opinion				
Yes	137	37.2	231	62.8
No	136	39.4	209	60.6
Class spiritual growth opinion				
Yes	256	37.3	431	62.7
No	17	56.7	13	43.3
Most frequently used teaching style				
Lecture	36	43.4	47	56.6
Question & Answer	44	53.0	39	47.0
Discussion	178	34.2	342	65.8
Not Listed	20	46.5	23	53.5

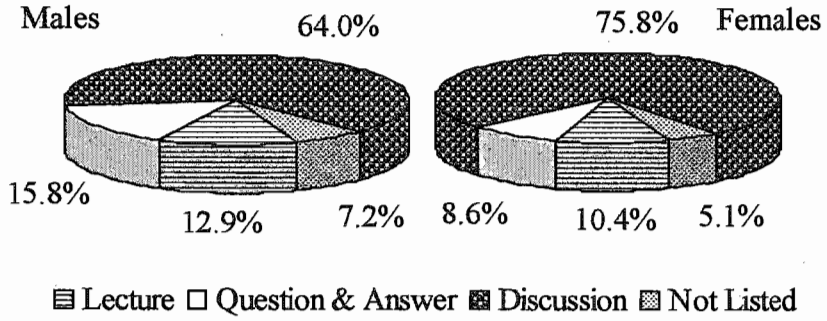

Figure 24. Gender distribution percentages by teaching style

In Table 41 statistics are presented about class numerical and spiritual growth opinion and teaching style. Only 1 more male responds positively to the numerical growth question than those who respond negatively. Twenty-two more females respond positively to the numerical growth question than those who respond negatively. In other words, opinions about class numerical growth are fairly divided, slightly favoring the positive. As opposed to class numerical growth opinions, both males and females

males and females overwhelmingly answered the affirmative about spiritual/maturational growth (687). Only 30 persons indicated a negative opinion in response to spiritual growth: more males (17) than females (13).

Finally, Table 41 presents information about the most frequently used teaching style. When individuals failed to follow directions (marked more than 1 response), answers were also entered as *not listed. Lecture* and *question and answer* are the least common responses. The most frequent response by both males (178) and females (342) is *discussion.* Almost twice as many females indicated *discussion* was the most frequently used style as males. More males (44) than females (39) indicated *question and answer* was utilized. Figure 24 shows that a higher percentage of females than males responded with *discussion.*

Cross Tabulation of Class Involvement with Other Demographic Data

The following 8 displays present cross tabulations of class involvement (teacher and class member) data with demographic data. One involvement response, guests, was dropped due to research design. Numbers, totals, and percentages of responses are reported. Explanation of the findings is presented after each two tables.

In the tables that follow, numbers of demographic responses are presented along with percentages of each response and totals. Tables 42 and 43 examine age and marital status. Tables 44 and 45 look at educational level and years as a Christian. Tables 46 and 47 examine class attendance frequency and number of close friends in class. Tables 48 and 49 look at class numerical and spiritual growth opinion and most frequently used teaching style, respectively.

Table 42. Cross tabulation of class involvement and age (in years)

		18-29	30-39	40-49	50-59	60-69	70+	Total
Teacher	*n*	1	9	14	22	27	23	96
	%	1.0	9.4	14.6	22.9	28.1	24.0	100.0
Class	*n*	48	82	84	121	123	173	631
Member	%	7.6	13.0	13.3	19.2	19.5	27.4	100.0
Total	*n*	49	91	98	143	150	196	727
	%	6.7	12.5	13.5	19.7	20.6	27.0	100.0

Table 43. Cross tabulation of class involvement and marital status

		Divorced	Married	Separated	Single	Widowed	Total
Teacher	*n*	6	79	-	5	7	97
	%	6.2	81.4	0.0	5.2	7.2	100.0
Class	*n*	49	451	4	40	89	633
Member	%	7.7	71.2	0.6	6.3	14.1	100.0
Total	*n*	55	530	4	45	96	730
	%	7.5	72.6	0.5	6.1	13.2	100.0

The ratio of reporting class members to teachers is slightly more than 6 to 1 throughout these displays. Table 42 presents cross tabulation data of class involvement and age. Total numbers of teachers and class members increase across the table as age increases. Only 10 teachers (10.4%) and 130 class members (20.6%) below the age of 40 completed and returned an instrument. A combined total of 489 (67.3%) teachers and class members are age 50 or older. Teachers are slightly older than class members throughout the display.

Table 43 displays cross tabulation data of class involvement and marital status. The largest number of teachers (79) and class members (451) are married, making up 72.6% of those completing instruments. The percentage of married teachers (81.4%) is

slightly higher than the percentage of married class members (71.2%). Only 4 class members and no teachers reported being separated, or less than 1% of participants. Teachers and class members who are single (45) and those who are divorced (55) combine for 13.6% of those completing instruments. The 96 widowed teachers and class members (13.2%) are about the same number as divorced and single participants combined. Only a total of 18 teachers (18.6%) reported being divorced, single, or widowed while a total of 178 (28.1%) class members reported the same.

Table 44. Cross tabulation of class involvement and educational level

		DNCHS	GHS	SC	GC	SGW	CGD	Total
Teacher	*n*	6	34	24	12	8	14	98
	%	6.1	34.7	24.5	12.2	8.2	14.3	100.0
Class Member	*n*	85	251	159	73	18	41	627
	%	13.6	40.0	25.4	11.6	2.9	6.5	100.0
Total	*n*	91	285	183	85	26	55	725
	%	12.6	39.3	25.2	11.7	3.6	7.6	100.0

Note: DNCHS = did not complete high school; GHS = graduated high school; SC = some college; GC = graduated college; SGW = some graduate work; CGD = completed graduate degree

Table 45. Cross tabulation of class involvement and salvation tenure

		Not a Christian	<1 Years	1-2 Years	3-5 Years	6-10 Years	11-20 Years	21-30 Years	31+ Years	Total
Teacher	*n*	-	-	-	1	4	11	17	65	98
	%	0.0	0.0	0.0	1.0	4.1	11.2	17.3	66.3	100.0
Class Member	*n*	1	4	15	28	29	90	111	354	632
	%	0.2	0.6	2.4	4.4	4.6	14.2	17.6	56.0	100.0
Total	*n*	1	4	15	29	33	101	128	419	730
	%	0.1	0.5	2.0	4.0	4.5	13.8	17.5	57.4	100.0

Table 44 displays cross tabulation data of class involvement and educational level. Overall, teachers tend to have slightly more education than class members. Forty teachers (40.8%) reported graduating high school or not completing high school while 336 class members (50.4%) reported the same. Of these, 6 teachers (6.1%) and 85 class members (13.6%) did not complete high school. Twenty-two teachers (22.5%) did some graduate work or completed a graduate degree while 59 class members (9.4%) did the same. Graduating high school and some college are the most frequent responses for both groups.

Table 45 presents cross tabulation data of class involvement and the number of years as a Christian. All reporting teachers had been Christians for at least 3 years. In fact, 93 of the 98 teachers had been Christians for 11 or more years (94.9%). Of the 632 class members, 555 had been Christians for 11 or more years (87.8%). Only 82 participants (11.2%) had been Christians for less than 11 years, including the 1 individual who was not a Christian. Like age, the number of class members and teachers increases as the number of reported years as a Christian increases.

Table 46. Cross tabulation of class involvement and class attendance frequency (by Sundays per month)

Class Involvement		0 Sundays	1 Sunday	2-3 Sundays	4+ Sundays	Total
Teacher	*n*	-	-	8	86	94
	%	0.0	0.0	8.5	91.5	100.0
Class	*n*	13	27	198	394	632
Member	%	2.0	4.3	31.3	62.3	100.0
Total	*n*	13	27	206	480	726
	%	1.8	3.7	28.4	66.1	100.0

Table 47. Cross tabulation of class involvement and number of close friends in class

Class Involvement		0 Friends	1 Friend	2 Friends	3 Friends	4 Friends	5 Friends	6+ Friends	Total
Teacher	*n*	3	10	19	8	8	10	37	95
	%	3.1	10.5	20.0	8.4	8.4	10.5	38.9	100.0
Class Member	*n*	59	66	99	97	70	39	192	622
	%	9.5	10.6	15.9	15.6	11.3	6.3	30.9	100.0
Total	*n*	62	76	118	105	78	49	229	717
	%	8.6	10.6	16.5	14.6	10.9	6.8	31.9	100.0

Table 46 displays cross tabulation data of class involvement and class attendance frequency. All teachers reported attending 2 or more Sundays per month with 91.5% of teachers attending 4 or more Sundays per month. Only 40 class members (6.3%) reported attending less than 2 Sundays per month while 394 (62.3%) reported attending 4 or more Sundays per month. Almost twice as many class members attended 4 or more Sundays per month (high attenders) as those who attended 2 to 3 Sundays per month (average attenders).

Table 47 displays cross tabulation data of class involvement and the number of close friends in class. The instrument asked participants to identify the number of close friends they would call in a time of crisis. The spread is fairly even with the largest number of teachers (37) and class members (192) reporting 6 or more friends. Teachers tend to report more friends: 47 (49.5%) teachers reported 5 or more friends while 231 (37.1%) class members reported 5 or more friends. The smallest number (3) and percentage (3.1%) of teachers reported having no close friends in class while the smallest number (39) and percentage (6.3%) of class members reported having 5 close friends in class.

Table 48. Cross tabulation of class involvement and numerical and spiritual growth opinion

Class Involvement		Numerical Growth			Spiritual Growth		
		Yes	No	Total	Yes	No	Total
Teacher	*n*	39	57	96	91	4	95
	%	40.6	59.4	100.0	95.8	4.2	100.0
Class Member	*n*	332	290	622	601	26	627
	%	53.4	46.6	100.0	95.9	4.1	100.0
Total	*n*	371	347	718	692	30	722
	%	51.7	48.3	100.0	95.8	4.2	100.0

Table 49. Cross tabulation of class involvement and most frequently used teaching style

Class Involvement		Lecture	Question & Answer	Discussion	Not Listed	Total
Teacher	*n*	11	13	61	11	96
	%	11.5	13.5	63.5	11.5	100.0
Class Member	*n*	72	68	465	32	637
	%	11.3	10.7	73.0	5.0	100.0
Total	*n*	83	81	526	43	733
	%	11.3	11.1	71.8	5.9	100.0

Table 48 presents cross tabulation data of class involvement and class numerical growth opinion and maturational/spiritual growth opinion. In response to the class numerical growth question, teachers tend to be more negative (59.4% answered no) and class members slightly positive (53.4% answered yes). Both class members and teachers are strongly positive (95.8% answered yes) about class spiritual/maturational growth taking place.

Table 49 presents cross tabulation data of class involvement and most frequently used teaching style. Teachers (63.5%) and class members (73.0%) report that *discussion* is the most common teaching style. *Lecture* and *question and answer* are

fairly evenly split for teachers and for class members. Even with the addition of the responses from those who identify more than 1 response to this demographic question, there are only 43 individuals (5.9%) responding in the category of *not listed.*

Miscellaneous One-way ANOVA Data

Due to the length and number of the ANOVA (analysis of variance) tables, they are included in Appendix 4. These tables present data about all instruments combined. Some of the tables have previously been considered. The "purpose of analysis of variance is to test differences in means . . . for statistical significance . . . by partitioning the total variance into the component that is due to true random error . . . and the components that are due to differences between means" (StatSoft 2002, stanman.html). Presented in this chapter are findings from those tables. Each table presents the sum of squares, df (degrees of freedom), mean square, F, and significance for each of the learning environment factors. The statistic F is named for the statistician, R. A. Fisher. The value of F in an analysis of variance "provides a test for the statistical significance of the observed differences among the means of two or more random samples" (Statistics Explained 2002, sgstat_f.htm). "Statisticians use the terms "degrees of freedom" to describe the number of values in the final calculation of a statistic that are free to vary" (Statistics Explained 2002, sgstat_f.htm).

Tables A7 and A9 in Appendix 4 present data about the impact of individual gender and of class tenure. Tables A11 and A12 in Appendix 4 present data about the impact of teacher tenure in the current class and of total tenure in any class. Tables A13 and A15 in Appendix 4 present data about the impact of class attendance (number of persons present) and of church location. Table A16 in Appendix 4 presents data about

the impact of teaching style. The closing paragraphs of this section summarize ANOVA data by spiritual, physical, and social factor categories.

In Table A7 in Appendix 4, where the impact of gender is presented, 12 factors are impacted at a significance of 95% or more (.050 or less). Three factors (all social) have a significance of .000: *Group Size*; *Participation: Meeting Length*; and *Demographic, Cultural, and Personality Factors*. The other 9 factors (2 physical and 7 social) have a significance between .001 and .037: *Room Size*; *Proxemics and Territoriality*; *Teacher: General*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building outside of Class*; *Expectation*; and *Participation: General*.

In Table A9 in Appendix 4, where the impact of class tenure is presented, 4 factors are impacted at a significance of 95% or more (.050 or less). *Participation: Meeting Length* and *Demographic, Cultural, and Personality Factors* (both social factors) both have significance values of .000. The other 2 factors (1 spiritual and 1 social), *Divine Involvement: Transformed Lives* and *Teacher: General*, have significance values of .018 and .013.

In Table A11 in Appendix 4, data about the impact of teacher tenure in the class are displayed. Twelve factors are impacted at a significance of 95% or more (.050 or less). Five factors (2 physical and 3 social) all have significance values of .000: *Flexibility*; *Aesthetics and Tidiness*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; and *Group Size*. The other 7 factors (1 spiritual, 2 physical, and 4 social) include *Divine Involvement: Transformed Lives*; *Lighting, Writing, and Reading*;

Temperature, Ventilation, and Humidity; *Teacher: General*; *Peers: General*; *Peers: Relationship-Building in Class*; and *Participation: Meeting Length.*

In Table A12 in Appendix 4, in which the impact of total teaching tenure is presented, 13 factors are impacted at a significance of 95% or more (.050 or less). One factor, a physical factor, is impacted at a significance of .000: *Room Size.* The other factors (1 spiritual, 1 physical, and 10 social) with a significance between .001 and .033 include the following: *Divine Involvement: Transformed Lives*; *Aesthetics and Tidiness*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Group Size*; *Psychological Factors*; *Expectation*; *Participation: General*; *Participation: Teaching Methods*; *Participation: Meeting Length*; *Participation: Conflicts*; and *Demographic, Cultural, and Personality Factors.*

Table A13 in Appendix 4 presents data about the impact of learning environment factors by class attendance (number of persons present). Twelve factors are impacted at a significance of 95% or more (.050 or less). Three factors (2 physical and 1 social) have a significance of .000: *Flexibility*; *Odors, Seating, and Noise*; and *Group Size*. The nine other factors (4 physical and 5 social) range from .001 to .044: *Physical Arrangement*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; *Temperature, Ventilation, and Humidity*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: Relationship-Building outside of Class*; *Expectation*; and *Participation: Teaching Methods.*

In Table A15 in Appendix 4, in which the impact of church location is presented, 3 factors are impacted at a significance of 95% or more (.050 or less). One factor, a physical one, has a significance of .000: *Flexibility*. Two factors (1 physical

and 1 social) have a significance of .002: *Temperature, Ventilation, and Humidity* and *Group Size*.

Table A16 in Appendix 4 presents data about the impact of teaching style upon learning environment factors. Eight factors are impacted at a significance of 95% or more (.050 or less). Half of the factors (3 physical and 1 social) have a significance of .000: *Flexibility*; *Proxemics and Territoriality*; *Aesthetics and Tidiness*; and *Participation: Teaching Methods*. The other half of the factors (all social) range from .001 to .044: *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building outside of Class*; and *Participation: General*.

In an examination of all Appendix 4 ANOVA tables from the perspective of the spiritual learning environment factors, *Divine Involvement* is impacted at an ANOVA level of significance of 95% or more (.050 or less) by 5 demographics: age, educational level, retention/attrition, number of close friends in class, and marital status. *Divine Involvement: Transformed Lives* is impacted by 13 demographics: age, gender, educational level, class tenure, teacher class and total tenure, class attendance (number of person present), class attendance frequency, retention/attrition, number of close friends in class, class gender, marital status, and participating church.

In an examination of physical factors from ANOVA tables in Appendix 4, *Physical Arrangement* is impacted at a level of significance of 95% or more (.050 or less) by 5 demographics: age, class attendance (number of persons present), church size, number of close friends in class, and participating church. *Flexibility* is impacted by 9 demographic variables: educational level, teacher class and total tenure, class attendance (number of persons present), church size and location, teaching style, marital status, and

participating church. *Room Size* is impacted by 4 demographics: gender, class attendance (number of persons present), church size, and participating church. *Proxemics and Territoriality* is impacted by 3 demographics: gender, class attendance (number of persons present), and teaching style.

Aesthetics and Tidiness is impacted by 9 demographics: age, educational level, teacher class and total tenure, class attendance (number of persons present), church size, teaching style, number of close friends in class, and participating church. *Lighting, Writing, and Reading* is impacted by 5 demographic variables: age, salvation length, teacher class tenure, class attendance (number of persons present), and participating church. *Temperature, Ventilation, and Humidity* is impacted by 5 demographics: teacher class tenure, church and location, marital status, and participating church. *Odors, Seating, and Noise* is impacted by 5 demographic variables: class attendance (number of persons present), church size, class attendance frequency, class gender, and participating church.

In an examination of social factors, *Teacher: General* is impacted by 8 demographics: age, gender, educational level, class tenure, teacher class tenure, class gender, marital status, and participating church. *Teacher: Social Interaction* is impacted by 9 demographic variables: age, gender, teacher class and total tenure, class attendance (number of persons present), number of close friends in class, class gender, marital status, and participating church. *Teacher: Classroom Management* is impacted by 11 demographics: age, gender, teacher class and total tenure, class attendance (number of persons present), church size, teaching style, number of close friends in class, class gender, marital status, and participating church.

Peers: General is impacted by 8 demographic variables: age, gender, teacher class tenure, teaching style, retention/attrition, number of close friends in class, class gender, and participating church. *Peers: Relationship-Building in Class* is impacted by 6 demographics: age, teacher class tenure, number of close friends in class, class gender, marital status, and participating church. *Peers: Relationship-Building outside of Class* is impacted by 9 demographic variables: age, gender, educational level, class attendance (number of persons present), teaching style, number of close friends in class, class gender, marital status, and participating church.

Group Size is impacted by 9 demographics: age, gender, teacher class and total tenure, class attendance (number of persons present), church size and location, class gender, and participating church. *Psychological Factors* is impacted by 5 demographic variables: teacher total tenure, class attendance frequency, retention/attrition, number of close friends in class, and marital status. *Expectation* is impacted by 5 demographics: gender, teacher total tenure, number of close friends in class, class gender, and participating church.

Participation: General is impacted by 9 demographic variables: age, gender, salvation length, teacher total tenure, class attendance (number of persons present), teaching style, retention/attrition, number of friends in class, and participating church. *Participation: Teaching Method* is impacted by 6 demographics: age, educational level, teacher total tenure, class attendance (number of persons present), teaching style, and participating church. *Participation: Meeting Length* is impacted by 8 demographic variables: age, gender, educational level, class tenure, teacher class and total tenure, class attendance (number of persons present), and participating church. *Participation:*

Conflicts is impacted by 7 demographics: educational level, teacher total tenure, class attendance (number of persons present), class attendance frequency, retention/attrition, marital status, and participating church. *Demographic, Cultural, and Personality Factors* is impacted by 9 demographic variables: age, gender, class tenure, salvation length, teacher total tenure, number of close friends in class, class gender, marital status, and participating church.

Evaluation of Research Design

In all research, it is essential to examine and evaluate the research design. The purpose of this study was to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. Overall, the research process and instrument proved to be effective in pursuing and satisfying the purpose of this research project. The instrument proved to be valid and reliable. Still, some changes could strengthen both the process and the instrument.

If repeating this study, the researcher would give consideration to additional ways of seeking information from a larger sample of low and no attenders. One method would include asking church leaders for permission to conduct telephone interviews with low and no attenders if attempts by mail have produced a low return rate. A second method would include asking pastors and/or Sunday School directors to conduct a set number of telephone interviews per church with low and no attenders. Calls would then be made asking the questions on the research instrument of those willing to participate. The first question would ask about attendance frequency. Only persons identifying themselves as low or no attenders would be asked to continue the interview. A telephone

interview script would be offered to church leaders. If every church had conducted a minimum of 5 of these interviews, 95 instruments from low and no attenders could have been received.

If repeating the current study, the research would begin surveying churches in July rather than August. Many churches begin new classes in September each year. Starting the research project in July would interfere less with church preparations for the new Sunday School year. It would also give church leaders more options for Sundays to ask their adult classes to participate. The change of month would likely make no difference in the results either of instruments completed in class or by mail.

If repeating the study, the researcher would attempt to enlist more small churches to participate in the project. Only 7 of the 12 small churches asked to participate agreed to do so. A larger number could have been pursued without exceeding the number needed. Since small churches made up the great majority of SBC churches and Long Run Baptist Association churches, additional data from this group would have been more representative.

A potentially less efficient but possibly more effective way to survey classes would be for the researcher to be present to orient each participating church's adult teachers and leaders. Potential benefits might include more member surveys returned connected to the corresponding teacher's survey. This would enable more demographic variables drawn from the teacher's instrument to be available for the entire class. In addition, specific reminders could be made for participants to initial their instruments. This would further assure that any persons returning surveys without initials were intentionally choosing not to have their data included in the research.

If repeating the study, the researcher would trim some of the statements in order to focus on those of greater relevance to learning environment factors. In particular, since divine involvement is assumed and is difficult to assess, those 6 question would be removed to focus the research more on physical and social learning environment factors. In addition, some statements and learning environment factor categories would also be removed/combined in order to reduce the number of total questions and focus the effectiveness of the research effort. A target of 60 remaining questions would be pursued. With the elimination of the divine involvement (spiritual) questions, this would mean that 6 additional questions would need to be removed.

If repeating this study, the researcher would also drop or move some of the demographic questions and change some of the response categories. The question about worship attendance did not produce any additional information relative to the study at hand. Thus, that question would be removed. The demographic question on the teacher instrument about average weekly total attendance of the church's Sunday School was considered to be redundant due to the construction of the research. Each church was enlisted because of the total average weekly attendance of the Sunday School. Thus, that question could be eliminated.

Also, since the question about church membership tenure did not produce significant results and was not intimately related to the research process, it could be eliminated. Ideally, the question on the teacher instrument about class attendance today would be moved to the pupil instrument as well. Also, the attendance categories of 31 to 40 and of 41 and greater would be replaced with a category of 31 and greater. Finally,

with few responses, the choice of separated for the marital status question could be eliminated.

CHAPTER 5

CONCLUSIONS

The learner and learning environment are set within a human or social environment, which is in turn set within a natural or physical environment, and God pervades it all. For the adult in Sunday School in a Kentucky Baptist Convention church, he or she is set within a wide variety of social environments, which are set within a wide variety of physical contexts. And Christians have "one God and Father of all, who is over all and through all and in all" (Eph 4:6).

Research Purpose and Questions

The purpose of this empirical research effort has been to examine the role of assimilation of the adult Sunday School class. Specifically, the purpose of this study has been to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. The descriptive quantitative design of qualitative social science research has been utilized.

The research questions that have been pursued include the following:

1. What is the strength of spiritual (divine involvement) learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

2. What is the strength of physical learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

3. What is the strength of social learning environment factors which impact adult Sunday School class member retention and attrition in Kentucky Baptist Convention churches?

4. What is the relationship between learning environment factors for adult Sunday School class high attenders, average attenders, low attenders, and no attenders in Kentucky Baptist Convention churches?

5. What is the relationship between adult Sunday School class member retention and attrition and demographics factors?

6. In what ways do learning environment factors vary by demographic factors?

Research Implications

In the pursuit to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in KBC churches, a number of implications of the research can be made. These implications may best be considered by examining the research questions sequentially along with relevant findings and precedent literature. In addition, implications of miscellaneous findings will be shared.

Question 1: Implications of Strength of Spiritual Factors

In this section, implications of findings relative to the first research question about spiritual factor strength are examined. Table 1 reports the ranking of the 72 survey statements by mean. The 6 statements representing the 2 spiritual factors are ranked sixth, eighth, ninth, thirteenth, twenty-ninth, and thirty-fifth. In addition, Table 2 reports that the 2 spiritual learning environment factors (*Divine Involvement: Transformed Lives* and *Divine Involvement*) are ranked third and fifth overall, respectively. These rankings show the significance of spiritual factors upon the learning environment of adult Sunday School. The reader should remember that the "man without the Spirit does not accept the

things that come from the Spirit of God, for they are foolishness to him, and he cannot understand them, because they are spiritually discerned" (1 Cor 2:14). To ignore the involvement of God in the adult Sunday School learning environment is to miss a significant contributor to the impact of that environment.

Now, how is the spiritual learning environment different for high/average attenders versus low/no attenders? Table 4 focuses on the findings of spiritual factors by retention and attrition (high/average and low/no attenders). High/average attenders have higher means than low/no attenders for 5 of the 6 statements of the 2 spiritual factors. The only statement with a higher (even if only by .02) means for low/no attenders was statement 1: As a result of God's involvement in class, I act in more loving ways toward others. Thus, it is not surprising that high/average attenders had higher means for both spiritual factors. In addition in Table 3 in an examination of the ranking of these 2 factors, they are ranked third and fifth for high/average attenders and sixth and eighth for low/no attenders. Complementing this information were ANOVA data in Table A18 showing that both spiritual factors have a high degree of significance for retention and attrition (high/average compared to low/no attenders).

The implication of these findings is that spiritual factors have greater strength for high/average attenders than they have for low/no attenders. This implies a couple of things. First, this means that high/average attenders are more likely than low/no attenders to be sensitive to and positive about God's involvement in class because of the frequency of their attendance. Second, this means that high/average attenders are more frequent than low/no attenders in their attendance because they are more sensitive to and positive about God's involvement in class. On the other hand, low/no attenders are less likely to

be sensitive to and more likely to be negative about God's involvement in class because of their infrequency of attendance. It may be that low/no attenders attended less frequently because they are less sensitive to or more negative about of God's involvement in class.

Question 2: Implications of Strength of Physical Factors

In this section, implications of findings relative to the second research question about physical learning environment factor strength are examined. According to the findings presented in Chapter 4, what is the difference in strength of the physical learning environment for high/average attenders versus that for low/no attenders? Table 5 displays mean scores for the 8 physical factors. They are divided between the 2 groups: retention (high/average attenders) and attrition (low/no attenders). Each of the groups led in 4 physical factors. Low/no attenders had higher means for *Aesthetics and Tidiness*; *Odors, Seating, and Noise*; *Lighting, Writing, and Reading*; and *Physical Arrangement*. High/average attenders had higher means for *Room Size*; *Temperature, Ventilation, and Humidity*; *Proxemics and Territoriality*; and *Flexibility*.

In the ranking of the 72 statements in Table 1, statements belonging to physical factors rank low. The first physical factor statement does not appear on the list until fourteenth, following 4 spiritual and 9 social statements. Six of the bottom 10 statements belong to physical factors. In Table 2 in the overall ranking of the means of the 24 learning environment factors, the first physical factor, *Room Size*, appears eighth in the list. Four of the bottom five factors in the list are physical factors.

There are differences between the two groups in their ranking of the physical factors. High/average attenders rank the 8 physical factors eighth, twelfth, fourteenth,

sixteenth, twentieth, twenty-second, twenty-third, and twenty-fourth. Low/no attenders rank them fifth, ninth, twelfth, thirteenth, eighteenth, twenty-first, twenty-third, and twenty-fourth. *Physical Arrangement*; *Flexibility*; and *Proxemics and Territoriality* are the lowest ranked physical factors for both groups. According to the results displayed in Table A18 in Appendix 4, none of the physical factors have a significance of .050 or less (95% or greater) for retention and attrition. These rankings and findings show the mixed nature of the means for the two groups.

Other demographics impact physical factors more significantly than do retention and attrition. For instance, 2 physical factors are reported at a level of ANOVA significance for individual gender in Table A7 in Appendix 4: *Room Size* and *Proxemics and Territoriality*. Three physical factors are reported at a level of ANOVA significance for age in Table A6 in Appendix 4: *Physical Arrangement*; *Aesthetics and Tidiness*; and *Lighting, Writing, and Reading*. Two physical factors are reported at a level of ANOVA significance for educational level in Table A8 in Appendix 4: *Flexibility* and *Aesthetics and Tidiness*. Only *Lighting, Writing, and Reading* was reported at a level of ANOVA significance for class tenure in Table A9 in Appendix 4. Four physical factors are reported at a level of ANOVA significance for teacher tenure in class in Table A11: *Flexibility*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; and *Temperature, Ventilation, and Humidity*. Seven of the 8 physical factors are reported at a level of ANOVA significance for class attendance (number of persons present) in Table A13 in Appendix 4: *Physical Arrangement*; *Flexibility*; *Room Size*; *Proxemics and Territoriality*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; and *Odors, Seating, and Noise*. Three physical factors are reported at a level of ANOVA

significance for teaching method in Table A16 in Appendix 4: *Flexibility*; *Proxemics and Territoriality*; and *Aesthetics and Tidiness*. Two physical factors are reported at a level of ANOVA significance for number of close friends in Table A19 in Appendix 4: *Physical Arrangement* and *Aesthetics and Tidiness*.

The implication of these findings is that physical factors are similar in overall significance for high/average attenders as they are for low/no attenders. In general, it appears that low/no attenders are more concerned with appearances (lighting, odors, and aesthetics) while high/average attenders are more concerned with the way the space feels (room size, closeness to each other, and temperature). In addition, the findings imply that physical factors did not have as much impact on the learning environment as spiritual or social factors. Apparently, some demographics variables impact physical factors more than retention and attrition. While a complete restatement of precedent literature is not necessary, the precedent literature supported these implications in several points.

In examining the precedent literature, research showed that "in small-group discussions a circular or sociopetal arrangement may be best" (Sommer 1967, 502). In contrast, the ranking of means by both groups (high/average and low/no attenders) of *Physical Arrangement* as last of the 24 learning environment factors (Table 3) bears out that the arrangement of adult Sunday School classes was not ideal. Many of the adult classes that reported were seated in chairs arranged in rows rather than in circles or semicircles. Also, many of the classes were seated in chairs arranged around one or more tables. Setting up a room so people have equal visual access with each other during discussions, could make participants "far more likely to interact with the content on a

personal basis" (George 1997, 118-19). Low/no attenders have a higher mean for this factor than high/average attenders.

The second lowest reported means in Table 3 for both groups is for *Flexibility*. Apparently, *Flexibility* is limited in many of the reporting classes. Physical elements of the learning environment ideally need flexibility in order to provide "easy alteration between a state of separateness and a state of togetherness" (Altman 1975, 107). Apparently, according to the last place ranking (72) for statement 28 (Table 1), few of the reporting adult Sunday School classes are flexible in their arrangement of the classroom seating and furnishings. Some of these classes have the added difficulty of at least one pew or couch limiting alteration of arrangement (statement 72). High/average attenders have a slightly higher mean for this factor than low/no attenders.

High/average attenders rank *Proxemics and Territoriality* twenty-second while low/no attenders rank it twenty-first. Interestingly, the only statement on which low/no attenders score a higher mean is statement 48: Class members sit in the same seats every week. While humans, "like other creatures, tend to establish territories" in order to give meaning to space and to create a sense of comfort and familiarity, the tendency of the statement in this research appears to be stronger for low/no attenders (Hiemstra 1991, 27). This implies that low/no attenders perceive high/average attenders to be sitting in the same seats when they return to class.

High/average attenders rank *Temperature, Ventilation, and Humidity* twentieth while low/no attenders rank it eighteenth. While high/average attenders score higher on statements 66 and 25, low/no attenders score higher on statement 3: Class members are sometimes bothered by heat/air conditioning blowing in the classroom. Low/no attenders

appear to have been more bothered by ventilation conditions in the classroom. Two quotes from precedent literature are relevant. "Sitting in a cool draft or next to a noisy heating system certainly lowers the learner's effective concentration level" (Leed and Leed 1987, 4). "A chilly or torrid space, no matter how beautifully conceived, will not attract and hold people" (Goshen 1959, 21). While the findings do not support the impact of retention and attrition on this physical factor, the challenge to learning remains.

It is not surprising in Table A13 of Appendix 4 that class attendance (number of persons present) impacts so many physical factors. The number of bodies present in a space impacts many dynamics in the physical environment. In the author's experience, the lowest 3 physical factors (proxemics, flexibility, and arrangement) as ranked by the means of both groups (retention and attrition) in Table 3 are the physical factors most impacted by class attendance (number of persons present).

Question 3: Implications of Strength of Social Factors

In this section, implications of findings relative to the third research question about social factor strength are examined. While 7 of the top 10 overall factors are social factors, it is helpful to remember that 14 of the total 24 factors are social factors. Nevertheless, the significance of social factors cannot be ignored and are apparent in the results. Some of those results include the fact that means of 32 of the 42 statements and 10 of the 14 social factors are higher for high/average attenders (Table 3). Also, 4 of the social factors have an ANOVA significance of 95% or greater (.05 or less) for retention and attrition: *Peers: General*; *Psychological Factors*; *Participation: General*; and *Participation: Conflicts*. High/average attenders have higher means for all 4 of these factors. Bartholomay states, "Classroom social environment has been supported by many

researchers as a contributing factor in student retention" (Bartholomay 1996, 32). This precedent literature quote and these facts clearly imply that social factor strength is significant for retention and attrition.

What are some of the details of social factor impact on retention and attrition? According to Table 3, the highest factor for high/average attenders is *Peers: General*. The highest factor for low/no attenders is *Teacher: General*. In addition, in Table 3 the 3 peer factors are ranked first, third and seventh for high/average attenders and second, third, and tenth for low/no attenders. Confirming the significance of peers on the learning environment, the precedent literature points out that "Unless people form meaningful friendships within the group, they probably won't stay for long" (Dockery 1997, 47). Combined with the fact that high/average attenders tend to have more close friends (Table 22) in class than low/no attenders, one may imply one or both of the following statements. Because high/average attenders attend more frequently, they have more friends who impact their learning environment. Because high/average attenders have more friends, they attend more frequently which impacts their learning environment. The ANOVA data about *Peers: General* affirm the significance of the impact of retention and attrition on the learning environment.

In addition to this information about peers, in Table 3 the 3 teacher factors (*Teacher: General*; *Teacher: Social Interaction*; and *Teacher: Classroom Management*) are ranked fourth, ninth, and eleventh for high/average attenders and first, fourth, and seventh for low/no attenders. None of the 3 teacher factors are included in the factors at a 95% or greater level of significance for retention and attrition in Table A18 in Appendix 4. For the sample of this research, the findings tend partially to disagree with

Knowles when he said that the "behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles 1980, 47). While the precedent literature points out "that teacher support was the most prevalent dimension of the actual classroom environment" (Bartholomay 1996, 34), these findings imply that low/no attenders are more impacted by teachers while high/average attenders are more impacted by peers.

In Table 6, *Psychological Factors* receives a higher mean score (by 0.81) from high/average attenders than from low/no attenders. In addition, all 3 statements range higher by high/average attenders, each from 0.20 to 0.28. The 3 statements as listed in Table 6 deal with discomfort in class due to background, satisfaction with the way class time is spent, and learning difficulty due to previous experiences. Also, Table A18 in Appendix 4 reports that *Psychological Factors* is 1 of the 4 social factors at a level of significance for retention and attrition. Furthermore, in the factor ranking of Table 3, the mean for *Psychological Factors* is ranked sixth for high/average attenders and fifteenth for low/no attenders. These findings tend to agree with Knowles in the precedent literature: "Important as physical climate is, *psychological* climate is even more important" (Knowles 1984, 15). These data imply that *Psychological Factors* impacts the attendance frequency difference between high/average attenders and low/no attenders at a level of significance. The data further imply that high/average attenders are more comfortable in class due to background, more satisfied with the way class time is spent, and better aided in learning by previous life experiences. Higher frequency of attendance may have helped high/average attenders to enjoy greater comfort, satisfaction, and learning. In addition, greater comfort, satisfaction, and learning may have helped

high/average attenders continue in higher frequency of attendance. Thus, the strength of the social factor, *Psychological Factors*, is implied to be a part of the reason for the greater attendance frequency of high/average attenders in this research effort.

Group Size ranks as eighteenth by high/average attenders and seventeenth by low/no attenders. In addition, *Group Size* does not make the list of factors at a level of significance for retention and attrition in ANOVA Table A18 in Appendix 4. The precedent literature points out that group size has impact "on aspects of individual and group performance, on the nature of the interaction and distribution of participation of group members, on group organization, on conformity and consensus, and on member satisfaction" (Thomas and Fink 1963, 383). Nevertheless, the research at hand does not bear out this statement. High/average attenders have higher means for statements 11 and 45 while low/no attenders have a higher mean for statement 19: I am satisfied with the number of class participants. This is somewhat contradictory for the two groups since statements 11 and 45 (higher for high/average attenders) have to do with too many and too few participants and statement 19 (higher for low/no attenders) is about satisfaction about the number. Thus, the strength of the social factor, *Group Size*, is not shown to be significant for retention and attrition in this research effort.

The largest difference (1.53) between any of the factor means favors high/average attenders in Table 6 for *Participation: Conflicts*. In addition to this data, *Participation: Conflicts* is the only factor with an ANOVA significance of .000 in Table A18 of Appendix 4. The statements for this factor were added to the research instrument at the encouragement of the members of the Expert Panel. The 3 statements deal with conflicts with a teacher or class member, family or work schedule, and personal or family

health problems. High/average attenders have higher means for all 3 statements. Statement 65 dealing with conflicts with a teacher or class member has the least difference (.16). Data imply that high/average attenders and low/no attenders in the research sample perceived a somewhat similar level of conflicts between teachers and class members. On the other hand, statement 27 dealing with family or work schedule conflicts has the greatest difference (.80). Family or work conflicts are implied to have played a significant part in the difference in the attendance frequency difference between the two groups. In summary, data imply that conflicts are a significant source of influence for retention and attrition. Specifically, low/no attenders attend less frequently than high/average attenders due to a greater impact of conflicts. Lower scores of low/no attenders imply that they had experienced higher degrees of conflict due to work or family schedule along with personal or family health problems. Conflicts may have initially led low/no attenders to decrease attendance frequency, and during the time away relationship strength with the class weakened. Or a decrease in frequency of attendance may have made it more acceptable to allow conflicts to influence continued infrequency of attendance. Certainly, the research implies that *Participation: Conflicts* is a significant contributor toward retention and attrition.

In Table 6, an additional factor for which high/average attenders report a higher mean is *Participation: General*. High/average attenders score higher means on all 3 statements. The statements deal with participation due to teaching methods, class members sharing class leadership and ministry responsibilities, and class domination by one or two class members. *Participation: General* is 1 of the 4 social factors reported in the Table A18 of Appendix 4 which has an ANOVA level of significance (.031) for

retention and attrition. In Table 3, high/average attenders rank this factor thirteenth while low/no attenders ranked it sixteenth. The precedent literature agrees that adults prefer social environments where they can "be actively involved in the learning process" with more "interactional activities with other students and with their instructors" (Bartholomay 1996, 37). The research implies that low/no attenders are not as positive about participation as high/average attenders. The research implies that the participation of low/no attenders is discouraged through the teaching methods utilized. Data imply the possibility that learning styles and teaching methods are at odds. Also, the research implies that low/no attenders either share less class leadership and ministry responsibilities or are more negative about responsibilities that are shared. Furthermore, the research implies that low/no attenders are slightly more bothered by one or two class members dominating the class. Thus, the strength of the social factor, *Participation: General*, is shown to be significant for retention and attrition.

Expectation is 1 of the 4 social factors for which low/no attenders report a higher mean in Table 6. Low/no attenders score higher on 2 of the statements while high/average attenders score higher on statement 46: I look forward to attending the class. The 2 statements for which low/no attenders are higher deal with teacher expectation for uniform application and teacher high positive expectation of class members. Precedent literature states that that while some adults resist active participation because of its excessive effort, responsibility, and risk, most adults actually thrive under such conditions if they are supported and challenged early (Knox 1986, 132-34). Research findings imply that high/average attenders do not take expectations seriously. In Table 3, *Expectation* is ranked fifteenth by high/average attenders and fourteenth by

low/no attenders. *Expectation* is not included in Table A18 of Appendix 4 as a factor of ANOVA significance for retention and attrition. Thus, the strength of the social factor, *Expectation*, is not shown to be significant for retention and attrition in this research effort.

Participation: Meeting Length is another of the 4 social factors for which low/no attenders report a higher mean in Table 6. Like *Expectation*, low/no attenders score higher on 2 of the *Participation: Meeting Length* statements while high/average attenders score higher on statement 12: Class time is too long. The 2 statements for which low/no attenders have higher means deal with class starting and ending on time and class time being too short. Low/no attenders are more in agreement that it is important for the teacher "to try to make it happen within 5 minutes of the announced start time" (George 1997, 87). In Table 3, low/no attenders rank this factor eleventh while high/average attenders rank it seventeenth. *Participation: Meeting Length* is not included in Table A18 of Appendix 4 as a factor of ANOVA significance for retention and attrition. This research implies that *Participation: Meeting Length* did not impact retention and attrition.

Table 6 presents data showing that high/average attenders have a higher mean (by .52) for *Demographic, Cultural, and Personality Factors*. In addition, high/average attenders score higher on all 3 statements. The statements deal with being more alike, having a similar background to, and having a similar personality to other class members. The precedent literature states, "People prefer to participate in groups where other members are similar in age, attractiveness, attitudes, personality, economic status, perceived ability, and needs" (McBride 1990, 57). The research findings imply that

high/average attenders are more like other class members, more similar in background, and more similar in personality to class members than low/no attenders. For high/average attenders, this perception could be the result of more time spent with other class members. In Table 3, high/average attenders rank this factor nineteenth and low/no attenders rank it twentieth. *Demographic, Cultural, and Personality Factors* is not included in Table A18 of Appendix 4 as a factor of ANOVA significance for retention and attrition. Despite the truth of McBride's statement, the implication of the research is that the strength of this social factor, *Demographic, Cultural, and Personality Factors*, did not significantly impact retention and attrition.

Finally, high/average attenders score higher than low/no attenders on *Participation: Teaching Methods* by .26. Only statement 34 is scored higher for low/no attenders: Students seem to do the same type of learning activities each week in class. Since the statement is worded negatively, the scores were reversed. Thus, the implication for low/no attenders about statement 34 is that they perceive more variety in learning activities than did high/average attenders who attend more frequently. This is somewhat contradictory with high/average attenders having higher scores on the second of the 2 statements that deal with taking part in class discussions and activities and with regularly varying teaching approaches. The precedent literature affirms that methods are "tools a teacher uses to engage the learner. Use of different methods in the same teaching session opens the possibilities of engaging people who take different approaches to learning" (Johnston and Brown 2000, 138). Table 3 shows that high/average attenders rank this factor twenty-first while low/no attenders rank it twenty-second. In addition, *Participation: Teaching Methods* is not included in Table A18 of Appendix 4 as a factor

of ANOVA significance for retention and attrition. Table 21 displays findings about teaching style and retention and attrition showing that discussion is the predominant teaching style in this research effort. While this social factor may have impacted learning, *Participation: Teaching Methods* is not shown to be significant for retention and attrition in this research effort.

In summary, findings from the current study lend much support for the implication that social learning environment factor strength impacts retention and attrition. In other words, the research implies that retention and attrition are impacted by social factors, especially *Peers: General*; *Psychological Factors*; *Participation: General*; and *Participation: Conflicts*. This is seen by comparing factor and statement means, comparing ranking of factor means, and examining analysis of variance (ANOVA) data for retention and attrition. Data imply that social learning environment strength is greater than that of the physical environment for retention and attrition.

Question 4: Implications of Factors by Attendance Frequency

In this section, implications of findings relative to the fourth research question about the relationship between learning environment factors and attendance frequency are examined. An examination of Tables 7-12 leads to the implication that high attenders and average attenders are more alike than any other two combinations of attendance frequencies. High attenders are teachers and members who attended 4 or more Sundays per month during the previous year while average attenders are those who attended 2 or 3 Sundays per month. Table 11 compares the top five learning environment factors for each attendance frequency. Two factors are shared by all 4 attendance frequencies:

Teacher: General and *Peers: General*. The key finding in Table 11 is that high and average attenders shared all five top factors. In order to examine the lower extremes, Table 12 compares the bottom five learning environment factors for each attendance frequency. In a similar way, 2 factors are shared by all 4 attendance frequencies: *Physical Arrangement* and *Flexibility*. As in Table 11, the key finding in Table 12 is that high and average attenders shared all five bottom factors. In addition, examination of the mean scores in Tables 11 and 12 show that high and average scores are closer to each other than any other two combinations of attendance frequency. Further examination of Tables 7-10 confirms these finding.

Table A17 in Appendix 4 presents ANOVA data about the impact of attendance frequency upon learning environment factors. It that table, 4 factors are identified at an ANOVA level of significance greater than 95% (less than .050). Those factors include *Divine Involvement: Transformed Lives*; *Odors, Seating, and Noise*; *Psychological Factors*; and *Participation: Conflicts*. They include 1 spiritual, 1 physical, and 2 social factors. The implication of this data is that attendance frequency has some impact on the learning environment, especially in these 4 factors.

In Table A18 in Appendix 4, while both spiritual factors are identified at an ANOVA level of significance for retention and attrition (high/average attenders and low/no attenders), only *Divine Involvement: Transformed Lives* is identified for attendance frequency (high, average, low, and no attendance) in Table A17 in Appendix 4. An examination of the means for this factor in Table A1 of Appendix 3 shows that high and average attenders are more alike and low and no attenders are more alike. Interestingly, as attendance frequency increases, the factor means increase. The

statements of this factor deal with the class meeting practical needs of members, understanding the Bible better, and understanding how to apply the Bible to life. In Table A3 in Appendix 3, statement 6 about meeting members' practical needs receives the lowest scores for this factor by every attendance frequency, implying that this is the area about which respondents felt least positive.

Ranking of factor means by attendance frequency is displayed in Table A2 of Appendix 3. In this table, *Divine Involvement: Transformed Lives* is ranked sixth by no attenders, eleventh by low attenders, second by average attenders, and third by high attenders. This is another confirmation of the implication that high and average attenders are more alike than any other combination of attendance frequency. The data imply that the more frequent attendance of high and average attenders helped them be more perceptive of God's involvement in changing lives through the teacher and class. In fact, the data imply that as attendance frequency increases, perception of God's involvement in changing lives increases. Thus, the church and class learning environment is not just the physical and social elements, and the "church is not first a methodology, but a dependence on the infinite power of a sovereign God" (Rainer 1994, 79).

While no physical factors makes the ANOVA level of significance for retention and attrition (high/average and low/no) in Table A18 of Appendix 4, 1 physical factor makes the ANOVA level of significance for attendance frequency in Table A17 of Appendix 4: *Odors, Seating, and Noise*. This factor makes neither the top five nor bottom five lists in Tables 11 and 12. Table A1 of Appendix 3 shows that as attendance frequency increases a similar pattern of increase can be noted for *Odors, Seating, and Noise* as can be discerned for *Divine Involvement: Transformed Lives* with one

exception. For this factor, average attender mean scores are lowest and the standard deviation highest of any attendance frequency. With the exception of average attenders, these data imply that as attendance frequency increases individuals are more positive about this physical factor. Tables 7-10 display the individual scores for each attendance frequency. In the table for average attendance frequency (Table 8), a number of low individual scores contribute to the lower mean and higher standard deviation for this factor. Accordingly, the ranking of this factor in Table A2 in Appendix 3 is lowest for average attenders: sixteenth. *Odors, Seating, and Noise* is ranked ninth for no attenders, twelfth for low attenders, and twelfth for high attenders. The 3 statements deal with learning difficulty due to strong odors, comfort of classroom chairs, and classroom hearing difficulty. The lowest scores for this factor's statements are recorded for statement 41 about hearing difficulty, implying that respondents are less positive about the noise level and hearing challenges in the learning environment than they are about odors or seating. "Adults seem to be able to put up with inadequate lighting and poor visual presentations a great deal better than they can endure disruptive noises" (Leed and Leed 1987, 4). For 3 of the 4 groups, the means for the statement about seating are below those for odors, implying that seating was less positively perceived than the smells/odors of the learning environment but more positively perceived than the noise/hearing difficulty. This affirms a statement from precedent literature that adults in Kentucky Baptist Convention (KBC) churches "are often physically uncomfortable in child-sized furniture" (White 1972, 3).

In Table A17 of Appendix 4, the 2 social factors with a level of ANOVA significance are *Psychological Factors* and *Participation: Conflicts*. The means for both

of these factors increase as the attendance frequency increases. The rankings for each factor vary. *Psychological Factors* is ranked eighth for high attenders, sixth for average attenders, thirteenth for low attenders, and nineteenth for no attenders. *Participation: Conflicts* is ranked sixth for high attenders, seventeenth for average attenders and for low attenders, and twenty-third for no attenders. These data imply that both of these factors are connected to attendance frequency. Thus, one can make the implication that the more frequently an individual attends adult Sunday School, the greater the likelihood that his/her perception of these 2 factors will be high. Specifically, the implication is that frequent attendance will be connected to a positive psychological perspective on the class and fewer conflicts. Data imply that more frequent attendance helps adults avoid carrying "into a learning environment external and internal 'baggage' that adversely affects their abilities to engage in learning experiences" (Hiemstra 1991, 51). In addition, the implication is that those who attend more frequently will more often realize a positive psychological perspective and fewer conflicts.

An examination of the statements for these 2 factors produces additional implications. The statements for *Psychological Factors* deal with satisfaction with the way class time was spent, learning difficulty due to previous life experiences, and discomfort in class due to background. In Table A3 of Appendix 3, statement 20 about satisfaction with the way class time is spent has means of 3.58 for no attenders, 3.84 for low attenders, 4.01 for average attenders, and 3.93 for high attenders. In Table A4 of Appendix 3, statement 20 is ranked forty-first by no attenders, twenty-seventh for low attenders, twenty-third for average attenders, and thirty-fourth for high attenders. These data imply that satisfaction with the way class time was spent increases as attendance

frequency increases up to average attendance level. Statement 31 about learning difficulty due to previous life experiences has a mean of 3.40 for no attenders, 3.71 for low attenders, 3.81 for average attenders, and 3.88 for high attenders. Statement 31 is ranked fifty-fourth by no attenders, forty-first for low attenders, and thirty-ninth for average and high attenders. These data imply that less learning difficulty due to previous life experiences is realized as attendance frequency increases. Statement 67 about discomfort in class due to background has a mean of 3.85 for no attenders, 3.79 for low attenders, 4.01 for average attenders, and 4.11 for high attenders. Statement 67 is ranked thirtieth by no attenders, thirty-second for low attenders, twenty-fourth for average attenders, and fifteenth for high attenders. These data imply that comfort in class generally increases as attendance frequency increases. Generally, mean scores for the 3 statements increase as attendance frequency increases, reinforcing the implication that increasing attendance frequency leads to being more positive about *Psychological Factors*.

The statements for *Participation: Conflicts* deal with family or work schedule conflicts, personal and/or family health problems, and personality conflict with a class member or teacher. In Table A3 of Appendix 3, statement 27 about family or work schedule conflicts has a mean of 2.73 for no attenders, 3.07 for low attenders, 3.36 for average attenders, and 3.95 for high attenders. In Table A4 of Appendix 3, statement 27 is ranked sixty-ninth by no attenders, sixty-seventh by low attenders, sixty-first by average attenders, and thirty-first by high attenders. These data imply that family or work schedule conflicts contribute to decreasing attendance frequency. Thus, no attenders experience more of these conflicts than do low attenders, etc. Statement 50

about personal and/or family health problems has a mean of 3.00 for no attenders, 3.14 for low attenders, 3.24 for average attenders, and 3.84 for high attenders. Statement 50 is ranked sixty-seventh by no attenders, sixty-sixth by low attenders, sixty-third by average attenders, and forty-second by high attenders. These data imply that personal and/or family health problems also contribute to decreasing attendance frequency. Statement 65 about personality conflict with a class member or teacher has a mean of 4.00 for no attenders, 4.11 for low attenders, 4.25 for average attenders, and 4.22 for high attenders. Statement 65 is ranked twenty-third by no attenders, thirteenth by low attenders, sixth by average attenders, and fifth by high attenders. These data imply that personality conflict with a class member or teacher slightly contributes to decreasing attendance frequency. On the other hand, the data imply that circumstances are perceived to be the most similar for all attendance frequencies about personality conflict with a class member or teacher. Overall, mean scores for the 3 statements increase as attendance frequency increase, reinforcing the implication that increasing attendance frequency leads to being more positive about *Participation: Conflicts*.

Question 5: Implications of Retention and Attrition by Demographics

In this section, implications of findings relative to the fifth research question about the relationship between retention and attrition and demographic variables are examined. In Table 13, cross tabulation of retention and attrition with individual gender is presented. Percentages of females are higher than those for males for both groups (high/average and low/no attenders). The percentage of females for low/no respondents is higher than for high/average attenders. With the knowledge that the Jefferson County

population only slightly favors females (52.1%), the implication of these findings is that adult Sunday School classes in participating churches did a better job of reaching and keeping females than males. The higher percentage of females among the low/no attenders implies that more females struggle to remain connected to adult Sunday School or that females are more likely to complete and return a survey by mail.

In Table 14, cross tabulation of retention and attrition with class gender is presented. Mixed (coed) classes are the most commonly reported (71.3%), followed by female classes (22.0%) and male classes (6.7%). While there is very little low/no attender data, one implication from the data in Table 14 is that a higher number of individuals from mixed classes are likely to become low/no attenders. An additional implication is that more respondents prefer mixed classes.

In Table 15, cross tabulation of retention and attrition with age is presented. Overall, the percentage of persons age 18 to 29 is the lowest. These statistics imply that adult classes are not reaching and keeping as many young adults as persons of other ages. Many similarities exist between realities in college and in the church. "The research on student attrition and retention demonstrates that the late adolescent and early adult's struggles with identity issues, career choices, interpersonal competence, and values formation clearly affect student decisions to continue or to complete a college education" (Stodt and Klepper 1987, 6). With a higher percentage of low/no attenders (33.3) under the age of 40 than high/average attenders (18.3%), these data imply that younger adults are more likely to become low/no attenders. With the number and percentage of high/average attenders increasing as age increases, these data imply that adult Sunday School classes are reaching and keeping fewer adults in each decade.

Table 16 presents cross tabulation of retention and attrition with marital status. With percentages of each marital status being similar for both groups, the implication is that marital status has no impact upon retention and attrition. The highest number and percentage of respondents are married, implying that adult Sunday School classes reach and keep more married individuals than other marital statuses. When combining these data with class gender data, it is implied that the number of mixed classes encouraged reaching and keeping more married adults. Married percentages exceed that for Jefferson County, which is only 50.1% married.

Table 17 presents cross tabulation of retention and attrition with educational level. Almost identical percentages of low/no attenders (51.3) and high/average attenders (51.5) had not completed high school or had graduated high school. These percentages slightly exceed the Jefferson County percentage for these two groups (47.2%). The largest 2 percentages of educational levels for both groups are graduated high school and some college, which are the same 2 highest educational levels for Jefferson County. These data imply that educational level does not contribute to the difference between retention and attrition. In addition, the data imply that few participants in adult Sunday School (22.8%) have graduated college or completed more education.

In Table 18, cross tabulation of retention and attrition with Christianity tenure is presented. For both groups, numbers and percentages of respondents increase as Christianity tenure increase. These data parallel data about age, implying that Christianity tenure increases as age increases. The data also imply that adult Sunday School classes in the sample are not leading as many persons to accept Christ as they had previously. With higher percentages for low/no attenders who have been Christians for

11 or more years, the data imply that adult classes will benefit from a focus on assimilation and retention efforts with members at this point in their Christianity tenure.

Additional implications are discerned from cross tabulation of retention and attrition class membership tenure in Table 19. A higher percentage of high/average attenders report longer class membership tenure than low/no attenders. These data imply that a significant portion of the change from high/average attendance frequency to low/no attendance occurs early in class membership (the first 5 years). In looking at the generally declining percentages for low/no attenders as class membership tenure increases, the data imply that individuals are less likely to decline in attendance frequency the longer he/she has been a class member. Data support the precedent literature perspective that the number of months the student has been enrolled in the institution also has a significant influence (Porter 1990, 11-28). When comparing the data in Table 19 with Table 18, the small percentage (26.3) of persons with class membership tenure in excess of 10 years is significantly less than the larger percentages of Christianity tenure in excess of 10 years (84.8). The data imply that respondents have been in a number of classes over their years as Christians.

Table 20 displays cross tabulation data of retention and attrition with class numerical and spiritual/maturational growth opinion. Both groups are nearly evenly divided in their opinions about class numerical growth. These data imply that numerical growth is not taking place in the classes of about half of the respondents. Opinions about spiritual/maturational growth are overwhelmingly positive. These data imply that spiritual/maturational growth is occurring in most adult Sunday School classes. Percentages of respondents for both growth opinion questions are very similar for both

groups. The data imply that the opinions about numerical and spiritual/maturational growth have no impact upon retention and attrition. Low/no attenders are slightly more negative about spiritual/maturational growth than are high/average attenders, implying that attrition produces more negative perceptions.

In Table 21, cross tabulation of retention and attrition with teaching style is displayed. The teaching style identified by the majority of participants is discussion (71.5%). The data imply that lesson participation through discussion is more common than the writer expected. In addition, the data imply that discussion is the method of choice by most teachers and perhaps preferred by class members. The responses by low/no attenders and high/average attenders are similar, implying that teaching style has little or no impact upon retention and attrition. The precedent literature stated, "God created people with different ways of learning and dealing with life situations" (Johnston and Brown 2000, 134). Thus, variety in teaching methods and styles is needed, but while they may have impacted learning, they have little impact upon retention and attrition.

Data about cross tabulation of retention and attrition with close friends in class are presented in Table 22. Generally, low/no attender responses decline as number of friends increases while high/average attender responses tend to increase. The extremes of the table display significant differences between the two groups. A higher percentage of low/no attenders (46.2%) report 0 or 1 friend than is reported by high/average attenders (17.5%). Low/no attenders (5.1%) report a lower percentage for 6 or more friends than is reported by high/average attenders (33.8%). William Hendricks reported that some people who left the church did so because their hunger for community or friendship was not being met (Hendricks 1993, 260, 283-84). The data imply that the number of close

friends in class impacts retention and attrition. "Unless people form meaningful friendships within the group, they probably won't stay for long" (Dockery 1997, 47). Specifically, the data imply that the more friends a person has, the more likely he/she will be a high/average attender.

Table 23 displays cross tabulation data about retention and attrition with church location. About half of both groups report attending a church in a suburban location. Almost twice the percentage of low/no attenders report attending a church in a rural location as high/average attenders. The data suggest that high/average attenders are more likely than low/no attenders to attend a church in the city or suburbs. ANOVA data from Table 15 in Appendix 4 list 3 factors of 95% significance or greater: *Flexibility*; *Temperature, Ventilation, and Humidity*; and *Group Size*, implying limited impact upon the physical and social learning environment.

In Tables A27-A29 of Appendix 4, cross tabulation of retention and attrition with class attendance (number of persons present) is displayed and top and bottom five factors are compared in Table 27 in Chapter 4. The writer did not anticipate one result: percentages of high/average attenders increase as class size increases. These data imply that larger classes accommodate a larger percentage of adult Sunday School attendance than do smaller classes. Added to these data, class attendance impacts several learning environment factors at an ANOVA level of significance in Table A13 in Appendix 4: *Divine Involvement: Transformed Lives*; *Physical Arrangement*; *Flexibility*; *Room Size*; *Proxemics and Territoriality*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; *Odors, Seating, and Noise*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: Relationship-Building outside of Class*; *Group Size*; *Participation:*

General; *Participation: Teaching Methods*; *Participation: Meeting Length*; and *Participation: Conflicts*. They include 1 spiritual, 7 physical, and 8 social factors.

The precedent literature stated, "Unless [classes] remain small, they lose their effectiveness and ability to care for the needs of each other" (Comiskey 2001, 13). In a further examination of cross tabulation of class attendance with numerical growth opinion, more persons in smaller classes (10 persons or fewer) answered negatively while more persons in larger classes (11 persons or more) answered positively. The data imply that smaller classes are not growing numerically as much as larger classes. Nevertheless, the data in Table 24 indicate that a higher percentage of low/no attenders (75.0) are members of larger classes (16 persons or more) than high/average attenders (60.8). Without a doubt, group size has impact "on aspects of individual and group performance, on the nature of the interaction and distribution of participation of group members, on group organization, on conformity and consensus, and on member satisfaction" (Thomas and Fink 1963, 383). In addition, the data imply that it is easier to become infrequent in attendance in large classes. Thus, if larger classes are more likely to be reported as growing and more likely to have persons with infrequent attendance, the data imply that class attendance (number of persons present) has impact upon retention and attrition, especially physical learning environment factors.

Cross tabulation of retention and attrition with church size is displayed in Tables A24-A26 of Appendix 4. Percentages of low/no attender responses and those of high/average attenders are similar. Church size is reported to have ANOVA significance for 8 learning environment factors in Table A14 of Appendix 4, and the implication of the data in Table 26 is that church size has some impact upon retention and attrition.

Question 6: Implications of Factors by Demographics

In this section, implications of findings are examined about the sixth research question that deals with the ways learning environment factors vary by demographic factors. The first display, Tables 26, deals with top and bottom five learning environment factors by church size. Small, medium, and large churches share all of the top five and 4 of the bottom five learning environment factors. At first glance, these findings imply that there is little impact of church size on learning environment factors. Tables A24-A26 present data showing quite a bit of diversity in the factor means. Further data are needed. Table A14 in Appendix 4 displays ANOVA data about church size and learning environment factors. In that table, one-third of the 24 factors had an ANOVA significance of 95% or greater (.050 or less): *Physical Arrangement*; *Flexibility*; *Room Size*; *Aesthetics and Tidiness*; *Temperature, Ventilation, and Humidity*; *Odors, Seating, and Noise*; *Teacher: Classroom Management*; and *Group Size*. They include 6 physical and 2 social factors. Despite similar rankings of the top and bottom five factors, the ANOVA data imply that church size does indeed impact the learning environment, in at least these 8 factors and particularly the physical environment. In considering the means in Tables A24-A26 of Appendix 5 for the 8 factors of ANOVA significance for church size, medium churches have the highest means for *Physical Arrangement*; *Room Size*; *Aesthetics and Tidiness*; *Teacher: Classroom Management*; and *Group Size*. Large churches have the highest mean for *Flexibility*. Small churches have the highest means for *Temperature, Ventilation, and Humidity* and *Odors, Seating, and Noise*. The data imply that there is greater satisfaction with more factors in medium churches.

The next set of findings in Chapter 4 relative to this research question focus on learning environment factors by class attendance (number of persons present). In Table 27, 3 of the top five and 4 of the bottom five factors are shared by every class size. Thus, much similarity of factor ranking is found. These data imply that class size has little or no impact upon learning environment factors. Nevertheless, factor means do vary. Thus, further data are needed. Table A13 of Appendix 4 displays ANOVA data about class attendance on learning environment factors. In that table, two-thirds of the 24 factors have an ANOVA significance of 95% or greater (.050 or less): *Divine Involvement: Transformed Lives*; *Physical Arrangement*; *Flexibility*; *Room Size*; *Proxemics and Territoriality*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; *Odors, Seating, and Noise*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: Relationship-Building outside of Class*; *Group Size*; *Participation: General*; *Participation: Teaching Methods*; *Participation: Meeting Length*; and *Participation: Conflicts*. These include 1 spiritual, 7 physical, and 8 social factors.

Interestingly, a larger percentage of physical factors are significant for class size, implying that class attendance particularly impacts perception of the physical environment. Like church size, the ANOVA data imply that class attendance does indeed impact the learning environment, in at least these 16 factors and particularly with physical factors. The data in Tables A13 and A14 in Appendix 4 imply that class attendance has more impact upon the learning environment than did church size. In considering the means in Tables A27-A-29 of Appendix 5 for the 16 factors of ANOVA significance for class attendance, classes with 0 to 5 in attendance and classes with 11 to 15 in attendance had none of the highest factor means. Classes with 6 to 10 in attendance

had the highest means for 4 factors: *Proxemics and Territoriality*; *Odors, Seating, and Noise*; *Participation: General*; and *Participation: Conflicts*. Classes with 16 to 20 in attendance had the highest means for 2 factors: *Flexibility* and *Group Size*. Classes with 21 to 30 in attendance had the highest means for *Physical Arrangement*. Classes with 41 or more in attendance had the highest means for 9 factors: *Divine Involvement: Transformed Lives*; *Room Size*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: Relationship-Building outside of Class*; *Participation: Teaching Methods*; and *Participation: Meeting Length*. With the highest means for 9 of the ANOVA factors, the data imply that persons in the class with 41 or more in attendance are the most affirming about the learning environment. It should, however, be noted that only 1 class in the sample had 41 or more in attendance. In examining the mean data in Tables A27-29 in Appendix 5, the class with 41 or more in attendance had the highest means for 13 factors followed by classes with 6 to 10 in attendance that had the highest means for 6 factors. The 13 factors for the class with 41 or more in attendance included 1 spiritual, 3 physical, and 9 social factors, implying that the large class in the sample had the most favorable social learning environment. The 1 large class (41 or more in attendance) reported the highest means (Tables 27-A29 in Appendix 5) for the greatest number of total factors implying that greatest satisfaction with the learning environment can be found in large classes. If that class size is not included, 2 class sizes have the highest means implying greatest satisfaction: 6 to 10 in attendance with 13 highest means and 21 to 30 in attendance with 9 highest means. The most dissatisfaction with the learning environment is implied by the 8 lowest means reported by classes with 0 to 5 in attendance. In the precedent

literature, Knowles and many others affirm learning environment advantages for smaller group sizes. These findings do not concur with the literature.

The next set of findings in Chapter 4 dealing with the sixth research question focus on learning environment factors by class gender: male, female, and mixed. Most teachers and members were in mixed classes. In Table 28, 4 of the top five and 4 of the bottom five factors are shared by all class genders. Thus, much similarity of factor ranking is found, implying that class gender has little or no impact upon learning environment factors. Nevertheless, factor means do vary necessitating pursuit of further data. Table A7 of Appendix 4 displays ANOVA of class gender on learning environment factors. In that table, 11 of the 24 factors had an ANOVA significance of 95% or greater (.050 or less): *Divine Involvement: Transformed Lives*; *Odors, Seating, and Noise*; *Teacher: General*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; *Group Size*; *Expectation*; and *Demographic, Cultural, and Personality Factors*. These 11 factors include 1 spiritual, 1 physical, and 9 social factors. It is not surprising that 9 of the factors of ANOVA significance for class gender are social factors since class gender is a social demographic variable. The data imply that class gender had an impact upon learning environment factors, especially upon social factors.

The next set of findings in Chapter 4 deal with learning environment factors by member age. Table 29 displays a comparison of the top and bottom five factors by member age. In that table, all age groups share only 2 of the top five and 2 of the bottom five factors. This can somewhat be attributed to the number of age categories: 6. The more limited number of shared factors for all age groups implies that age does impact

learning environment factors. Mean scores vary considerably from age group to age group in Tables A32-A34 in Appendix 5. One example can be quickly discerned by examining the mean of the bottom factor, *Physical Arrangement*, which varies from 7.42 to 8.60. The variance of factor means further implies the impact of member age. In Table A6 in Appendix 4, in an examination of the analysis of variance (ANOVA) of age upon the learning environment factors, two-thirds of the 24 factors had an ANOVA significance of 95% or greater (.050 or less): *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Physical Arrangement*; *Aesthetics and Tidiness*; *Lighting, Writing, and Reading*; *Teacher: General*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; *Group Size*; *Participation: General*; *Participation: Teaching Methods*; *Participation: Meeting Length*; and *Demographic, Cultural, and Personality Factors*. The list includes 2 spiritual, 3 physical, and 11 social factors. With 16 factors impacted at an ANOVA significance of 95% or greater, the data imply an impact upon the learning environment in adult Sunday School, with an especially strong impact upon the spiritual and social factors. The impact of member age upon the learning environment is greater than that by class gender or church size. The impact is similar in magnitude to that of class attendance (number of persons present). One of the main differences between the impact of the 2 demographic factors is that class attendance has a stronger impact upon physical factors while member age has a stronger impact upon social factors.

The next set of Chapter 4 findings deal with learning environment factor responses by educational level. Table 30 compares the top and bottom five factors by

educational level. In that table, all 6 educational levels share 3 of the top five and 2 of the bottom five factors. This variance along with the variance of factor means implies that educational level does impact learning environment factors. Along with these data, ANOVA significance is considered in Table A8 in Appendix 4. In that table, 9 of the 24 factors have an ANOVA significance of 95% or greater (.050 or less): *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Aesthetics and Tidiness*; *Teacher: General*; *Peers: Relationship-Building outside of Class*; *Group Size*; *Participation: Teaching Methods*; *Participation: Meeting Length*; and *Participation: Conflicts*. Two spiritual, 1 physical, and 6 social factors are included. Interestingly, when the data file is split by member gender, males had only 1 factor of ANOVA significance while females had 12. When the data file is split by age, each age group from 30 to 69 had 1 factor of ANOVA significance while ages 18 to 29 had 4 and age 70 and up had 8. The data imply that respondent educational level has impact upon learning environment factors, especially for females and for the youngest and oldest. The number of factors of ANOVA significance is fewer than for age, class gender, or class attendance. These data imply that respondent educational level does not impact learning environment factors as much as age, class gender, class attendance, or marital status (in the paragraph to follow). Also implied is that educational level has slightly more impact than does church size. One additional piece of information can be noted. In comparing the means in Tables A35-A37 in Appendix 5, the highest means for 12 of the factors (2 spiritual, 1 physical, and 9 social) are scored by those with the most education: completed graduate degree. This finding implies that this group has the most learning environment satisfaction in adult Sunday School.

Following findings about learning environment factor responses by educational level are findings about marital status. In Table 31, top and bottom five factors are compared, showing only 1 top five factor and 3 bottom five factors shared by all marital statuses. This variance of data implies that marital status did impact learning environment factor responses. The ranking of the factors as noted in Table 31 is also quite varied, further implying that marital status impacts learning environment factors. In addition, Table A21 of Appendix 4 displays analysis of variance of the impact of marital status upon learning environment factors. In that table, half of the 24 factors had an ANOVA significance of 95% or greater (.050 or less): *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Flexibility*; *Temperature, Ventilation, and Humidity*; *Teacher: General*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; *Psychological Factors*; *Participation: Conflicts*; and *Demographic, Cultural, and Personality Factors*. The 12 factors include 2 spiritual, 2 physical, and 8 social factors. All 3 of the teacher and 2 of the peer factors are included. Added to these data is the fact that 12 of the highest factor means are recorded by persons who are divorced, implying that they are the most satisfied with the learning environment of any marital status. These data further confirm the implication that marital status does impact learning environment factor responses, especially spiritual and social factors with a specific impact upon perspectives about teacher and peers.

Next in Chapter 4 come findings about learning environment factor responses by salvation length (years as a Christian). Table 32 presents a comparison of top and bottom five factors by salvation length. There, 2 top five and all salvation lengths,

including Not a Christian, share 2 bottom five factors. In examination of the means from Tables A41-A44, the 2 shortest salvation lengths (less than 1 year and 1 to 2 years) score 19 of the highest factor means. If these 2 lengths are not included because the scores represented only 6 respondents, 8 of the highest factor means (1 spiritual, 3 physical, and 4 social) are scored by those who have been Christians from 3 to 5 years, and 6 of the highest factor means (1 physical and 5 social) are scored by those who have been Christians for 31 or more years. The data imply that those with fewer years as a Christian tend to be the most positive about the learning environment. The great variance of rankings and the variance in mean scores imply that salvation length impacts the learning environment, especially for the newest Christians. Also, data from the ANOVA Table A10 in Appendix 4 show that only 3 of the 24 factors have a significance of 95% or greater (.050 or less): *Lighting, Writing, and Reading*; *Participation: General*; and *Demographic, Cultural, and Personality Factors*. Interestingly, neither spiritual factor makes the list. The 3 factors include 1 physical and 2 social factors. While the data imply some impact of salvation length upon the learning environment, the data do not imply the impact that other demographic factors in this section have.

The next set of Chapter 4 findings focus on learning environment factors by years as a church member. Table 33 compares top and bottom five factors, showing that all membership lengths share 2 of the top five and 3 of the bottom five factors. The diversity of ranking implies that membership length has some impact upon the learning environment. In addition, further examination of the means for each factor in Tables A45-A48 in Appendix 5 shows quite a bit of consistency for some factors implying a mixed message about the impact of this demographic factor. Though a table of ANOVA

data about this factor is not included, only 6 factors had an ANOVA significance of 95% or greater, further implying a more limited impact of church membership tenure, like that of salvation length.

Tables A49-A52 in Appendix 5 present data about learning environment factors by number of close friends. The highest number of responses is recorded from those identifying 6 or more close friends in the class. In Table 34, 2 of the top five and 3 of the bottom five factors were shared by every category of response. Like other factors, the data imply at least a mixed impact upon the learning environment by number of close friends. The diversity of mean scores for the factors implies even more of an impact by friends than the rankings indicated. Further examination of Tables A49-A52 in Appendix 5 reveals that respondents with 5 friends had 14 of the highest factor means. These 14 highest factor means include 2 spiritual, 5 physical, and 7 social factors, implying the greatest learning environment satisfaction of any close friends category. Table A19 of Appendix 4 presents ANOVA data about the impact of close friends upon learning environment factors. In that table, 13 of the 24 factors have a significance of 95% or greater (.050 or less): *Divine Involvement*; *Divine Involvement: Transformed Lives*; *Physical Arrangement*; *Aesthetics and Tidiness*; *Teacher: Social Interaction*; *Teacher: Classroom Management*; *Peers: General*; *Peers: Relationship-Building in Class*; *Peers: Relationship-Building outside of Class*; *Psychological Factors*; *Expectation*; *Participation: General*; and *Demographic, Cultural, and Personality Factors*. They include 2 spiritual, 2 physical, and 9 social factors. The ANOVA data imply that the number of close friends did indeed impact the learning environment, especially spiritual and social factors and especially for those with 5 friends.

Implications of Miscellaneous Findings

In Chapter 4, miscellaneous findings are examined after specific findings for each of the research questions. The first set of miscellaneous findings presents data about learning environment factors by participating church. With 19 participating churches, the data in Tables A53-A56 of Appendix 6 present numbers of responses along with mean scores for each factor. Tables A57-A59 of Appendix 6 present rankings of factors by participating church. An examination of the means in Tables A53-A56 of Appendix 6 shows that Church 1, 1 of the small churches, recorded 19 of the highest scores. Eight of the lowest means are by Church 11, 1 of the small churches. Tables 35 and 36 present comparison of the top five and bottom five factors by church. In Table 35, top five factors are shared by a number of churches, but no one factor makes the list for all churches: *Divine Involvement* and *Peers: Relationship-Building in Class* are included by 14 churches, *Teacher: General* is included by 16 churches, and *Peers: General* is included by 17 churches. In the contrast, all churches share 2 bottom five factors in Table 36: *Physical Arrangement* and *Flexibility*. Fourteen churches include *Proxemics and Territoriality* in their bottom five. That diversity along with the significant variance of mean scores implies a strong impact of the participating church upon the learning environment. Table A22 in Appendix 4 presents ANOVA data about the factors by participating church. In that table, 21 of the 24 factors have an ANOVA significance of 95% or greater (.050 or less). Thus, the ANOVA data concur with previous data that imply that participating church has the most impact of any of the demographic variable examined. Table A23 of Appendix 4 presents data about the impact of participating

church upon the 72 factor statements. In that table, 17 statements are of an ANOVA significance of 95% or greater.

The next set of findings in Chapter 4 deals with demographic data by gender distribution for age, marital status, and educational level. One implication of data from Table 37 is that females strongly influenced the learning environment in the sample of KBC church adult Sunday School classes surveyed. The population is aging with fewer responses from the younger generation, implying that churches are not reaching younger adults in the proportions of previous decades. The median age of Jefferson County residents, including those birth through age 17, was 37 years old according to Scan/US 2002 Estimates that was 15 to 20 years younger than the adults in the research.

The great majority is married, but a higher percentage of participating males are married (82.6%) than females (66.3%). One implication of this finding is that men are more likely to attend if they are married than if they are not. On the other hand, a higher percentage of widowed persons are female (20.0%) than male (2.5%). Two possible implications are discerned: more females outlive their husbands and the churches do a better job of pursuing and/or maintaining relationships with widows. Also, a higher percentage of divorced individuals are female (9.0%) than male (4.6%). The implication is that churches are not as effective in pursuing and/or maintaining relationships with divorced men as with divorced women. More of the single respondents are male (25) than were female (20), implying that the churches are doing a better job of meeting the needs, pursuing, and reaching single men.

Furthermore, in Table 37 as a percentage, respondent males are more educated than are females; 26.7% of males graduated college or pursued further education while

only 20.3% of females did so. Knowing that current higher education statistics show females pursuing education in greater percentages than males, these data imply that the churches have not yet had enough influx of females with college degrees or beyond to change previous history.

Table 38 presents findings of gender distribution by years as a Christian and years as a church member. Respondent males and females increase in number and percentage as years as a Christian increase. These statistics show the low number of persons who have become Christians in the last 20 years, implying that the churches have not been as evangelistic as in previous decades. Also in Table 38, data about years as a church member are displayed which do not parallel years as a Christian, implying that many respondents are not currently members of the church where they made their profession of faith. In fact, these statistics point more to the transfer of membership than to the profession of faith and baptism occurring in the current church. Females tend to have longer church membership tenures than males, implying that they live longer and are more likely to stay connected to a church than males.

Table 39 presents findings about worship attendance frequency, class involvement, and years as a class member. More females responded to every worship attendance frequency which is not surprising since more females participated in the research. Almost twice as many respondents attending 1 Sunday or none per month are female. Males (95.3%) are slightly more likely to be high or average attenders than females (94.4%). One implication of these statistics is that females are more likely to become low/no attenders than are males.

Also in Table 39, a higher percentage of the adult Sunday School class teacher respondents are male while more class member respondents are female, implying a church preference for males to teach adults. An additional issue may have been at play here. In many Kentucky Baptist Convention (KBC) churches, females are enlisted at higher percentages to teach preschool and children's Sunday School classes leaving fewer females to teach adults.

Table 39 closes by sharing statistics about gender distribution by years as a class member. Data about years as a class member are quite different from data about years as a church member. More males and females have been class members for 3 to 5 years than any other category. Females tend to have longer class member tenure than men, implying that (1) females stay with classes longer than males and (2) female's greater number of years as a church member impacts class membership tenure.

Table 40 presents statistics about gender distribution by class attendance frequency and number of class members as close friends. Class attendance frequency looks very similar to worship attendance frequency. Low/no attenders are twice as likely to be female, implying that females are more likely to become low/no attenders than males. The final data in Table 40 focus on number of class members as close friends. As number of friends increases, the gap widens between males and females, implying that females have a higher number of close friends in class than males do.

Table 41 presents gender distribution by class numerical and spiritual growth opinion and most frequently used teaching style. Both genders answered affirmatively to both questions, but a higher percentage of females are positive. These statistics imply a more optimistic, positive outlook and perspective on life, the learning environment, and

class growth by the females in the research population. This is especially true when one considers the fact that the great majority of male and female respondents are in mixed classes and are, therefore, responding to questions about the same classes.

The final section of Table 41 focuses on the most frequently used teaching style that is clearly discussion. While responses identifying other methods are fairly evenly divided between males and females, females respond with discussion almost twice as often as do males. This fact implies a different understanding of discussion between the genders, particularly when many of them are describing the same mixed classes.

The final set of displays in Chapter 4 presents cross tabulation findings of class involvement and other demographic data. Table 42 examines class involvement and age. Generally, as age increases the number of teachers and class members increases. These statistics imply greater effectiveness in previous years with reaching and keeping adults in greater numbers. The low number of younger teachers (below age 40) also implies (1) a lack of confidence by younger adults to teach, (2) a lack of availability of younger adults in the church, and/or (3) a lack of confidence by church leaders in the abilities of younger adults.

Table 43 deals with class involvement and marital status. Married is the predominant response by both groups, with a slightly higher percentage of teachers married than class members. This fact implies a preference by the church for married teachers and/or a greater willingness by married persons to teach. In fact, 94.8% of male teachers and 61.5% of female teachers are married, implying a greater openness by females of other marital statuses to teach or by the church to enlist. In general, married male teachers are the preference for adult Sunday School classes.

In Table 44, data about class involvement and educational level are presented. Teachers tend to have slightly more education than class members. This fact implies that persons who teach adult Sunday School are more willing to teach as a result of more education and are more likely to be asked to teach because of the additional education. Thus, married males with more education are the preferred teachers for adult classes.

Table 45 presents data about class involvement and years as a Christian. All reporting teachers had been Christians for at least 3 years, implying an appropriate requirement by churches that teachers not be new Christians. The low number of new Christian class members (10 years or less) implies that the churches have not been as effective in leading person to faith in Jesus Christ in the last decade as previously.

Cross tabulation data of class involvement and class attendance frequency are presented in Table 46. The is a sizable drop in response rate between average attenders (2 to 3 Sundays) and low attenders (1 Sunday) implies that persons whose attendance drops below 2 Sundays per month are more likely to slide toward no attendance. As may have been expected, teachers are more frequent in attendance, implying the demands of the responsibility impact attendance frequency. These data dovetail with information in Table 47. In that table, class involvement and number of close friends in class are examined. Teachers tend to have more friends than class members, implying that position and/or attendance frequency has impacted relationships and vice versa.

Research Applications

The purpose of the research study has been to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in KBC churches. What are the significant applications suggested by this

research? Like the research implications above, the applications are shared in response to each of the 6 research questions with the addition of miscellaneous findings.

Question 1: Applications of Spiritual Factor Findings

High/average attenders scored higher than low/no attenders on both spiritual factors and 5 of the 6 spiritual factor statements. These data along with ranking differences and ANOVA significance for both spiritual factors imply the impact of retention and attrition upon the spiritual learning environment. Several applications of these data are possible. In order to help low/no attenders maintain a more positive spiritual learning environment perspective which as was recorded for high/average attenders, the data emphasize the importance of efforts toward assimilation and relationship-building with those whose adult Sunday School attendance has begun to waver or drop. Second, the data emphasize the need for recovery and ministry efforts for those who are disconnected from an adult Sunday School class. Christian Schwarz in Natural Church Development emphasized that a church should utilize its strongest factor to address and improve its weakest factor (Schwarz 1996, 56). In a similar manner, an application of this research is for teachers and high/average attenders intentionally to pursue relationship-building opportunities (one-on-one and as a group) for the benefit of the low/no attenders' perspective on their relationship with God. Finally, helping low/no attenders understand the spiritual impact of a reduction in attendance frequency may also be productive.

Question 2: Applications of Physical Factor Findings

The findings imply that physical factors have less impact upon the learning

environment than do spiritual and social factors. When evaluating by means, physical factors are mixed: divided between retention (high/average attenders) and attrition (low/no attenders). In addition, in Table 3 low/no attenders tend to rank physical factors higher than do high/average attenders. Added to these data is the fact that none of the physical factors make the retention and attrition list for ANOVA significance. In fact, other demographic variables impact physical factors more than retention and attrition. The application of these findings is that spiritual and social factors in the learning environment are more impacting on retention and attrition than the physical factors. Also, teachers and class members have a more positive perspective about spiritual and social factors than about physical factors. As a result, physical factors may be in need of improvement for the benefit of both groups: high/average attenders as well as low/no attenders. The fact that physical factors cannot clearly be shown to be linked with retention and attrition should lead teachers and church leaders to utilize spiritual and social factors, particularly for the benefit of low/no attenders. In addition, the physical environment should be like the temperature of a classroom: it is best when you do not notice it. Thus, some efforts to improve the physical environment may increase scores and make that portion of the learning environment positively invisible. While it is true that the "meeting place either positively or negatively influences members' participation in the group," the findings do not support the impact of retention and attrition on physical factors (McBride 1990, 57).

In Table 3, *both groups rank Physical Arrangement and Flexibility twenty-fourth and twenty-third.* Conditions in the classrooms are apparently less than ideal for these 2 factors in the view of both groups. These two areas need to be addressed in many

classrooms, and teachers and church leaders need to be educated about how best to take advantage of these 2 factors of the physical learning environment.

Since low/no attenders are more bothered by heat/air conditioning blowing in the classroom than are high/average attenders, special efforts to address ventilation may be time well spent. Such efforts can be especially helpful with females and with senior adults who tend to be more bothered by variations in *Temperature, Ventilation, and Humidity*. Addressing classroom conditions may enable the class to reintegrate persons lost due to inability to endure current conditions.

Question 3: Applications of Social Factor Findings

In this section, application of the social factor findings and implications will be made. Social factors have significant impact upon the learning environment for retention and attrition. This can be seen in differences between high/average and low/no attender means and rankings of the social factors as well as ANOVA scores. These findings concur with precedent literature: "Social environment or climate is one of the most important variables in an educational environment" (Beer 1986, 2). Differences between the two groups include the rankings of the 3 peer factors and the 3 teacher factors. High/average attenders rank the peer factors higher than low no attenders while low/no attenders rank the teacher factors higher. These findings have several applications. First, the influence of and relationship with the teacher is complemented by peers through greater frequency of attendance. Second, when individuals attend less frequently, relationships with peers are lost through loss of interaction in class, but the impact of the teacher remains. Third, when persons begin attending less frequently, the teacher may be the best person in the class to communicate encouragement to return. Fourth, when a

low/no attenders returns to class, intentional efforts may be beneficial (1) to conduct relationship-building activities as a part of the lesson and (2) to avoid embarrassing him/her. Fifth, classes with low/no attenders may benefit from class leadership efforts to increase the number of fellowships and projects in order to increase the number of relationship-building opportunities outside of class.

The data about *Psychological Factors* imply that high/average attenders are more positive about these statements. Some of the comfort, satisfaction, and aid to learning come from the greater amount of time spent in the class. A natural application of that understanding is for teachers to assign willing class members to spend time by phone and in person with low/no attenders in order to improve their connection with the background and previous life experiences of the low/no attenders.

The contradictory nature of the findings about *Group Size* implies that the factor was not significant for retention and attrition. In fact, the findings imply satisfaction with the size of the group. When taking the midpoint in class size ranges and 45 for classes reporting attendance of 41 or greater, the average reported average class size is 22 persons. Cross tabulation of *Group Size* with class attendance (number of persons present) show that the highest means are reported by those in classes with attendance between 16 and 20 followed by classes with attendance between 21 and 30. An application of these findings is that mixed classes with about 22 in attendance appear to have the greatest satisfaction about *Group Size*. Thus, churches may benefit from examining adult Sunday School class sizes and starting new classes as needed in order to maintain satisfaction with this social factor.

The findings about *Participation: Conflicts* should not have been surprising. Those who were present 1 Sunday or less were more likely to identify conflicts with a teacher or class member, family or work schedule, and/or personal or family problems. Maintaining the relationship with low/no attenders during times of family/work schedule or health conflicts can enable easier reintegration into the class should schedule or health problems change. When class members encounter a conflict with a teacher or class member, reconciliation efforts can result in attendance frequency increase. In addition, some ongoing teacher or class member conflict may be sidestepped by inviting the low/no attender who has encountered conflict to attend another class.

High/average attenders scored higher means for all 3 statements for *Participation: General*. In addition, the factor is 1 of the 4 social factors of ANOVA significance in Table A18 in Appendix 4 for retention and attrition. In order to bridge the gap between high/average and low/no attenders, it may be necessary for teachers to address the differences. Teachers may benefit from accountability and training in utilizing teaching methods to meet varying learning styles. Also, efforts to get to know the learning styles of members may help the teacher become more effective in increasing participation of all members, especially low/no attenders. These efforts may also address the cases in which one or two persons dominate class time, thus addressing one source of difference between low/no attenders and high/average attenders.

Low/no attenders are more positive about *Expectation* as registered by their higher mean for this factor. This factor is not significant for retention and attrition in Table A18 of Appendix 4. An application of these findings is for teachers and high/average attenders to recognize that low/no attenders have slightly higher perceptions

of expectations. Working to deliver the best experience of Bible study and fellowship, especially when low/no attenders are present, could help high/average attenders and teachers to deliver on and exceed those expectations.

Participation: Meeting Length is not significant for retention and attrition in the ANOVA table, Table A18 of Appendix 4. In fact, contradictory messages are discerned from the two groups. High/average attenders score higher on the statement about class time being too long while low/no attenders score higher on the statement about class time being too short. An application of the low/no attender response can be that low/no attenders desire more Bible study and relationship-building time than is afforded in their infrequent times of attendance. Establishing additional times when the class gets together for Bible study and fellowship may address some of this desire.

The implications of the findings about *Demographic, Cultural, and Personality Factors* indicate that high/average attenders identify more with class members than do low/no attenders. Some of those perceptions come from high/average attenders spending more time together. Thus, efforts to enable low/no attenders to get to know high/average attenders during class and between class sessions may help low/no attenders identify with other class members better and improve perception and scores.

In Table 6, high/average attenders score higher on *Participation: Teaching Methods*, and they rank it higher in Table 3. In Table 6 in Chapter 4 and Table A4 in Appendix 3, statement 34 (about students doing the same type of learning activities each week) is scored and ranked low by both groups, causing this factor's mean to rank as the lowest social factor overall in Table 2. Discussion is the predominant teaching style response identified by both groups of survey participants (Table 21). What is the

application of all this information? While discussion is preferred over lecture by Knowles and many others due to its participatory nature, a constant diet of the same teaching method may not be effective. Effective teachers "create environments which maximise [*sic*] opportunities to learn, in which pupils are well managed and motivated to learn" (McBer 2000, teachingreformsold/mcber/01.htm). In order to meet the varied learning styles of class members, teachers can offer a variety of teaching methods. Variety for variety's sake is the wrong choice, but variety can be effective when utilized wisely to communicate the truth and message of God's Word to a particular group of people in such a way that they better understand Him, His truth, and His ways. "Use of different methods in the same teaching session opens the possibilities of engaging people who take different approaches to learning" (Johnston and Brown 2000, 138).

Question 4: Applications of Factors by Attendance Frequency

Findings generally show more similarity between average attenders and high attenders than between any other two groups. Low attenders appear to be the most dissimilar to any other group. In addition 4 factors are shown to have ANOVA significance of 95% or greater (.050 or less) in Table A17 of Appendix 4: 1 spiritual, 1 physical, and 2 social. What are the applications for the findings and implications discovered in the data about learning environment factors by attendance frequency (no, low, average, and high attenders)? How can scores of low and no attenders be increased? First, efforts can be made to note when an individual's attendance pattern has changed, especially when decreasing to 1 Sunday or less. Special attention in a loving way may keep him/her connected. The bottom line is that the "success of an institution and the

success of its students are inseparable" (Gaither 1999, 31). This may require the teacher and/or class members to call, visit, and/or fellowship with the person on the edge of becoming a low or no attender. This may require giving the individual some responsibility to fulfill for which he or she may be held positively accountable. The goal is "meaningful incorporation of individuals into the body of Christ so that they have a sense of belonging and are thus involved in the ministry of that community" (Brown and Hightower 1994, 9).

Efforts to re-engage a low or no attender in the class may, however, prove impossible. Some circumstances are inflexible. Table A17 in Appendix 4 points out that *Participation: Conflicts* is a significant ANOVA factor for attendance frequency. Thus, low and no attenders' attendance frequency are impacted by class conflicts, health issues, and schedule issues. Following attempts to connect the person to class where possible, the teacher and class members can work to minister to and fellowship with the low/no attender. The individual may benefit from a teacher or class member taking the Sunday School lesson to him/her in person or by tape. In addition, remembering the low/no attender's birthday and other special dates in his/her life can bring a sense of connection even when attendance is impossible. Prayer in person or by phone with the low/no attender may be greatly appreciated. An invitation to a class activity, fellowship, or project can re-ignite the sense of belonging. Sharing testimonies about class members' steps of faith and transformed lives can also help the low or no attender bridge the gap noted in the Table A17 in Appendix 4 for the 1 spiritual factor of ANOVA significance, *Divine Involvement: Transformed Lives*.

These efforts before and after the individual has become a low or no attender can also address another of the factors of ANOVA significance for attendance frequency in Table A17 in Appendix 4, *Psychological Factors*. In Table A2 of Appendix 3, high and average attenders rank *Psychological Factors* eighth and sixth while low and no attenders rank it thirteenth and eighteenth. High and average attenders are more satisfied and comfortable in class and do not feel life experiences make learning more difficult. Low and no attenders are less comfortable and satisfied and experience more learning difficulty from life experiences. Class leaders should do whatever they can to capitalize upon "past and present experiences, feelings, the learner's character, motivation, cognitive structure, and ways of perceiving" (Bartholomay 1996, 32). Steps by the class to connect, build relationships, and identify with the low/no attender and his/her challenges will be steps toward bridging the *Psychological Factors* gap.

Question 5: Applications of Retention and Attrition by Demographics

What are applications of the findings in response to the fifth research question? The fifth research question examines cross tabulations of retention and attrition with demographic variables. An application of the finding that the response of females is at a higher percentage than the general population points to the need for churches to focus more upon reaching males. The author has heard numerous church leaders across Kentucky talk about having difficulty filling deacon positions due to an insufficient number of qualified males. Church leaders have expressed similar concerns about the lack of males to teach Sunday School classes. Five strategies that enable a class to do an effective job at assimilation include the following: (1) develop friendships, (2) become

involved, (3) belong, (4) work together, and (5) grow in their faith (McIntosh and Martin 1992, 16-17). Several additional assimilation suggestions have been made in this chapter. In order to reach new people, there is often benefit from targeting a group of persons rather than trying to reach everyone. Thus, targeting and preparing well for males of a particular age group could produce results. Starting new adult Sunday School classes can sometimes engage new people more effectively than reaching efforts by existing classes. As strange as it might sound, an additional effort by churches might also pay dividends in efforts to retain males. While the church does not often focus on the physical health of individuals, doing so with males could be beneficial since more male attrition can be noticed in the statistics as age increases.

The data in Table 14 indicate that most participants are in mixed gender classes, implying that more individuals prefer mixed classes. While a natural application will be the suggestion to start additional mixed classes or only mixed classes, there are benefits for offering a variety of types of classes, including male, female, single, and others. One of the benefits of providing a class for one sex could be better meeting the needs of single, separated, divorced, or widowed persons of that sex.

Tables 34 and 35 present learning environment factor responses by class gender implying that female classes, closely followed by mixed classes, are more positive about the class learning environment. Male class mean scores are lowest for 20 of the learning environment factors. Confirming this implication, Table A20 in Appendix 4 presents ANOVA data showing half of the 24 learning environment factors are significant at 95% or more (.050 or less) for class gender. Added to this data is the fact that a higher percentage of mixed classes answer positively about numerical and spiritual

growth of the class. While 62.4% of mixed gender class respondents answer positively about class numerical growth, only 42.9% of male classes and 41.7% of female class respondents do so. Also, while 97.6% of mixed gender class respondents answer positively about class spiritual/maturational growth, only 88.2% of male class participants and 97.4% of female class participants do so. What does all the data mean? What application can be made? An element of negativism by respondents in male classes is implied. Training of the teachers of male classes may be helpful in order to utilize the negativism in the most effective way for the benefit of the class and Kingdom. In particular, the social environment in male classes may be addressed with teachers and classes. A further application of these data is that factors in the male class may need to be addressed in order to improve the learning environment and males' perception of it. Further research into male class responses will be beneficial far beyond greater attendance numbers and wise stewardship (Harton 1984, 9).

Statistics about retention and attrition with age in Table 15 imply that churches are not reaching and retaining younger adults as well as other adults. Data in Table 18 about retention and attrition with Christianity tenure echo the same implication. In addition, ANOVA data in Table A6 of Appendix 4 imply that age does impact the learning environment and learners' perception of it. Application of these implications leads to the realization that churches need to start younger adult classes. Places of service in adult classes and in church and community ministry for younger adults are needed. Adults are more likely to attend regularly when they have a responsibility of some kind. Some churches are hesitant to release responsibility to the younger generation, and yet the future of the church demands that this release be handled well. Furthermore, as with

all age groups, church leaders and teachers can take positive steps by seeking the input of younger adults about Sunday School and other ministries of the church. Finally, many authors are writing about the younger adult desire for authentic relationships. Churches and younger adult Sunday School classes may further address retention and attrition of younger adults by being intentional in their relationship-developing efforts, such as fellowships, mission projects, mentoring, and even Sunday School and worship.

Even though data in Table 16 imply that marital status has no impact upon retention and attrition, the higher percentage of married respondents than can be found in the general population suggests the need for application. Classes may find it difficult to reach non-married persons because the church has for so long not fully addressed the needs of single, separated, divorced, and widowed persons in the community. And yet non-married individuals may seek the relationships found in an adult Sunday School class. Thus, classes can make a difference by providing ministries and adult Sunday School classes that intentionally address the varied needs of persons in their communities.

Data in Table 19 imply that a portion of the change from high/average attendance to low/no attendance occurs early in class membership (the first 5 years). An application of this finding can be the training of church leaders and teachers to organize adult class leadership in prayer and contact groups with a leader assigned to each group of five or so individuals. With training of leaders, the groups can serve as assimilation and ministry aids by monitoring attendance and attitudes.

Table 20 displays cross tabulation of retention and attrition with class numerical and spiritual/maturational growth opinions. Data imply numerical growth is

not taking place in the classes of half of respondents from both groups (retention and attrition) while spiritual/maturational growth is taking place in the great majority of classes. Apparently, neither of the growth opinions impacts retention and attrition. Thus, a single application is offered. While these two class growth opinions may not have impacted retention and attrition, spiritual/maturational growth would suggest that adult classes should be growing in their understanding of the responsibility to carry out the Great Commission. Thus, more classes should be realizing numerical growth. Training teachers to lead their classes to reach out, start new classes, and to conduct class mission/ministry projects can be key strategies in shifting toward a more positive response about class numerical growth.

Even though it is apparent that discussion is the method used in the majority of classes, data in Table 21 imply that teaching style has little or no impact upon retention and attrition. Implications from Table A16 of Appendix 4 about the impact of teaching style on learning environment factors will be shared in the next section. As has already been stated, well-chosen variety in teaching style can benefit those with different learning styles, even if there is no impact upon attendance frequency.

Data in Table 22 present cross tabulation of retention and attrition with number of close friends in class, and Table A19 in Appendix 4 presents ANOVA data about learning environment factors and number of close friends in class. The implication of these tables is that peers (friends) impact the learning environment as well as retention and attrition. The greater the number of close friends reported, the greater the likelihood that the individual is a high/average attender. Thus, actions should be intentionally taken by teacher and class members to develop relationships with each other and to aid in the

assimilation, retention, and learning efforts of the class. Several suggestions for relationship development have already been offered, from regular class fellowships and projects to class prayer and contact groups. One additional application should be made. Why not encourage class members to conduct random acts of kindness for other class members one month? How long would class members talk about what happened? People do not "care how skilled you are nearly as much as they want to know that you care about them" (George 1997, 93). In the process, relationships would begin and be strengthened. Not all relationship-building efforts can or should be programmed, but the encouragement of the teacher can be key to motivating class members to take steps on their own.

Table 24 displays data about retention and attrition with class attendance (number of persons present) that implies that retention and attrition are impacted by class size. In particular, data imply that it is easier to become less frequent in attendance in a large class and that large classes are more likely to be reported to be growing numerically. The application of these data is understanding the importance in the large class for organized efforts of assimilation and retention. In particular, prayer and contact groups are needed to contact class members weekly and to pray together. Prayer partners for every class member can help. Four by four fellowships in which class members fellowship in groups of four for four months and then switch group members for the next four months can help develop relationships that have staying power. Keeping good records of attendance and addressing the information available in them can also be beneficial. When a person's attendance begins to waver, sending a class love team to

visit and love the person back into attendance (without mentioning attendance) can head off many potential problems.

The final data about retention and attrition with demographics are presented in Table 25 that deals with church size. Church size is reported to have ANOVA significance for 8 of the learning environment factors in Table A14 of Appendix 4. The implication of the data in Table 25 is in agreement that church size has minor impact upon retention and attrition. This should be encouraging to church and class leaders in churches of all sizes. These statistics may be different for adult church attenders and members who are not members of a Sunday School class. In the author's experience, individuals who are members of adult Sunday School class tend to have more relationships with people in the church than those who are not class members.

Question 6: Applications of Factors by Demographics

In this section, applications of findings about the sixth research question are examined. The sixth question deals with ways learning environment factors vary by demographic factors. Demographic factors include church size, class attendance (number of persons present), class gender, age, educational level, marital status, years as a Christian, years as a church member, and number of close friends in class. Relevant tables are found in Chapter 4 and Appendix 5.

Table 26 in Chapter 4 and Tables A24-A26 in Appendix 5 examine learning environment factors by church size. While rankings and mean variation do not clearly imply that church size impacted the learning environment, the ANOVA data in Table A14 show an impact in at least 8 of the factors. Respondents from medium and small churches are more satisfied with their learning environments. None of the respondents

from small churches report being in a class with more than 20 persons in attendance. An application of these data is that the larger a church grows, the more the church must pay attention to the learning environment in order for it to be most effective.

Table 27 in Chapter 4 and Tables A27-A29 in Appendix 5 examine learning environment factors by class attendance (number of persons present). The data imply that class attendance impacts the learning environment even more than church size. According to ANOVA data, all but 1 of the physical factors along with half of the spiritual and social factors are impacted by class size. An application of these findings is an understanding that the perceptions of and satisfaction with the learning environment vary by class size. The precedent literature stated that group members "usually evaluate smaller groups more positively than larger groups" (McBride 1990, 57). The research at hand shows that classes with 6 to 10 in attendance as well as classes with 16 or more in attendance are preferred and more satisfying learning environments. Thus, encouraging classes of these sizes may help them to thrive.

Table 28 in Chapter 4 and Tables A30-A31 in Appendix 5 examine learning environment factors by class gender: male, female, and mixed. ANOVA scores imply a strong impact on the learning environment, especially the social environment in adult Sunday School classes. Mean scores in Table 29 imply that females are the reason that the scores in female and mixed classes are higher. The application of these findings is an understanding of the way females positively impact the learning environment and the more positive perspective females have on the learning environment. While male class learning environments need to be improved, male perceptions may not fully reflect those

improvements or the same level of satisfaction that a female may have expressed in the same environment.

Additional data are presented in Table 29 in Chapter 4 and Table A32-A34 of Appendix 5 that look at factors by age. ANOVA scores, factor means, and factor rankings all imply a significant impact of age especially upon the social environment of adult Sunday School. With such diversity and impact, adult Sunday School age grouping (sometimes called age grading) is affirmed in order to provide the best learning environment possible, especially the best social environment for learning and retention.

Table 30 in Chapter 4 examines learning environment factors by educational level. Data imply less impact upon the learning environment than by age, class gender, or class attendance but slightly more impact than church size. Data imply that educational level impacts the perception of the spiritual and social environment more than the physical environment. In application, church leaders will want to note that educational level has more impact upon the perceptions of the learning environment for females and for the youngest and oldest respondents. This may help church leaders in teacher enlistment, in class organization, planning, and training. The data about greatest learning environment satisfaction by those with the most education should encourage adult classes to reach even more individuals with education beyond high school.

Table 31 in Chapter 4 and Tables A38-A40 of Appendix 5 examine learning environment factors by marital status. ANOVA, mean, and ranking data imply marital status impact upon learning environment factors, especially spiritual and social factors. Five of the 6 teacher and peer factors are significantly impacted. The impact by marital status is greater than that of educational level, class gender, or church size. An

application of the implication that divorced persons are the most satisfied with the learning environment is the need for the church to do more intentional ministry with persons outside the church who are divorced. Apparently, the adult Sunday School classes in the sample are good learning environments for divorced persons.

In continuing to respond to the sixth research question, Table 32 in Chapter 4 and Tables A41-A44 of Appendix 5 examine learning environment factors by salvation length. With only 3 factors of ANOVA significance, number of years as a Christian has less impact upon the learning environment than does any other demographic factor explored in this section. In order to apply this data, the church would do well to tap into the energy, enthusiasm, and positive perspectives of those newest as Christians in adult Sunday School. Those newest as Christians should be challenged to invite their friends to class and church. Classes should seek to discover the names of this group's friends in order to reach them with the gospel.

Table 34 in Chapter 4 and Tables A45-A48 in Appendix 5 examine learning environment factors by number of close friends in the class. ANOVA data, means, and rankings of factors all affirm the significance of the impact of close friends on the learning environment, especially the social environment. The implication of examining factor means is that having 5 close friends in class resulted in having the most learning environment satisfaction. "In a world of isolation and fragmentation small groups are a powerful way for people to connect with one another and experience the power of the gospel" (Bunch 1996, 8). Several applications of this data become apparent. Addressing efforts to improve and develop relationships has the potential to improve the perceptions of the adult Sunday School learning environment. Class leaders should set a goal for

every class member to develop relationships with 5 close friends in class in order to best impact the learning environment and retention efforts. Several potential relationship-building suggestions have been made previously. In a cross tabulation of close friends and gender, females report a higher percentage than males for 4 or more friends. Since men have been shown to be more likely to be more negative in learning environment assessment, these efforts at relationship-building are especially important with men. Patience may be required since friendships are difficult to program and impossible and unethical to force. Cross tabulation of close friends with class gender shows that female classes have the highest percentage for 4 or more friends of the 3 class genders, but male classes are second. This may also have been impacted by the tendency of female and male classes to have fewer in attendance than mixed classes.

Applications of Miscellaneous Findings

The first set of miscellaneous findings deal with learning environment factors by participating church. The most interesting finding is that 21 of the 24 factors were of ANOVA significance, implying that participating church has the most impact on the learning environment of any demographic variable considered. This cannot be explained totally by church size (which only impacts 8 factors at ANOVA significance) or church location (which only impacts 3 factors at ANOVA significance). In application of this information, every church is a unique body of Christ. Each has different strengths and weaknesses. Each has a unique purpose and has been given unique gifts of the Spirit. One may have great facilities while another has aging facilities or no facilities. One may have hundreds of people while another has a handful. Into that mix is set the learning environment for adult Sunday School classes, which is varied like those in participating

churches as indicated in Tables 35 and 36 in Chapter 4 and Tables A53-A59 in Appendix 6. With such variety, it would be wrong to try to force the learning environment in one church to look like the learning environment in another church. On the other hand, accepting the learning environment with all its deficiencies is not acceptable either. Leaders in every adult Sunday School should strive to improve the learning environment for more effective learning and retention efforts.

The second set of miscellaneous findings deal with demographic data by gender distribution. In Table 37, as previous data imply, females strongly influence the learning environment. In application, appreciation needs to be expressed for the involvement and investment of females in the church and specifically in adult Sunday School. The influence of females on the learning environment should be acknowledged. Such influence can also be utilized to improve the physical environment in male classes.

Research implications are that the sample was aging, and the majority is married. Married men are more likely to attend than any other marital status. Widowed persons are 8 times more likely to be female. The church must recognize the difference between those in the church and those in the community. Knowing that a higher number of single adults, divorced adults, men, and young adults reside in Jefferson County than can be found in the church should help churches realize a weakness in their strategies. Such knowledge should serve as an incentive to target reaching and ministry efforts toward these individuals, to love them into the Kingdom and into the church. In addition, respondent males are more educated than females. In a few years, that statistic may change since a larger percentage of females than males are pursuing further education after high school.

Table 38 presents gender distribution by Christianity and church membership tenure. Both males and females increase as years as a Christian increase, implying that the church has not kept evangelistic pace with previous years. A renewed emphasis in adult Sunday School is needed to reach the younger generation with the love of Christ. Also in Table 38, females tend to have longer church membership, implying they are more likely to stay connected to one church and to live longer. Also, knowing that more people live in Jefferson County now than did at any time in the past is additional data to help the church realize the untapped potential in each church's community. The data on male and female church membership may suggest a need to be more sensitive to the attendance patterns of males who may be more likely to change churches than would females. When even a small problem or attendance variation is sensed, attention should be given immediately in order to be most caring and responsive.

Table 39 presents data showing that low/no attenders are twice as likely to be females, implying that females are more likely to becoming irregular in attendance. The data suggest that female attendance patterns should be tracked and addressed on an individual church basis. Also, a higher percentage of teachers are males as opposed to class members that are more female. This implies that churches have a preference for males to teach adult male and mixed classes. This may be an additional area in which the church needs to address efforts to reach and assimilate men, specifically in order to have enough men to train as teachers. New classes (wineskins) and teachers are needed if the church is to hold new people (new wine) (Matt 9:17).

Data in Table 40 imply that women have a higher number of friends than men. In efforts to lead men to continue as high or average attenders, males may be content with

fewer friends, and their target for number of friends may not need to be as high as with females. Thus, relationship-building efforts for the purpose of increasing retention success need to be aware of this information.

Many of the females in this research sample are in the same mixed classes as males. Thus, for nearly twice as many females to identify the teaching style as discussion in Table 41 is surprising. Apparently, females view discussion differently than males. As has been said, this information should be noted in teacher training efforts.

The next set of miscellaneous findings in Chapter 4 deals with cross tabulation of class involvement and other demographic variables. The data in Table 42 show that there are few teachers below the age of 40. That fact needs to be addressed by the churches for the future of the Sunday School. An intentional adult Sunday School teacher training and mentoring program is needed. Since many more mature teachers are on the job, church leaders should select potential mentors and mentees. Efforts could address lack of confidence in the ability of younger adults both by the mentor and by the mentee. This may also address the need to start new classes for younger adults.

Table 43 reveals a church preference for married teachers, especially male teachers. In order to reach single, divorced, and widowed males, the church may need to seek and train qualified single, divorced, and widowed male teacher candidates. This may also be true for female teachers since the percentage of single females in church is lower than those in Jefferson County.

The next cross tabulation data are for class involvement and educational level in Table 44. Teachers tend to have more education than class members. While there are many other important criteria for the enlistment of adult Sunday School teachers, church

leaders may need to acknowledge this tendency in either their enlistment efforts or teachers' willingness to serve. No one is worthy to serve the Lord, and teachers in His service are to be held to higher accountability (Jam 3:1).

Data in Table 45 affirm previous data implying that the churches have not been as effective in recent years in leading persons to faith in the Lord Jesus Christ. Church leaders will need to strategize the best methods for the church and adult classes to utilize in changing these statistics. In particular, a focus upon youth and young adults may be needed if community demographics warrant it.

The drop in response numbers between average attenders and low attenders noted in Table 46 affirms the previously noted need to utilize class attendance records to note changes in attendance frequency by class members. When an individual's attendance starts to decline, class leaders need to put into play a ministry and relationship-building plan for his or her recovery, where possible. In the author's experience, attendance decline is allowed to continue for two reasons: neglect by the class (whether accidental or intentional) and/or no recovery plan. Granted, the individual's persistence is his or her own choice, but the retention efforts, or lack thereof, by the class is also a choice.

In Table 47, teachers report more friends than class members, implying that position and/or attendance frequency impact the relationships. In a class with more than half a dozen members, the teacher will be less able to maintain the same level of relationship with additional members. Thus, class members should be organized to help in this process. While such efforts may not lead class members to develop additional close friends in class, the ministry and relationship-building efforts can still aid retention.

Further Research

The purpose of this research effort was to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention (KBC) churches. In the process, some additional research designs, modifications, and directions were recognized. Delimitations of the study included focusing on Sunday morning, at-the-church, adult Sunday School classes. Further research would be valuable in pursuing an understanding of the learning environment of small group, adult home Bible studies. Comparing small group home Bible study results to those of adult Sunday School classes could provide additional insight. Efforts to improve the learning environment could help build the Kingdom.

Further research focused on the context for youth (grades 6 or 7 through 12) Sunday School is also much needed. Many individuals lost from youth Sunday School will not find their way back to church or Sunday School. Many have not accepted a life-changing relationship with Jesus Christ and will spend eternity in Hell. Youth are capable of taking and understanding the instrument. Improvement in the context of youth Sunday School in many KBC churches and beyond is needed.

Unquestionably, replication of this research for the purpose of validation is needed. In addition, research is also needed to consider a wider context, such as seeking to sample the entire population of KBC churches or Southern Baptist Convention (SBC) churches. Research conducted in other denominations would also be insightful. Research conducted in churches whose primary language is not English would likely produce further interesting and helpful findings. With the decline of enrollment and

attendance in Sunday School in many denominations across the country, this research is needed along with efforts to address the needs discovered in the learning environment.

At least four modifications of the research and instrument are worthy of consideration. All involve dividing the instrument and research. The first modification could focus on natural or physical factors of the learning environment, still focusing on the impact on retention and attrition. The research would create a new instrument from the demographic questions along with the statements relating to the physical learning environment factors to be used in a wide variety of Bible study contexts. Comparing the physical environment from the point of view of different ethnographic backgrounds could produce some interesting and useful data. Comparing the physical environment across geographic lines, such as in different parts of the United States, could produce additional useful results. It would also be worthy of research efforts to compare the physical environment across denominations.

The second modification could focus on human or social environment factors of the learning environment, still focusing on the impact on retention and attrition. There could be benefits from a new instrument drawn from the social factor statements and demographic questions that has been set in new ethnographic, geographic, or denominational settings. Such modifications could produce more focused results and enable researchers and consultants to aid church leaders in improving the respective factors of the learning environments.

A third modification to the research process would focus on the human or social factors of the learning environment and their impact on learning (rather than retention and attrition) while also assessing the learning styles of class members. This

would require that a longitudinal study be done. Such a study would necessarily be narrowly focused upon one denomination or group of churches teaching the same passages and/or curriculum in order to test learning. The amount of time participants would need to respond to testing would likely increase as well.

A fourth modification of the research process would focus on the human or social factors of the learning environment and the impact of the personality and/or leadership style of the teacher. This modification would not require any additional information from learners. In fact, with the focus on the 14 social factors and corresponding 42 statements and demographic questions, less class time would be required. Only the teacher would be required to complete additional testing, and this could be arranged in advance of or separately from class time. A variety of instruments are available and could be used to discover personality and/or leadership styles of teachers.

APPENDIX 1

EXPERT PANEL INFORMATION AND INSTRUCTIONS

An expert panel was enlisted and assembled from within Kentucky. Each panelist received a letter stating what was being requested of the individual, what time was involved, and what use would be made of the research. Enlisted panelists represented a wide range of responsibilities with expertise with adult Sunday School and its learning environment. The expert panel included five individuals: a minister of adults, a minister of discipleship, a Sunday School director, a retired state Baptist convention Sunday School director, and a minister of education.

Panelists received by mail the research instrument, the triangulation categories, and the evaluation questions. They were asked to examine the materials carefully and thoroughly before responding to the evaluation questions in writing in advance of gathering for the Expert Panel. They were asked to examine the research instrument in an effort to address its thoroughness and clarity, its questions, its wording, and the triangulation categories. Panelists were asked to bring their written answers to the Expert Panel meeting to aid in open discussion of the questions. Appropriate adjustments to the instrument were made following Expert Panel input, and dissertation committee approval was sought prior to field testing the instrument in a Kentucky Baptist Convention church which was a member of the Long Run Baptist Association.

Adult Sunday School Learning Environment
Assessment Triangulation Categories

Factor 1: ***Divine involvement***

1. As a result of God's involvement in class, I act in more loving ways toward others.

16. God regularly helps me apply His truth to my life as a result of class Bible lessons.

21. My life has been changed this year through class Bible study.

Factor 2: ***Divine involvement: Transformed lives***

6. As a result of the class, members help meet the practical needs (financial, physical, etc.) of others.

10. Class participants understand the Bible better because of class time.

39. The class helps participants understand how the Bible applies to life.

Factor 3: ***Physical arrangement***

14. Classroom seating is arranged in rows.

37. The chairs in the classroom are arranged around one or more tables.

52. The seating in the classroom is arranged in one or more circles or semicircles.

Factor 4: ***Flexibility***

28. The seating and furnishings in the classroom are arranged in the same way each week.

51. The seating and furnishings of the classroom can be easily arranged in different ways in order to allow a variety of teaching/learning activities.

72. The classroom seating includes at least one pew or couch.

Factor 5: ***Room size***

13. The size of the room is uncomfortable.

22. The space is too small for the number of persons in attendance.

55. The space is too large for the number of persons in attendance.

Factor 6: ***Proxemics and territoriality***

2. It feels like class members are seated too far apart.

33. Class members have to sit too close to one another.

48. Class members sit in the same seats every week.

Factor 7: ***Aesthetics and tidiness***

8. The room is kept clean and uncluttered.

47. The room is decorated nicely and appropriately for our class.

69. The room really needs a fresh coat of paint.

Factor 8: ***Lighting, writing, reading***

15. Glare from windows or lighting makes learning uncomfortable.

49. There is adequate light in the classroom.

60. The teacher encourages class members to take notes.

Factor 9: ***Temperature, ventilation, and humidity***

3. Class members are sometimes bothered by heat/air conditioning blowing in the classroom.

25. The temperature in the classroom is often too hot.

66. The temperature in the classroom is frequently too cold.

Factor 10: ***Odors, seating, and noise***

5. Strong odors in the classroom make learning difficult.

41. The classroom chairs are comfortable.

56. It is often difficult to hear in the classroom.

Factor 11: ***Teacher: General***

57. The teacher cares whether or not the students learn.

61. The teacher sometimes makes participants uncomfortable by asking them to pray, read aloud, etc.

64. The teacher listens to student comments and questions made in class.

Factor 12: ***Teacher: Social interaction***

29. The teacher talks informally with students one-on-one before and/or after class and/or between Sundays.

30. The teacher fellowships with class members at times other than Sunday.

71. This class is more a social hour.

Factor 13: ***Teacher: Classroom management***

36. The teacher comes to class well prepared.

44. The group sticks to the point and rarely gets sidetracked.

62. The teacher leads the class with a clear sense of direction and purpose.

Factor 14: ***Peers: General***

38. The class atmosphere is warm and friendly.

43. The degree of mutual respect and trust among class participants is high.

54. The members of the class work well together.

Factor 15: ***Peers: Relationship-building in class***

9. Class participants know the personal needs and concerns of others in the class.

42. This class intentionally helps new people feel a part of the class.

63. People notice when someone is absent.

Factor 16: ***Peers: Relationship-building outside of class***

4. Class members share in ideas, planning, and/or hosting class fellowship activities.

17. I regularly invite guests/prospects to class fellowships.

32. Close friendships are established among students in the class.

Factor 17: ***Group size***

11. The number of class members present each week is just too large.

19. I am satisfied with the number of class participants.

45. The number of class members present each week is just too few.

Factor 18: ***Psychological factors***

20. I am satisfied with the way the Sunday School hour is spent each week.

31. Previous life experiences sometimes make learning in class more difficult for me.

67. My background sometimes makes me uncomfortable in class.

Factor 19: ***Expectation***

46. I look forward to attending the class.

59. The teacher does not expect every student to make the same application.

68. The teacher has high positive expectations of class members.

Factor 20: ***Participation: General***

35. Class members regularly share in class leadership and ministry responsibilities.

40. The class is sometimes dominated by one or two class members.

58. Teaching methods allow everyone to participate in the lesson each week.

Factor 21: ***Participation: Teaching methods***

7. Teaching approaches in the class are varied regularly.

23. Most class members take part in class discussions and lesson activities.

34. Students seem to do the same type of learning activities each week in class.

Factor 22: ***Participation: Meeting length***

12. Class time is too long.

53. Class usually starts and ends on time.

70. Class time is too short.

Factor 23: ***Participation: Conflicts***

27. My class participation has been prevented regularly by family or work schedule conflicts.

50. My class participation has been prevented regularly by personal and/or family health problems.

65. As a result of a personality conflict with a class member or teacher, I have attended class less frequently.

Factor 24: ***Demographic, cultural, personality factors***

18. I am more alike than different from other class participants.

24. My background is similar to the background of other class members.

26. My personality is fairly similar to that of other class participants.

Expert Panel Instrument Evaluation Questions

Please examine the research instrument as well as the triangulation categories and answer every question on this form.

1. Does the instrument appear to be thorough? From your experience with the learning environment of adult Sunday School, what do you see that is missing?

2. Does the instrument as a whole appear to be clear? Are the instructions clear? Is the layout clear? How could the instrument be made even clearer?

3. Which statement(s) did you have difficulty in understanding? How could the statement(s) be better worded?

4. Examine carefully each set of three statements. Does each statement seem to fit into the learning environment factor category? If not, which one is out of place? What might be better wording to seek better fit?

5. Examine carefully each set of three statements. Will responses to the three statements give an indication of the impact on the individual of the listed adult Sunday School learning environment factor? If not, why not? If not, what might be better wording to seek this input?

6. Which statement(s) will Sunday School dropouts and low attendance members have the most difficulty in answering? Why? How could the statement(s) be better worded to ease some of the difficulty?

7. In examining the demographics questions (*Your Information* and *Teacher, Class, and Church Information*) at the conclusion of the instrument, are any questions unclear? If yes, how might they be better worded to seek this input? Are any demographics questions missing that might aid this research effort?

8. If your church were randomly selected to participate in this research, would you encourage your adult teachers and classes to participate? Why or why not? What other information about the instrument would you need in order to feel more confident about participating in the research?

9. What other information about the instrument would you like the researcher to know?

APPENDIX 2

RESEARCH INSTRUMENTS

Based upon understanding gained from the precedent literature, two instruments, utilizing a Likert response scale, were created addressing learning environment factors of adult Sunday School classes in Kentucky Baptist Convention churches. The first one for class members was five pages in length and was entitled, ADULT SUNDAY SCHOOL LEARNING ENVIRONMENT ASSESSMENT. The second one for teachers was six pages in length and was entitled, ADULT SUNDAY SCHOOL LEARNING ENVIRONMENT ASSESSMENT: TEACHER VERSION. The teacher version had one additional page seeking demographic information described below.

Each instrument was divided into two sections. The first section of the instrument addressed spiritual, human/social, and natural/physical learning environment factors. Seventy-two triangulated questions relating to twenty-four learning environment factor categories were mixed throughout this section. Thomas Hutchison gave the author permission to use and adapt some of the 118 questions from his 1997 Doctor of Philosophy dissertation research instrument, *Adult Class Survey for Churches* (Hutchison 1997, 186-192).

The instruments' second section sought the following demographics information: gender, age, marital status, education level, Christianity tenure, church

membership tenure, worship attendance frequency, class involvement, class membership tenure, class attendance frequency, close friends in this class, numerical class growth opinion, spiritual/maturational class growth opinion, and teacher's most frequently used teaching style. In addition to this information, the teacher's instrument sought the following teacher, class, and church demographics information: teacher's tenure teaching this class; teacher's total teaching tenure; class gender; class attendance today, average total weekly church Sunday School attendance, and church location.

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Adult Sunday School Learning Environment Assessment

Please indicate only one response to each statement:

Please Shade Circles Like This → ●
Not Like This → ✓ ✗

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Section 1 - General Information:					
1. As a result of God's involvement in class, I act in more loving ways toward others.	①	②	③	④	⑤
2. It feels like class members are seated too far apart.	①	②	③	④	⑤
3. Class members are sometimes bothered by heat/air conditioning blowing in the classroom.	①	②	③	④	⑤
4. Class members share in ideas, planning, and/or hosting class fellowship activities.	①	②	③	④	⑤
5. Strong odors in the classroom make learning difficult.	①	②	③	④	⑤
6. As a result of the class, members help meet the practical needs (financial, physical, etc.) of others.	①	②	③	④	⑤
7. Teaching approaches in the class are varied regularly.	①	②	③	④	⑤
8. The room is kept clean and uncluttered.	①	②	③	④	⑤
9. Class participants know the personal needs and concerns of others in the class.	①	②	③	④	⑤
10. Class participants understand the Bible better because of class time.	①	②	③	④	⑤
11. The number of class members present each week is just too large.	①	②	③	④	⑤
12. Class time is too long.	①	②	③	④	⑤
13. The size of the room is uncomfortable.	①	②	③	④	⑤
14. Classroom seating is arranged in rows.	①	②	③	④	⑤
15. Glare from windows or lighting makes learning uncomfortable.	①	②	③	④	⑤
16. God regularly helps me apply His truth to my life as a result of class Bible lessons.	①	②	③	④	⑤
17. Guests are regularly invited to class fellowships.	①	②	③	④	⑤
18. I am more alike than different from other class participants.	①	②	③	④	⑤
19. I am satisfied with the number of class participants.	①	②	③	④	⑤
20. I am satisfied with what is done in the class.	①	②	③	④	⑤
21. My life has been changed this year through class Bible study.	①	②	③	④	⑤
22. The space is too small for the number of persons in attendance.	①	②	③	④	⑤
23. Most class members take part in class discussions and lesson activities.	①	②	③	④	⑤

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Adult Sunday School Learning Environment Assessment

Please indicate only one response to each statement: Please Shade Circles Like This → ● Not Like This → ✓ ✗	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
24. My background is similar to other class members.	①	②	③	④	⑤
25. The temperature in the classroom is often too hot.	①	②	③	④	⑤
26. My personality is fairly similar to that of other class participants.	①	②	③	④	⑤
27. My class participation has been prevented regularly by family or work schedule conflicts.	①	②	③	④	⑤
28. The seating and furnishings in the classroom are arranged in the same way each week.	①	②	③	④	⑤
29. The teacher talks informally with students one-on-one before and/or after class and/or between Sundays.	①	②	③	④	⑤
30. The teacher fellowships with class members at times other than Sunday.	①	②	③	④	⑤
31. Previous life experiences make learning in class more difficult for me.	①	②	③	④	⑤
32. Relationships established among students in the c lass carry over outside the classroom.	①	②	③	④	⑤
33. Class members have to sit too close to one another.	①	②	③	④	⑤
34. Students seem to do the same type of learning activities each week in class.	①	②	③	④	⑤
35. Class members regularly share in class leadership and ministry responsibilities.	①	②	③	④	⑤
36. The teacher comes to class well prepared.	①	②	③	④	⑤
37. The chairs in the classroom are arranged around one or more tables.	①	②	③	④	⑤
38. The class atmosphere is warm and friendly.	①	②	③	④	⑤
39. The class helps participants understand how the Bible applies to life.	①	②	③	④	⑤
40. The class is sometimes dominated by one or two class members	①	②	③	④	⑤
41. The classroom chairs are comfortable.	①	②	③	④	⑤
42. This class intentionally helps new people feel a part of the class.	①	②	③	④	⑤
43. The degree of mutual respect and trust among class participants is high.	①	②	③	④	⑤
44. The group sticks to the point and rarely gets sidetracked.	①	②	③	④	⑤
45. The number of class members present each week is just too few.	①	②	③	④	⑤

38454

Adult Sunday School Learning Environment Assessment

Please indicate only one response to each statement: Please Shade Circles Like This → ● Not Like This → ✓ ✗	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
46. Class sessions are exciting.	①	②	③	④	⑤
47. The room is decorated nicely and appropriately for our class.	①	②	③	④	⑤
48. Class members sit in the same seats every week.	①	②	③	④	⑤
49. There is adequate light in the classroom.	①	②	③	④	⑤
50. My class participation has been prevented regularly by personal and/or family health problems.	①	②	③	④	⑤
51. The seating and furnishings of the classroom can be easily arranged in different ways in order to allow a variety of teaching/learning activities.	①	②	③	④	⑤
52. The seating in the classroom is arranged in one or more circles or semicircles.	①	②	③	④	⑤
53. Class usually starts and ends on time.	①	②	③	④	⑤
54. The members of the class work well together.	①	②	③	④	⑤
55. The space is too large for the number of persons in attendance.	①	②	③	④	⑤
56. It is often difficult to hear in the classroom.	①	②	③	④	⑤
57. The teacher cares whether or not the students learn.	①	②	③	④	⑤
58. Teaching methods allow everyone to participate in the lesson each week.	①	②	③	④	⑤
59. The teacher does not expect every student to learn exactly the same things.	①	②	③	④	⑤
60. The teacher encourages class members to take notes.	①	②	③	④	⑤
61. The teacher sometimes makes participants uncomfortable by asking them to pray, read aloud, etc.	①	②	③	④	⑤
62. The teacher leads the class with a clear sense of direction and purpose.	①	②	③	④	⑤
63. People notice when someone is absent.	①	②	③	④	⑤
64. The teacher listens to student comments and questions made in class.	①	②	③	④	⑤
65. Because of a personality conflict with a class member or teacher, I have attended class less frequently.	①	②	③	④	⑤
66. The temperature in the classroom is frequently too cold.	①	②	③	④	⑤
67. My background makes me regularly uncomfortable in class.	①	②	③	④	⑤
68. The teacher has high positive expectations of class members.	①	②	③	④	⑤

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Adult Sunday School Learning Environment Assessment

PLEASE DO NOT SKIP QUESTIONS 69 - 72	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
69. The room really needs a fresh coat of paint.	①	②	③	④	⑤
70. Class time is too short.	①	②	③	④	⑤
71. This class is more a social hour.	①	②	③	④	⑤
72. The classroom seating includes at least one pew or couch.	①	②	③	④	⑤

Section 2 - Your Information:

Thank you for taking time to complete the following questions. Your responses will be used to strengthen adult Sunday School. Please indicate only one response to each category.

Gender: O Female O Male

Age: O 18-29 O 30-39 O 40-49 O 50-59 O 60-69 O 70+

Marital Status:

O Divorced O Married O Separated O Single O Widowed

Education Level Attained:

O Did not complete high school
O Graduated high school / G.E.D.
O Some college
O Graduated college
O Some graduate work
O Completed graduate degree

How long have you been a Christian?

O Not a Christian
O Less than 1 year (after September 2001)
O 1-2 years
O 3-5 years
O 6-10 years
O 11-20 years
O 21-30 years
O 31+ years

How long have you been a Member of this church?

O Not a member
O Less than 1 year (after September 2001)
O 1-2 years
O 3-5 years
O 6-10 years
O 11-20 years
O 21-30 years
O 31+ years

38454

Adult Sunday School Learning Environment Assessment

In the past year, on average how many Sundays each month have you attended worship services at this church?

O 0 (none) O two or three Sundays per month
O one Sunday per month O four or more Sundays per month

What is your involvement with the Sunday School Class?

O Teacher O First-time or Repeat Guest O Class Member

How long have you been attending this class?

O Less than 1 year (after September 2001)
O 1-2 years O 6-10 years O 21-30 years
O 3-5 years O 11-20 years O 31+ years

In the past year, on average how many Sundays each month have you attended this Sunday School class?

O 0 (none) O two or three Sundays per month
O one Sunday per month O four or more Sundays per month

How many of your close friends (you would call in a time of crisis) are in this class?

O 0 O 1 O 2 O 3 O 4 O 5 O 6+

In your opinion, is the class growing numerically?

O Yes O No

In your opinion, is the class growing spiritually / maturationally?

O Yes O No

What is the teaching style most frequently used by the teacher (choose only one)?

O Lecture O Question & Answer O Discussion O Not listed

ONE FINAL STEP!

By your completion of this assessment form, and signing your initials below, you are giving informed consent for the use of your responses in this research.

_____ Initials of Participant

50061

Adult Sunday School Learning Environment Assessment: Teacher Version

Please indicate only one response to each statement:

Please Shade Circles Like This → ●
Not Like This → ✓ ✗

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Section 1 - General Information:					
1. As a result of God's involvement in class, I act in more loving ways toward others.	①	②	③	④	⑤
2. It feels like class members are seated too far apart.	①	②	③	④	⑤
3. Class members are sometimes bothered by heat/air conditioning blowing in the classroom.	①	②	③	④	⑤
4. Class members share in ideas, planning, and/or hosting class fellowship activities.	①	②	③	④	⑤
5. Strong odors in the classroom make learning difficult.	①	②	③	④	⑤
6. As a result of the class, members help meet the practical needs (financial, physical, etc.) of others.	①	②	③	④	⑤
7. Teaching approaches in the class are varied regularly.	①	②	③	④	⑤
8. The room is kept clean and uncluttered.	①	②	③	④	⑤
9. Class participants know the personal needs and concerns of others in the class.	①	②	③	④	⑤
10. Class participants understand the Bible better because of class time.	①	②	③	④	⑤
11. The number of class members present each week is just too large.	①	②	③	④	⑤
12. Class time is too long.	①	②	③	④	⑤
13. The size of the room is uncomfortable.	①	②	③	④	⑤
14. Classroom seating is arranged in rows.	①	②	③	④	⑤
15. Glare from windows or lighting makes learning uncomfortable.	①	②	③	④	⑤
16. God regularly helps me apply His truth to my life as a result of class Bible lessons.	①	②	③	④	⑤
17. Guests are regularly invited to class fellowships.	①	②	③	④	⑤
18. I am more alike than different from other class participants.	①	②	③	④	⑤
19. I am satisfied with the number of class participants.	①	②	③	④	⑤
20. I am satisfied with what is done in the class.	①	②	③	④	⑤
21. My life has been changed this year through class Bible study.	①	②	③	④	⑤
22. The space is too small for the number of persons in attendance.	①	②	③	④	⑤
23. Most class members take part in class discussions and lesson activities.	①	②	③	④	⑤

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Adult Sunday School Learning Environment Assessment: Teacher Version

Please indicate only one response to each statement: Please Shade Circles Like This → ● Not Like This → ✓ ✗	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
24. My background is similar to other class members.	①	②	③	④	⑤
25. The temperature in the classroom is often too hot.	①	②	③	④	⑤
26. My personality is fairly similar to that of other class participants.	①	②	③	④	⑤
27. My class participation has been prevented regularly by family or work schedule conflicts.	①	②	③	④	⑤
28. The seating and furnishings in the classroom are arranged in the same way each week.	①	②	③	④	⑤
29. The teacher talks informally with students one-on-one before and/or after class and/or between Sundays.	①	②	③	④	⑤
30. The teacher fellowships with class members at times other than Sunday.	①	②	③	④	⑤
31. Previous life experiences make learning in class more difficult for me.	①	②	③	④	⑤
32. Relationships established among students in the c lass carry over outside the classroom.	①	②	③	④	⑤
33. Class members have to sit too close to one another.	①	②	③	④	⑤
34. Students seem to do the same type of learning activities each week in class.	①	②	③	④	⑤
35. Class members regularly share in class leadership and ministry responsibilities.	①	②	③	④	⑤
36. The teacher comes to class well prepared.	①	②	③	④	⑤
37. The chairs in the classroom are arranged around one or more tables.	①	②	③	④	⑤
38. The class atmosphere is warm and friendly.	①	②	③	④	⑤
39. The class helps participants understand how the Bible applies to life.	①	②	③	④	⑤
40. The class is sometimes dominated by one or two class members	①	②	③	④	⑤
41. The classroom chairs are comfortable.	①	②	③	④	⑤
42. This class intentionally helps new people feel a part of the class.	①	②	③	④	⑤
43. The degree of mutual respect and trust among class participants is high.	①	②	③	④	⑤
44. The group sticks to the point and rarely gets sidetracked.	①	②	③	④	⑤
45. The number of class members present each week is just too few.	①	②	③	④	⑤

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Adult Sunday School Learning Environment Assessment: Teacher Version

Please indicate only one response to each statement: Please Shade Circles Like This → ● Not Like This → ✓ ✗	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
46. Class sessions are exciting.	①	②	③	④	⑤
47. The room is decorated nicely and appropriately for our class.	①	②	③	④	⑤
48. Class members sit in the same seats every week.	①	②	③	④	⑤
49. There is adequate light in the classroom.	①	②	③	④	⑤
50. My class participation has been prevented regularly by personal and/or family health problems.	①	②	③	④	⑤
51. The seating and furnishings of the classroom can be easily arranged in different ways in order to allow a variety of teaching/learning activities.	①	②	③	④	⑤
52. The seating in the classroom is arranged in one or more circles or semicircles.	①	②	③	④	⑤
53. Class usually starts and ends on time.	①	②	③	④	⑤
54. The members of the class work well together.	①	②	③	④	⑤
55. The space is too large for the number of persons in attendance.	①	②	③	④	⑤
56. It is often difficult to hear in the classroom.	①	②	③	④	⑤
57. The teacher cares whether or not the students learn.	①	②	③	④	⑤
58. Teaching methods allow everyone to participate in the lesson each week.	①	②	③	④	⑤
59. The teacher does not expect every student to learn exactly the same things.	①	②	③	④	⑤
60. The teacher encourages class members to take notes.	①	②	③	④	⑤
61. The teacher sometimes makes participants uncomfortable by asking them to pray, read aloud, etc.	①	②	③	④	⑤
62. The teacher leads the class with a clear sense of direction and purpose.	①	②	③	④	⑤
63. People notice when someone is absent.	①	②	③	④	⑤
64. The teacher listens to student comments and questions made in class.	①	②	③	④	⑤
65. Because of a personality conflict with a class member or teacher, I have attended class less frequently.	①	②	③	④	⑤
66. The temperature in the classroom is frequently too cold.	①	②	③	④	⑤
67. My background makes me regularly uncomfortable in class.	①	②	③	④	⑤
68. The teacher has high positive expectations of class members.	①	②	③	④	⑤

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Adult Sunday School Learning
Environment Assessment: Teacher Version

PLEASE DO NOT SKIP QUESTIONS 69 - 72	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
69. The room really needs a fresh coat of paint.	①	②	③	④	⑤
70. Class time is too short.	①	②	③	④	⑤
71. This class is more a social hour.	①	②	③	④	⑤
72. The classroom seating includes at least one pew or couch.	①	②	③	④	⑤

Section 2 - Your Information:

Thank you for taking time to complete the following questions. Your responses will be used to strengthen adult Sunday School. Please indicate only one response to each category.

Gender: O Female O Male

Age: O 18-29 O 30-39 O 40-49 O 50-59 O 60-69 O 70+

Marital Status:

O Divorced O Married O Separated O Single O Widowed

Education Level Attained:

O Did not complete high school
O Graduated high school / G.E.D.
O Some college
O Graduated college
O Some graduate work
O Completed graduate degree

How long have you been a Christian?

O Not a Christian
O Less than 1 year (after September 2001)
O 1-2 years
O 3-5 years
O 6-10 years
O 11-20 years
O 21-30 years
O 31+ years

How long have you been a Member of this church?

O Not a member
O Less than 1 year (after September 2001)
O 1-2 years
O 3-5 years
O 6-10 years
O 11-20 years
O 21-30 years
O 31+ years

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Adult Sunday School Learning Environment Assessment: Teacher Version

In the past year, on average how many Sundays each month have you attended worship services at this church?

O 0 (none) O two or three Sundays per month
O one Sunday per month O four or more Sundays per month

What is your involvement with the Sunday School Class?

O Teacher O First-time or Repeat Guest O Class Member

How long have you been attending this class?

O Less than 1 year (after September 2001)
O 1-2 years O 6-10 years O 21-30 years
O 3-5 years O 11-20 years O 31+ years

In the past year, on average how many Sundays each month have you attended this Sunday School class?

O 0 (none) O two or three Sundays per month
O one Sunday per month O four or more Sundays per month

How many of your close friends (you would call in a time of crisis) are in this class?

O 0 O 1 O 2 O 3 O 4 O 5 O 6+

In your opinion, is the class growing numerically?

O Yes O No

In your opinion, is the class growing spiritually / maturationally?

O Yes O No

What is the teaching style most frequently used by the teacher (choose only one)?

O Lecture O Question & Answer O Discussion O Not listed

50061

Adult Sunday School Learning Environment Assessment: Teacher Version

Section 3 - Teacher, Class, and Church Information:

Please indicate only one response to each category.

How many years have you been teaching this Sunday School class?

- O Less than 1 year (after September 2001)
- O 1-2 years
- O 3-5 years
- O 6-10 years
- O 11-20 years
- O 21-30 years
- O 31+ years

How many years have you been teaching Sunday School classes in any church?

- O Less than 1 year (after September 2001)
- O 1-2 years
- O 3-5 years
- O 6-10 years
- O 11-20 years
- O 21-30 years
- O 31+ years

Class Gender:

- O Mixed (Males and Females)
- O All Male
- O All Female

What is the total number of members and guests in attendance in the Sunday School class today?

- O 0-5
- O 6-10
- O 11-15
- O 16-20
- O 21-30
- O 31-40
- O 41+

What is the average weekly <u>total</u> attendance of the church's Sunday School?

- O 0-49
- O 50-99
- O 100-149
- O 150-199
- O 200-299
- O 300-399
- O 400+

Church Location: O City O Suburban O Rural

ONE FINAL STEP!

By your completion of this assessment form, and signing your initials below, you are giving informed consent for the use of your responses in this research.

_____ Initials of Participant

APPENDIX 3

COMPARISON AND RANKING OF FACTORS AND STATEMENTS BY ATTENDANCE FREQUENCY AND BY RETENTION AND ATTRITION

The purpose of this project has been to identify and analyze the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. In order to do so, examination of learning environment factors and the statements making up those factors has been necessary. In the following tables, learning environment factors and statements were ranked and compared by attendance frequency and by retention and attrition. Learning environment factors were compared by attendance frequency in Table A1. Factor means were ranked for attendance frequency in Table A2. Learning environment factor statements were compared by attendance frequency in Table A3. Statement means were ranked for attendance frequency in Table A4. In Table A5, statements were ranked for retention and attrition by means.

Table A1. Comparison of learning environment factor means by attendance frequency

Learning Environment Factor	No		Low		Average		High	
	n	M	*n*	M	*n*	M	*n*	M
1. Divine Involvement	11	11.45	28	11.64	207	12.17	467	12.25
2. Divine Involvement: Transformed Lives	11	11.45	27	11.48	201	12.35	466	12.36
3. Physical Arrangement	10	9.20	28	8.18	192	7.99	437	8.25
4. Flexibility	10	9.90	25	8.60	199	9.11	416	9.06
5. Room Size	13	10.54	27	11.78	206	11.80	462	11.81
6. Proxemics and Territoriality	11	9.82	28	10.18	203	10.30	461	10.14
7. Aesthetics and Tidiness	10	10.90	24	12.08	193	11.60	426	11.38
8. Lighting, Writing, and Reading	11	10.55	27	11.67	193	11.04	423	11.04
9. Temperature, Ventilation, and Humidity	12	10.50	26	10.12	201	10.44	454	10.31
10. Odors, Seating, and Noise	12	11.25	27	11.33	202	10.94	452	11.40
11. Teacher: General	11	12.36	28	12.32	201	12.26	457	12.25
12. Teacher: Social Interaction	10	11.00	25	11.68	192	11.74	424	11.73
13. Teacher: Classroom Management	12	11.42	28	11.89	202	11.65	459	11.66
14. Peers: General	11	12.18	27	11.93	195	12.56	447	12.57
15. Peers: Relationship-Building in Class	12	12.33	27	11.74	207	12.28	461	12.37
16. Peers: Relationship-Building outside of Class	12	11.75	27	11.19	202	11.77	468	11.92
17. Group Size	11	10.45	27	10.19	204	10.79	457	10.64
18. Psychological Factors	9	10.44	25	11.32	196	11.87	450	11.92
19. Expectation	12	11.67	28	11.14	200	11.13	470	11.09
20. Participation: General	11	10.45	28	10.75	200	11.25	448	11.27
21. Participation: Teaching Methods	11	10.45	28	9.89	198	10.18	448	10.36
22. Participation: Meeting Length	10	11.00	24	11.50	196	11.14	424	10.93
23. Participation: Conflicts	11	9.73	28	10.32	203	10.86	459	12.04
24. Demographics, Cultural, and Personality Factors	12	10.25	27	10.07	202	10.46	460	10.73

Table A2. Ranking of learning environment factor means by attendance frequency

Rank	No			Low			Average			High		
	F	*n*	M	F	*n*	M	F	*n*	M	F	*n*	M
1	11	11	12.36	11	28	12.32	14	195	12.56	14	447	12.57
2	15	12	12.33	7	24	12.08	2	201	12.35	15	461	12.37
3	14	11	12.18	14	27	11.93	15	207	12.28	2	466	12.36
4	16	12	11.75	13	28	11.89	11	201	12.26	1	467	12.25
5	19	12	11.67	5	27	11.78	1	207	12.17	11	457	12.25
6	2	11	11.45	15	27	11.74	18	196	11.87	23	459	12.04
7	1	11	11.45	12	25	11.68	5	206	11.80	16	468	11.92
8	13	12	11.42	8	27	11.67	16	202	11.77	18	450	11.92
9	10	12	11.25	1	28	11.64	12	192	11.74	5	462	11.82
10	22	10	11.00	22	24	11.50	13	202	11.65	12	424	11.73
11	12	10	11.00	2	27	11.48	7	193	11.60	13	459	11.66
12	7	10	10.90	10	27	11.33	20	200	11.25	10	452	11.40
13	8	11	10.55	18	25	11.32	22	196	11.14	7	426	11.38
14	5	13	10.54	16	27	11.19	19	200	11.13	20	448	11.27
15	9	12	10.50	19	28	11.14	8	193	11.04	19	470	11.09
16	21	11	10.45	20	28	10.75	10	202	10.94	8	423	11.04
17	20	11	10.45	23	28	10.32	23	203	10.86	22	424	10.93
18	17	11	10.45	17	27	10.19	17	204	10.79	24	460	10.73
19	18	9	10.44	6	28	10.18	24	202	10.48	17	457	10.64
20	24	12	10.25	9	26	10.12	9	201	10.46	21	448	10.36
21	4	10	9.90	24	27	10.07	6	203	10.44	9	454	10.31
22	6	11	9.82	21	28	9.89	21	198	10.30	6	461	10.14
23	23	11	9.73	4	25	8.60	4	199	9.11	4	416	9.06
24	3	10	9.20	3	28	8.18	3	192	7.99	3	437	8.25

Note: F = Factor; M = mean; Factor 1 = Divine Involvement; 2 = Divine Involvement: Transformed Lives; 3 = Flexibility; 4 = Physical Arrangement; 5 = Room Size; 6 = Proxemics and Territoriality; 7 = Aesthetics and Tidiness; 8 = Lighting, Writing, and Reading; 9 = Temperature, Ventilation, and Humidity; 10 = Odors, Seating, and Noise; 11 = Teacher: General; 12 = Teacher: Social Interaction; 13 = Teacher: Classroom Management; 14 = Peers: General; 15 = Peers: Relationship-Building in Class; 16 = Peers: Relationship-Building outside of Class; 17 = Group Size; 18 = Psychological Factors; 19 = Expectation; 20 = Participation: General; 21 = Participation: Teaching Methods; 22 = Participation: Meeting Length; 23 = Participation: Conflicts; 24 = Demographic, Cultural, and Personality Factors

Table A3. Comparison of instrument statement means by attendance frequency

Statement	No		Low		Average		High	
	n	M	*n*	M	*n*	M	*n*	M
1	13	4.15	28	4.18	210	4.10	478	4.17
2	13	4.00	28	3.71	212	4.03	483	4.00
3	13	3.62	27	3.00	211	3.15	477	3.07
4	13	4.23	28	3.89	211	3.99	481	3.99
5	13	4.00	27	4.19	211	4.08	475	4.15
6	12	3.67	28	3.43	208	3.86	479	4.00
7	13	3.23	28	3.32	202	3.43	466	3.49
8	13	4.00	28	4.39	213	4.16	484	4.08
9	13	3.85	28	3.71	214	4.00	477	4.07
10	13	4.00	27	3.93	211	4.19	484	4.13
11	13	4.08	28	3.93	211	4.27	476	4.23
12	13	4.00	28	3.93	213	4.04	477	4.05
13	13	3.62	27	4.11	211	3.92	475	3.94
14	13	3.23	28	3.50	208	3.54	471	3.41
15	13	3.77	28	4.11	212	4.03	473	4.00
16	13	4.00	28	3.89	212	4.14	483	4.19
17	13	3.85	28	3.75	210	3.96	483	3.97
18	13	3.46	27	3.22	206	3.52	475	3.67
19	13	3.62	27	3.44	212	3.38	476	3.31
20	12	3.58	25	3.84	201	4.01	471	3.93
21	11	3.36	28	3.57	211	3.93	475	3.91
22	13	3.46	28	3.75	214	3.96	483	3.96
23	13	4.08	27	3.78	212	3.88	486	4.00
24	12	3.42	27	3.48	213	3.46	475	3.51
25	12	3.50	27	3.41	212	3.54	473	3.47
26	12	3.42	28	3.39	209	3.50	472	3.56
27	11	2.73	28	3.07	208	3.36	475	3.95
28	12	2.25	28	1.89	212	1.87	478	1.98
29	11	3.64	28	3.86	208	3.86	469	3.93
30	12	3.50	28	3.86	207	3.97	477	3.87
31	10	3.40	28	3.71	209	3.81	474	3.88
32	12	3.67	27	3.59	207	3.84	474	3.96
33	12	3.33	28	3.64	208	3.62	471	3.85
34	11	3.00	28	2.93	209	2.84	461	2.87
35	11	3.27	28	3.46	208	3.62	467	3.64
36	12	4.08	28	4.32	211	4.34	476	4.30
37	10	2.20	28	3.50	202	3.27	457	3.34
38	12	4.17	28	4.18	212	4.29	475	4.35

Note: F = Factor; M = mean

Table A3—*Continued.* Comparison of instrument statement means by attendance frequency

Statement	No		Low		Average		High	
	n	M	*n*	M	*n*	M	*n*	M
39	12	3.83	28	4.11	210	4.26	473	4.21
40	11	3.18	28	3.25	208	3.46	467	3.51
41	12	3.42	28	3.29	208	3.16	473	3.46
42	12	4.25	27	3.93	210	4.11	476	4.10
43	11	4.18	28	3.82	206	4.17	474	4.15
44	12	3.00	28	3.29	208	3.14	476	3.26
45	11	2.91	28	2.93	207	3.15	476	3.11
46	13	3.92	28	3.54	208	3.74	475	3.75
47	12	3.50	27	3.67	203	3.69	468	3.64
48	12	2.58	28	2.82	209	2.43	477	2.28
49	11	3.91	27	4.15	200	4.05	447	4.03
50	12	3.00	28	3.14	209	3.24	473	3.84
51	13	3.31	28	3.21	209	3.44	468	3.37
52	12	3.17	28	3.18	209	2.87	470	3.04
53	13	3.92	27	3.81	208	3.67	473	3.62
54	12	4.17	27	3.89	203	4.09	461	4.08
55	13	3.46	28	3.71	208	3.89	470	3.89
56	13	4.00	28	3.79	208	3.72	471	3.77
57	12	4.33	28	4.25	207	4.11	472	4.05
58	13	4.00	28	4.04	208	4.17	474	4.14
59	12	3.83	28	3.86	204	3.74	473	3.68
60	12	3.42	28	3.36	204	2.98	460	3.02
61	12	3.50	28	3.75	208	3.81	470	3.94
62	13	4.31	28	4.29	207	4.16	474	4.12
63	12	4.25	28	4.07	211	4.15	476	4.20
64	13	4.31	28	4.32	207	4.31	469	4.25
65	13	4.00	28	4.11	209	4.25	470	4.22
66	13	3.62	28	3.54	205	3.74	472	3.79
67	13	3.85	28	3.79	210	4.01	471	4.11
68	13	3.92	28	3.75	209	3.66	479	3.66
69	11	3.36	25	3.84	204	3.70	439	3.63
70	10	3.10	25	3.72	202	3.42	438	3.26
71	11	3.55	25	4.00	201	3.88	437	3.92
72	10	4.20	25	3.56	202	3.82	433	3.73

Note: F = Factor; M = mean

Table A4. Ranking of instrument statement means by attendance frequency

Rank	No			Low			Average			High		
	S	*n*	M	S	*n*	M	S	*n*	M	S	*n*	M
1	57	12	4.33	8	28	4.39	36	211	4.34	38	475	4.35
2	62	13	4.31	36	28	4.32	64	207	4.31	36	476	4.30
3	64	13	4.31	64	28	4.32	38	212	4.29	64	469	4.25
4	42	12	4.25	62	28	4.29	11	211	4.27	11	476	4.23
5	63	12	4.25	57	28	4.25	39	210	4.26	65	470	4.22
6	4	13	4.23	5	27	4.19	65	209	4.25	39	473	4.21
7	72	10	4.20	1	28	4.18	10	211	4.19	63	476	4.20
8	43	11	4.18	38	28	4.18	43	206	4.17	16	483	4.19
9	38	12	4.17	49	27	4.15	58	208	4.17	1	478	4.17
10	54	12	4.17	13	27	4.11	8	213	4.16	5	475	4.15
11	1	13	4.15	15	28	4.11	62	207	4.16	43	474	4.15
12	11	13	4.08	39	28	4.11	63	211	4.15	58	474	4.14
13	23	13	4.08	65	28	4.11	16	212	4.14	10	484	4.13
14	36	12	4.08	63	28	4.07	42	210	4.11	62	474	4.12
15	2	13	4.00	58	28	4.04	57	207	4.11	67	471	4.11
16	5	13	4.00	71	25	4.00	1	210	4.10	42	476	4.10
17	8	13	4.00	10	27	3.93	54	203	4.09	8	484	4.08
18	10	13	4.00	11	28	3.93	5	211	4.08	54	461	4.08
19	12	13	4.00	12	28	3.93	49	200	4.05	9	477	4.07
20	16	13	4.00	42	27	3.93	12	213	4.04	12	477	4.05
21	56	13	4.00	4	28	3.89	2	212	4.03	57	472	4.05
22	58	13	4.00	16	28	3.89	15	212	4.03	49	447	4.03
23	65	13	4.00	54	27	3.89	20	201	4.01	2	483	4.00
24	46	13	3.92	29	28	3.86	67	210	4.01	6	479	4.00
25	53	13	3.92	30	28	3.86	9	214	4.00	15	473	4.00
26	68	13	3.92	59	28	3.86	4	211	3.99	23	486	4.00
27	49	11	3.91	20	25	3.84	30	207	3.97	4	481	3.99
28	9	13	3.85	69	25	3.84	17	210	3.96	17	483	3.97
29	17	13	3.85	43	28	3.82	22	214	3.96	22	483	3.96
30	67	13	3.85	53	27	3.81	21	211	3.93	32	474	3.96
31	39	12	3.83	56	28	3.79	13	211	3.92	27	475	3.95
32	59	12	3.83	67	28	3.79	55	208	3.89	13	475	3.94
33	15	13	3.77	23	27	3.78	23	212	3.88	61	470	3.94
34	6	12	3.67	17	28	3.75	71	201	3.88	20	471	3.93
35	32	12	3.67	22	28	3.75	6	208	3.86	29	469	3.93
36	29	11	3.64	61	28	3.75	29	208	3.86	71	437	3.92
37	3	13	3.62	68	28	3.75	32	207	3.84	21	475	3.91
38	13	13	3.62	70	25	3.72	72	202	3.82	55	470	3.89

Note: S = Statement; M = mean

Table A4—*Continued.* Ranking of instrument statement means for all attendance frequencies

Rank	No			Low			Average			High		
	S	*n*	M	S	*n*	M	S	*n*	M	S	*n*	M
39	19	13	3.62	2	28	3.71	31	209	3.81	31	474	3.88
40	66	13	3.62	9	28	3.71	61	208	3.81	30	477	3.87
41	20	12	3.58	31	28	3.71	46	208	3.74	33	471	3.85
42	71	11	3.55	55	28	3.71	59	204	3.74	50	473	3.84
43	25	12	3.50	47	27	3.67	66	205	3.74	66	472	3.79
44	30	12	3.50	33	28	3.64	56	208	3.72	56	471	3.77
45	47	12	3.50	32	27	3.59	69	204	3.70	46	475	3.75
46	61	12	3.50	21	28	3.57	47	203	3.69	72	433	3.73
47	18	13	3.46	72	25	3.56	53	208	3.67	59	473	3.68
48	22	13	3.46	46	28	3.54	68	209	3.66	18	475	3.67
49	55	13	3.46	66	28	3.54	33	208	3.62	68	479	3.66
50	24	12	3.42	14	28	3.50	35	208	3.62	35	467	3.64
51	26	12	3.42	37	28	3.50	14	208	3.54	47	468	3.64
52	41	12	3.42	24	27	3.48	25	212	3.54	69	439	3.63
53	60	12	3.42	35	28	3.46	18	206	3.52	53	473	3.62
54	31	10	3.40	19	27	3.44	26	209	3.50	26	472	3.56
55	21	11	3.36	6	28	3.43	24	213	3.46	24	475	3.51
56	69	11	3.36	25	27	3.41	40	208	3.46	40	467	3.51
57	33	12	3.33	26	28	3.39	51	209	3.44	7	466	3.49
58	51	13	3.31	60	28	3.36	7	202	3.43	25	473	3.47
59	35	11	3.27	7	28	3.32	70	202	3.42	41	473	3.46
60	7	13	3.23	41	28	3.29	19	212	3.38	14	471	3.41
61	14	13	3.23	44	28	3.29	27	208	3.36	51	468	3.37
62	40	11	3.18	40	28	3.25	37	202	3.27	37	457	3.34
63	52	12	3.17	18	27	3.22	50	209	3.24	19	476	3.31
64	70	10	3.10	51	28	3.21	41	208	3.16	44	476	3.26
65	34	11	3.00	52	28	3.18	3	211	3.15	70	438	3.26
66	44	12	3.00	50	28	3.14	45	207	3.15	45	476	3.11
67	50	12	3.00	27	28	3.07	44	208	3.14	3	477	3.07
68	45	11	2.91	3	27	3.00	60	204	2.98	52	470	3.04
69	27	11	2.73	34	28	2.93	52	209	2.87	60	460	3.02
70	48	12	2.58	45	28	2.93	34	209	2.84	34	461	2.87
71	28	12	2.25	48	28	2.82	48	209	2.43	48	477	2.28
72	37	10	2.20	28	28	1.89	28	212	1.87	28	478	1.98

Note: S = Statement; M = mean

Table A5. Ranking of instrument statement means by retention and attrition

Rank	Retention (High/Average)			Attrition (Low/No)		
	S	*n*	M	S	*n*	M
1	38	688	4.33	64	41	4.32
2	36	688	4.31	62	41	4.29
3	64	677	4.27	57	40	4.27
4	11	688	4.24	8	41	4.27
5	39	684	4.23	36	40	4.25
6	65	680	4.23	38	40	4.18
7	63	688	4.19	1	41	4.17
8	16	696	4.17	63	40	4.13
9	43	681	4.16	5	40	4.13
10	10	696	4.15	49	38	4.08
11	58	683	4.15	65	41	4.07
12	1	689	4.15	42	39	4.03
13	62	682	4.13	39	40	4.02
14	5	687	4.13	58	41	4.02
15	8	698	4.11	15	41	4.00
16	42	687	4.11	4	41	4.00
17	54	665	4.08	11	41	3.98
18	67	682	4.08	54	39	3.97
19	57	680	4.07	12	41	3.95
20	12	691	4.05	13	40	3.95
21	9	692	4.05	10	40	3.95
22	49	648	4.04	16	41	3.93
23	2	696	4.01	43	39	3.92
24	15	686	4.01	23	40	3.88
25	4	693	3.99	71	36	3.86
26	17	694	3.97	56	41	3.85
27	23	699	3.96	53	40	3.85
28	22	698	3.96	59	40	3.85
29	6	688	3.96	67	41	3.80
30	20	673	3.96	68	41	3.80
31	13	687	3.94	2	41	3.80
32	32	682	3.92	29	39	3.79
33	21	687	3.92	17	41	3.78
34	71	639	3.91	20	37	3.76
35	29	678	3.91	9	41	3.76
36	30	685	3.90	30	40	3.75
37	61	679	3.90	72	35	3.74

Note: S = Statement; M = mean

Table A5—*Continued.* Learning environment factor statements ranked by means

Rank	Retention (High/Average)			Attrition (Low/No)		
	S	*n*	M	S	*n*	M
38	55	679	3.89	69	36	3.69
39	31	684	3.86	61	40	3.67
40	33	680	3.84	22	41	3.66
41	66	678	3.77	46	41	3.66
42	27	684	3.77	55	41	3.63
43	72	636	3.76	31	38	3.63
44	56	680	3.75	47	39	3.62
45	46	684	3.74	32	39	3.62
46	59	678	3.70	66	41	3.56
47	68	689	3.66	33	40	3.55
48	47	672	3.66	70	35	3.54
49	50	683	3.65	21	39	3.51
50	69	644	3.65	6	40	3.50
51	53	682	3.63	19	40	3.50
52	35	676	3.63	24	39	3.46
53	18	682	3.62	25	39	3.44
54	26	682	3.54	14	41	3.41
55	40	676	3.50	35	39	3.41
56	24	689	3.49	26	40	3.40
57	25	686	3.49	60	40	3.37
58	7	669	3.48	41	40	3.33
59	14	680	3.45	18	40	3.30
60	51	678	3.39	7	41	3.29
61	41	682	3.37	51	41	3.24
62	19	689	3.34	40	39	3.23
63	37	660	3.32	44	40	3.20
64	70	641	3.31	3	40	3.20
65	44	685	3.22	52	40	3.18
66	45	684	3.12	37	38	3.16
67	3	689	3.09	50	40	3.10
68	60	665	3.01	27	39	2.97
69	52	680	2.99	34	39	2.95
70	34	671	2.86	45	39	2.92
71	48	687	2.32	48	40	2.75
72	28	691	1.95	28	40	2.00

Note: S = Statement; M = mean

APPENDIX 4

ANOVA TABLES

The ANOVA (analysis of variance) tables which follow were findings from a consideration of the impact of demographics (dependent variables) upon learning environment factors (independent variables). The "purpose of analysis of variance is to test differences in means . . . for statistical significance . . . by partitioning the total variance into the component that is due to true random error . . . and the components that are due to differences between means" (StatSoft 2002, stanman.html). Each table presented the sum of squares, df, mean square, F, and significance for each of the learning environment factors.

Tables A6-A8 displayed data about the impact of age, gender, and educational level upon learning environment factors. Tables A9-A12 presented data about the impact of class membership tenure, salvation length, teacher tenure in the current class, and total tenure in any class upon learning environment factors. Tables A13-A15 displayed data about the impact of class attendance (numbers of persons present), church size, and church location. Tables A16-A19 presented data about the impact of teaching methods, class attendance frequency, retention and attrition, and the number of friends. Tables A20-A22 displayed data about the impact of class gender, marital status, and participating church. Table A23 presented ANOVA findings of factor statements by retention and attrition.

Table A6. Analysis of variance of the impact of age upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	34.887	5	6.977	2.550	.027
	WithinGroups	1927.258	708	2.736		
Divine Involvement: Transformed Lives	BetweenGroups	43.972	5	8.774	3.081	.002
	WithinGroups	1616.067	700	2.309		
Physical Arrangement	BetweenGroups	53.544	5	10.709	3.681	.003
	WithinGroups	1920.193	660	2.909		
Flexibility	BetweenGroups	46.924	5	9.385	2.973	.102
	WithinGroups	2061.003	653	3.156		
Room Size	BetweenGroups	28.386	5	5.677	2.051	.070
	WithinGroups	1945.879	703	2.768		
Proxemics and Territoriality	BetweenGroups	9.618	5	1.924	.908	.475
	WithinGroups	1485.604	701	2.119		
Aesthetics and Tidiness	BetweenGroups	60.864	5	12.173	3.709	.003
	WithinGroups	2156.053	657	3.282		
Lighting, Writing, and Reading	BetweenGroups	29.328	5	5.866	2.749	.018
	WithinGroups	1389.113	651	2.134		
Temperature, Vent., and Humidity	BetweenGroups	24.713	5	4.943	1.166	.324
	WithinGroups	2924.529	690	4.238		
Odors, Seating, and Noise	BetweenGroups	16.330	5	3.266	.938	.455
	WithinGroups	2401.595	690	3.481		
Teacher: General	BetweenGroups	37.621	5	7.524	3.204	.007
	WithinGroups	1629.606	694	2.348		
Teacher: Social Interaction	BetweenGroups	38.646	5	7.729	2.421	.035
	WithinGroups	2088.329	654	3.193		
Teacher: Classroom Management	BetweenGroups	44.758	5	8.952	3.388	.005
	WithinGroups	1838.631	696	2.642		
Peers: General	BetweenGroups	34.830	5	6.966	3.284	.006
	WithinGroups	1440.359	679	2.121		
Peers: Relationship-Building in Class	BetweenGroups	26.413	5	5.283	2.541	.027
	WithinGroups	1461.781	703	2.079		
Peers: Relationship-Building out. of Class	BetweenGroups	37.360	5	7.472	2.424	.034
	WithinGroups	2179.092	707	3.082		
Group Size	BetweenGroups	69.487	5	13.897	4.063	.001
	WithinGroups	2377.067	695	3.420		
Psychological Factors	BetweenGroups	13.986	5	2.797	1.206	.305
	WithinGroups	1572.804	678	2.320		
Expectation	BetweenGroups	8.501	5	1.700	.668	.648
	WithinGroups	1802.535	708	2.546		
Participation: General	BetweenGroups	102.292	5	20.458	7.752	.000
	WithinGroups	1810.540	686	2.639		
Participation: Teaching Methods	BetweenGroups	41.907	5	8.381	2.822	.016
	WithinGroups	2013.614	678	2.970		
Participation: Meeting Length	BetweenGroups	89.936	5	17.987	8.0210	.000
	WithinGroups	1477.848	659	2.243		
Participation: Conflicts	BetweenGroups	13.527	5	2.705	.63500	.673
	WithinGroups	2979.004	699	4.262		
Demographic, Cultural, and Personality Factors	BetweenGroups	190.704	5	38.141	10.128	.000
	WithinGroups	2624.721	697	3.766		

Table A7. Analysis of variance of the impact of gender upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	10.220	1	10.220	3.713	.054
	WithinGroups	1940.530	705	2.753		
Divine Involvement: Transformed Lives	BetweenGroups	19.925	1	19.925	8.427	.004
	WithinGroups	1650.269	698	2.364		
Physical Arrangement	BetweenGroups	6.110	1	6.110	2.104	.147
	WithinGroups	1910.884	658	2.904		
Flexibility	BetweenGroups	.149	1	.149	.047	.829
	WithinGroups	2067.884	652	3.172		
Room Size	BetweenGroups	32.664	1	32.664	12.045	.001
	WithinGroups	1898.208	700	2.712		
Proxemics and Territoriality	BetweenGroups	20.950	1	20.950	9.991	.002
	WithinGroups	1463.644	698	2.097		
Aesthetics and Tidiness	BetweenGroups	6.370	1	6.370	1.906	.168
	WithinGroups	2189.359	655	3.343		
Lighting, Writing, and Reading	BetweenGroups	.557	1	.557	.253	.615
	WithinGroups	1422.978	657	2.199		
Temperature, Vent., and Humidity	BetweenGroups	9.346	1	9.346	2.217	.137
	WithinGroups	2399.778	688	4.215		
Odors, Seating, and Noise	BetweenGroups	10.810	1	10.810	3.093	.079
	WithinGroups	2404.645	688	3.495		
Teacher: General	BetweenGroups	13.249	1	13.249	5.568	.019
	WithinGroups	1646.609	692	2.379		
Teacher: Social Interaction	BetweenGroups	30.958	1	30.958	9.711	.002
	WithinGroups	2078.650	652	3.188		
Teacher: Classroom Management	BetweenGroups	15.215	1	15.215	5.690	.017
	WithinGroups	1858.455	695	2.674		
Peers: General	BetweenGroups	17.984	1	17.984	8.459	.004
	WithinGroups	1434.997	675	2.126		
Peers: Relationship-Building in Class	BetweenGroups	8.012	1	8.012	3.803	.052
	WithinGroups	1478.937	702	2.107		
Peers: Relationship-Building out. of Class	BetweenGroups	37.003	1	37.003	12.102	.001
	WithinGroups	2152.545	704	3.058		
Group Size	BetweenGroups	55.889	1	55.889	16.452	.000
	WithinGroups	2350.804	692	3.397		
Psychological Factors	BetweenGroups	6.167	1	6.167	2.667	.103
	WithinGroups	1560.602	675	2.312		
Expectation	BetweenGroups	14.219	1	14.219	5.605	.018
	WithinGroups		706	2.537		
Participation: General	BetweenGroups	12.033	1	12.033	4.351	.037
	WithinGroups	1889.120	683	2.766		
Participation: Teaching Methods	BetweenGroups	.257	1	.257	.085	.771
	WithinGroups	2055.242	677	3.036		
Participation: Meeting Length	BetweenGroups	40.442	1	40.442	17.637	.000
	WithinGroups	1508.824	658	2.293		
Participation: Conflicts	BetweenGroups	.227	1	.227	.053	.817
	WithinGroups	2974.550	698	4.262		
Demographic, Cultural, and Personality Factors	BetweenGroups	64.809	1	64.809	16.415	.000
	WithinGroups	2739.996	694	3.948		

Table A8. Analysis of variance of the impact of educational level upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	37.175	5	7.435	2.719	.019
	WithinGroups	1930.644	706	2.735		
Divine Involvement: Transformed Lives	BetweenGroups	28.959	5	5.792	2.494	.030
	WithinGroups	1625.726	700	2.322		
Physical Arrangement	BetweenGroups	24.170	5	4.834	1.639	.148
	WithinGroups	1952.913	662	2.950		
Flexibility	BetweenGroups	69.044	5	13.809	4.424	.001
	WithinGroups	2041.465	654	3.122		
Room Size	BetweenGroups	7.227	5	1.445	.521	.761
	WithinGroups	1950.708	703	2.775		
Proxemics and Territoriality	BetweenGroups	18.866	5	3.773	1.787	.113
	WithinGroups	1480.489	701	2.112		
Aesthetics and Tidiness	BetweenGroups	50.651	5	10.112	3.065	.010
	WithinGroups	2167.964	657	3.300		
Lighting, Writing, and Reading	BetweenGroups	15.018	5	3.004	1.379	.230
	WithinGroups	1417.475	651	2.177		
Temperature, Vent., and Humidity	BetweenGroups	18.903	5	3.781	.886	.490
	WithinGroups	2951.985	692	4.266		
Odors, Seating, and Noise	BetweenGroups	20.920	5	4.184	1.201	.307
	WithinGroups	2411.361	692	3.485		
Teacher: General	BetweenGroups	39.746	5	7.893	3.381	.005
	WithinGroups	1617.695	693	2.334		
Teacher: Social Interaction	BetweenGroups	31.646	5	6.329	2.032	.072
	WithinGroups	2040.584	655	3.115		
Teacher: Classroom Management	BetweenGroups	26.509	5	5.302	2.018	.074
	WithinGroups	1830.928	697	2.627		
Peers: General	BetweenGroups	20.204	5	4.041	1.881	.096
	WithinGroups	1456.619	678	2.148		
Peers: Relationship-Building in Class	BetweenGroups	20.206	5	4.041	1.927	.088
	WithinGroups	1474.378	703	2.097		
Peers: Relationship-Building out. of Class	BetweenGroups	42.096	5	8.419	2.734	.019
	WithinGroups	2183.672	709	3.080		
Group Size	BetweenGroups	19.580	5	3.916	1.125	.346
	WithinGroups	2426.636	697	3.482		
Psychological Factors	BetweenGroups	13.541	5	2.708	1.165	.325
	WithinGroups	1573.226	677	2.324		
Expectation	BetweenGroups	24.061	5	4.812	1.909	.091
	WithinGroups	1785.093	708	2.521		
Participation: General	BetweenGroups	29.916	5	5.983	2.156	.057
	WithinGroups	1909.018	688	2.775		
Participation: Teaching Methods	BetweenGroups	39.641	5	7.892	2.643	.022
	WithinGroups	2027.380	679	2.986		
Participation: Meeting Length	BetweenGroups	79.627	5	15.925	7.043	.000
	WithinGroups	1490.157	659	2.261		
Participation: Conflicts	BetweenGroups	50.326	5	10.065	2.375	.038
	WithinGroups	2962.733	699	4.239		
Demographic, Cultural, and Personality Factors	BetweenGroups	38.545	5	7.709	1.916	.089
	WithinGroups	2808.135	698	4.023		

Table A9. Analysis of variance of the impact of class tenure upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	3.919	6	.653	.235	.965
	WithinGroups	1982.640	712	2.785		
Divine Involvement: Transformed Lives	BetweenGroups	35.862	6	5.977	2.578	.018
	WithinGroups	1634.608	705	2.319		
Physical Arrangement	BetweenGroups	13.464	6	2.244	.748	.611
	WithinGroups	1990.736	664	2.998		
Flexibility	BetweenGroups	20.705	6	3.451	1.084	.370
	WithinGroups	2072.342	651	3.183		
Room Size	BetweenGroups	19.854	6	3.309	1.189	.310
	WithinGroups	1959.589	704	2.784		
Proxemics and Territoriality	BetweenGroups	14.002	6	2.334	1.093	.365
	WithinGroups	1504.987	705	2.135		
Aesthetics and Tidiness	BetweenGroups	22.006	6	3.668	1.106	.357
	WithinGroups	2166.121	653	3.317		
Lighting, Writing, and Reading	BetweenGroups	16.848	6	2.808	1.309	.251
	WithinGroups	1398.960	652	2.146		
Temperature, Vent., and Humidity	BetweenGroups	36.743	6	6.124	1.436	.198
	WithinGroups	2955.692	693	4.265		
Odors, Seating, and Noise	BetweenGroups	40.591	6	6.765	1.964	.069
	WithinGroups	2384.219	692	3.445		
Teacher: General	BetweenGroups	38.185	6	6.364	2.721	.013
	WithinGroups	1632.303	698	2.339		
Teacher: Social Interaction	BetweenGroups	25.309	6	4.218	1.308	.251
	WithinGroups	2099.903	651	3.226		
Teacher: Classroom Management	BetweenGroups	17.381	6	2.898	1.069	.380
	WithinGroups	1893.225	698	2.712		
Peers: General	BetweenGroups	11.816	6	1.969	.097	.489
	WithinGroups	1475.741	680	2.170		
Peers: Relationship-Building in Class	BetweenGroups	11.214	6	1.869	.897	.496
	WithinGroups	1468.314	705	2.083		
Peers: Relationship-Building out. of Class	BetweenGroups	34.600	6	5.767	1.876	.082
	WithinGroups	2182.633	710	3.074		
Group Size	BetweenGroups	16.033	6	2.672	.775	.590
	WithinGroups	2413.849	700	3.448		
Psychological Factors	BetweenGroups	13.426	6	2.238	.938	.467
	WithinGroups	1624.243	681	2.385		
Expectation	BetweenGroups	27.548	6	4.591	1.837	.089
	WithinGroups	1774.405	710	2.499		
Participation: General	BetweenGroups	27.980	6	4.663	1.668	.126
	WithinGroups	1923.723	688	2.796		
Participation: Teaching Methods	BetweenGroups	12.174	6	2.029	.666	.677
	WithinGroups	2079.513	683	3.045		
Participation: Meeting Length	BetweenGroups	59.228	6	9.871	4.318	.000
	WithinGroups	1499.590	656	2.286		
Participation: Conflicts	BetweenGroups	11.788	6	1.965	.458	.839
	WithinGroups	3009.721	702	4.287		
Demographic, Cultural, and Personality Factors	BetweenGroups	117.800	6	19.633	5.102	.000
	WithinGroups	2693.784	700	3.848		

Table A10. Analysis of variance of the impact of salvation length upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	29.485	7	4.212	1.557	.145
	WithinGroups	1917.714	709	2.705		
Divine Involvement: Transformed Lives	BetweenGroups	20.296	7	2.899	1.232	.283
	WithinGroups	1652.403	702	2.354		
Physical Arrangement	BetweenGroups	12.522	7	1.789	.602	.754
	WithinGroups	1965.985	662	2.970		
Flexibility	BetweenGroups	25.911	7	3.702	1.164	.321
	WithinGroups	2079.160	654	3.179		
Room Size	BetweenGroups	12.789	7	1.827	.650	.714
	WithinGroups	1980.232	705	2.809		
Proxemics and Territoriality	BetweenGroups	10.535	7	1.505	.710	.663
	WithinGroups	1489.586	703	2.119		
Aesthetics and Tidiness	BetweenGroups	17.925	7	2.561	.768	.614
	WithinGroups	2197.607	659	3.335		
Lighting, Writing, and Reading	BetweenGroups	39.966	7	5.709	2.669	.010
	WithinGroups	1390.224	650	2.139		
Temperature, Vent., and Humidity	BetweenGroups	35.078	7	5.011	1.179	.313
	WithinGroups	2941.680	692	4.251		
Odors, Seating, and Noise	BetweenGroups	18.939	7	2.706	.776	.607
	WithinGroups	2411.945	692	3.485		
Teacher: General	BetweenGroups	11.852	7	1.693	.706	.667
	WithinGroups	1670.636	697	2.397		
Teacher: Social Interaction	BetweenGroups	4.538	7	.648	.198	.986
	WithinGroups	2143.525	655	3.273		
Teacher: Classroom Management	BetweenGroups	8.282	7	1.183	.435	.881
	WithinGroups	1896.334	697	2.721		
Peers: General	BetweenGroups	9.386	7	1.341	.618	.742
	WithinGroups	1474.282	679	2.171		
Peers: Relationship-Building in Class	BetweenGroups	19.308	7	2.758	1.312	.241
	WithinGroups	1481.649	705	2.102		
Peers: Relationship-Building out. of Class	BetweenGroups	24.750	7	3.536	1.139	.337
	WithinGroups	2198.351	708	3.105		
Group Size	BetweenGroups	47.568	7	6.795	1.967	.057
	WithinGroups	2404.169	696	3.454		
Psychological Factors	BetweenGroups	15.599	7	2.228	.958	.461
	WithinGroups	1577.235	678	2.326		
Expectation	BetweenGroups	19.081	7	2.726	1.061	.387
	WithinGroups	1824.781	710	2.570		
Participation: General	BetweenGroups	44.465	7	6.352	2.307	.025
	WithinGroups	1894.569	688	2.754		
Participation: Teaching Methods	BetweenGroups	13.343	7	1.906	.628	.733
	WithinGroups	2065.865	681	3.034		
Participation: Meeting Length	BetweenGroups	24.743	7	3.535	1.506	.162
	WithinGroups	1547.041	659	2.348		
Participation: Conflicts	BetweenGroups	41.847	7	5.978	1.414	.197
	WithinGroups	2960.236	700	4.229		
Demographic, Cultural, and Personality Factors	BetweenGroups	91.828	7	13.118	3.323	.002
	WithinGroups	2755.379	698	3.948		

Table A11. Analysis of variance of the impact of teacher tenure in class upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	21.994	6	3.666	1.339	.238
	WithinGroups	1429.132	522	2.738		
Divine Involvement: Transformed Lives	BetweenGroups	44.557	6	7.426	3.235	.004
	WithinGroups	1168.348	509	2.295		
Physical Arrangement	BetweenGroups	2.424	6	.404	.137	.991
	WithinGroups	1429.637	486	2.942		
Flexibility	BetweenGroups	104.611	6	17.425	6.233	.000
	WithinGroups	1328.686	475	2.797		
Room Size	BetweenGroups	34.493	6	5.749	2.103	.051
	WithinGroups	1405.257	514	2.734		
Proxemics and Territoriality	BetweenGroups	8.398	6	1.400	.662	.680
	WithinGroups	1086.738	514	2.114		
Aesthetics and Tidiness	BetweenGroups	102.251	6	17.042	5.397	.000
	WithinGroups	1493.446	473	3.157		
Lighting, Writing, and Reading	BetweenGroups	39.582	6	6.597	3.187	.004
	WithinGroups	985.429	476	2.070		
Temperature, Vent., and Humidity	BetweenGroups	71.561	6	11.927	2.756	.012
	WithinGroups	2185.408	505	4.328		
Odors, Seating, and Noise	BetweenGroups	25.847	6	4.308	1.283	.263
	WithinGroups	1692.501	504	3.358		
Teacher: General	BetweenGroups	30.963	6	5.161	2.282	.035
	WithinGroups	1148.679	508	2.261		
Teacher: Social Interaction	BetweenGroups	81.793	6	13.632	4.593	.000
	WithinGroups	1406.747	474	2.968		
Teacher: Classroom Management	BetweenGroups	104.085	6	17.348	7.675	.000
	WithinGroups	1150.512	509	2.260		
Peers: General	BetweenGroups	35.371	6	5.895	3.000	.007
	WithinGroups	968.661	493	1.965		
Peers: Relationship-Building in Class	BetweenGroups	28.999	6	4.833	2.345	.030
	WithinGroups	1057.308	513	2.061		
Peers: Relationship-Building out. of Class	BetweenGroups	34.427	6	5.738	1.861	.086
	WithinGroups	1590.701	516	3.083		
Group Size	BetweenGroups	78.894	6	13.149	4.110	.000
	WithinGroups	1631.822	510	3.200		
Psychological Factors	BetweenGroups	22.741	6	3.790	1.747	.108
	WithinGroups	1067.283	492	2.169		
Expectation	BetweenGroups	25.501	6	4.250	1.750	.107
	WithinGroups	1257.749	518	2.428		
Participation: General	BetweenGroups	22.207	6	3.701	1.415	.207
	WithinGroups	1307.793	500	2.616		
Participation: Teaching Methods	BetweenGroups	35.900	6	5.983	2.032	.060
	WithinGroups	1463.426	497	2.945		
Participation: Meeting Length	BetweenGroups	48.350	6	8.058	3.529	.002
	WithinGroups	1089.353	477	2.284		
Participation: Conflicts	BetweenGroups	40.259	6	6.710	1.579	.151
	WithinGroups	2179.771	513	4.249		
Demographic, Cultural, and Personality Factors	BetweenGroups	38.108	6	6.351	1.646	.133
	WithinGroups	1964.427	509	3.859		

Table A12. Analysis of variance of the impact of total teacher tenure upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	32.448	6	5.408	1.990	.065
	WithinGroups	1418.679	522	2.718		
Divine Involvement: Transformed Lives	BetweenGroups	43.380	6	7.230	3.147	.005
	WithinGroups	1169.525	509	2.298		
Physical Arrangement	BetweenGroups	16.601	6	2.767	.950	.459
	WithinGroups	1415.460	486	2.912		
Flexibility	BetweenGroups	153.418	6	25.570	9.490	.000
	WithinGroups	1279.879	475	2.694		
Room Size	BetweenGroups	32.106	6	5.351	1.954	.071
	WithinGroups	1407.644	514	2.739		
Proxemics and Territoriality	BetweenGroups	21.192	6	3.532	1.690	.121
	WithinGroups	1073.944	514	2.089		
Aesthetics and Tidiness	BetweenGroups	67.824	6	11.304	3.499	.002
	WithinGroups	1527.874	473	3.230		
Lighting, Writing, and Reading	BetweenGroups	10.989	6	1.832	.860	.524
	WithinGroups	1014.021	476	2.130		
Temperature, Vent., and Humidity	BetweenGroups	27.207	6	4.534	1.027	.407
	WithinGroups	2229.762	505	4.415		
Odors, Seating, and Noise	BetweenGroups	38.662	6	6.444	1.933	.074
	WithinGroups	1679.686	504	3.333		
Teacher: General	BetweenGroups	15.992	6	2.665	1.164	.324
	WithinGroups	1163.651	508	2.291		
Teacher: Social Interaction	BetweenGroups	45.941	6	7.657	2.516	.021
	WithinGroups	1442.599	474	3.043		
Teacher: Classroom Management	BetweenGroups	40.038	6	6.673	2.797	.011
	WithinGroups	1214.559	509	2.386		
Peers: General	BetweenGroups	13.074	6	2.179	1.084	.371
	WithinGroups	990.958	493	2.010		
Peers: Relationship-Building in Class	BetweenGroups	19.149	6	3.191	1.534	.165
	WithinGroups	1067.159	513	2.080		
Peers: Relationship-Building out. of Class	BetweenGroups	25.723	6	4.287	1.383	.219
	WithinGroups	1599.405	516	3.100		
Group Size	BetweenGroups	52.459	6	8.743	2.689	.014
	WithinGroups	1658.256	510	3.251		
Psychological Factors	BetweenGroups	29.819	6	4.970	2.306	.033
	WithinGroups	1060.205	492	2.155		
Expectation	BetweenGroups	35.731	6	5.955	2.473	.023
	WithinGroups	1247.519	518	2.408		
Participation: General	BetweenGroups	59.079	6	9.846	3.874	.001
	WithinGroups	1270.921	500	2.542		
Participation: Teaching Methods	BetweenGroups	47.718	6	7.953	2.723	.013
	WithinGroups	1451.607	497	2.921		
Participation: Meeting Length	BetweenGroups	53.775	6	8.962	3.944	.001
	WithinGroups	1083.928	477	2.272		
Participation: Conflicts	BetweenGroups	61.798	6	10.300	2.448	.024
	WithinGroups	2158.233	513	4.207		
Demographic, Cultural, and Personality Factors	BetweenGroups	82.497	6	13.749	3.645	.001
	WithinGroups	1920.038	509	3.772		

Table A13. Analysis of variance of the impact of class attendance upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	16.219	5	3.244	1.201	.307
	WithinGroups	1439.948	533	2.702		
Divine Involvement: Transformed Lives	BetweenGroups	35.310	5	7.062	3.075	.010
	WithinGroups	1194.059	520	2.296		
Physical Arrangement	BetweenGroups	40.075	5	8.015	2.689	.021
	WithinGroups	1481.440	497	2.981		
Flexibility	BetweenGroups	217.887	5	43.577	17.376	.000
	WithinGroups	1216.337	485	2.508		
Room Size	BetweenGroups	32.262	5	6.452	2.344	.040
	WithinGroups	1445.366	525	2.753		
Proxemics and Territoriality	BetweenGroups	33.621	5	6.724	3.283	.006
	WithinGroups	1073.096	524	2.048		
Aesthetics and Tidiness	BetweenGroups	87.051	5	17.410	5.553	.000
	WithinGroups	1514.438	483	3.135		
Lighting, Writing, and Reading	BetweenGroups	38.025	5	7.605	3.712	.003
	WithinGroups	993.620	485	2.049		
Temperature, Vent., and Humidity	BetweenGroups	34.494	5	6.899	1.575	.165
	WithinGroups	2259.731	516	4.379		
Odors, Seating, and Noise	BetweenGroups	75.518	5	15.104	4.545	.000
	WithinGroups	1711.257	515	3.323		
Teacher: General	BetweenGroups	10.388	5	2.078	.907	.476
	WithinGroups	1188.184	519	2.289		
Teacher: Social Interaction	BetweenGroups	36.908	5	7.382	2.417	.035
	WithinGroups	1478.398	484	3.055		
Teacher: Classroom Management	BetweenGroups	88.320	5	17.664	7.751	.000
	WithinGroups	1185.011	520	2.279		
Peers: General	BetweenGroups	14.929	5	2.986	1.489	.192
	WithinGroups	1010.922	504	2.006		
Peers: Relationship-Building in Class	BetweenGroups	6.773	5	1.355	.642	.668
	WithinGroups	1106.059	524	2.111		
Peers: Relationship-Building out. of Class	BetweenGroups	40.776	5	8.155	2.702	.020
	WithinGroups	1590.421	527	3.018		
Group Size	BetweenGroups	73.454	5	14.691	4.478	.001
	WithinGroups	1705.877	520	3.281		
Psychological Factors	BetweenGroups	9.982	5	1.996	.912	.473
	WithinGroups	1101.106	503	2.189		
Expectation	BetweenGroups	12.514	5	2.503	1.026	.401
	WithinGroups	1287.501	528	2.438		
Participation: General	BetweenGroups	44.612	5	8.922	3.495	.004
	WithinGroups	1304.680	511	2.553		
Participation: Teaching Methods	BetweenGroups	34.221	5	6.844	2.342	.041
	WithinGroups	1481.498	507	2.922		
Participation: Meeting Length	BetweenGroups	58.503	5	11.701	5.264	.000
	WithinGroups	1082.495	487	2.223		
Participation: Conflicts	BetweenGroups	52.518	5	10.504	2.525	.028
	WithinGroups	2179.603	524	5.160		
Demographic, Cultural, and Personality Factors	BetweenGroups	31.872	5	6.374	1.653	.144
	WithinGroups	2009.384	521	3.857		

Table A14. Analysis of variance of the impact of church size upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	9.121	2	4.560	1.640	.195
	WithinGroups	2021.412	727	2.780		
Divine Involvement: Transformed Lives	BetweenGroups	.896	2	.448	.191	.826
	WithinGroups	1683.674	719	2.342		
Physical Arrangement	BetweenGroups	21.213	2	10.606	3.547	.029
	WithinGroups	2024.551	677	2.990		
Flexibility	BetweenGroups	48.088	2	24.044	7.691	.000
	WithinGroups	2066.443	661	2.126		
Room Size	BetweenGroups	28.241	2	14.121	5.122	.006
	WithinGroups	1984.907	720	2.757		
Proxemics and Territoriality	BetweenGroups	11.222	2	5.611	2.655	.071
	WithinGroups	1517.407	718	2.113		
Aesthetics and Tidiness	BetweenGroups	51.190	2	25.595	7.841	.000
	WithinGroups	2170.798	665	3.264		
Lighting, Writing, and Reading	BetweenGroups	3.400	2	1.700	.785	.457
	WithinGroups	1443.087	666	2.167		
Temperature, Vent., and Humidity	BetweenGroups	66.418	2	33.209	7.966	.000
	WithinGroups	2943.026	706	4.169		
Odors, Seating, and Noise	BetweenGroups	165.962	2	82.981	25.522	.000
	WithinGroups	2298.727	707	3.251		
Teacher: General	BetweenGroups	1.024	2	.512	.215	.807
	WithinGroups	1694.382	711	2.383		
Teacher: Social Interaction	BetweenGroups	8.990	2	4.495	1.389	.250
	WithinGroups	2139.558	661	3.237		
Teacher: Classroom Management	BetweenGroups	19.882	2	9.941	3.726	.025
	WithinGroups	1902.325	713	2.668		
Peers: General	BetweenGroups	5.516	2	2.758	1.281	.278
	WithinGroups	1494.510	694	2.153		
Peers: Relationship-Building in Class	BetweenGroups	1.714	2	.857	.410	.664
	WithinGroups	1506.505	720	2.092		
Peers: Relationship-Building out. of Class	BetweenGroups	1.535	2	.768	.248	.780
	WithinGroups	2241.901	724	3.097		
Group Size	BetweenGroups	76.181	2	38.090	11.329	.000
	WithinGroups	2393.799	712	3.362		
Psychological Factors	BetweenGroups	4.785	2	2.392	1.008	.366
	WithinGroups	1645.192	693	2.374		
Expectation	BetweenGroups	5.074	2	2.537	.991	.372
	WithinGroups	1855.689	725	2.560		
Participation: General	BetweenGroups	11.903	2	5.952	2.134	.119
	WithinGroups	1957.577	702	2.789		
Participation: Teaching Methods	BetweenGroups	10.354	2	5.177	1.727	.179
	WithinGroups	2089.776	697	2.998		
Participation: Meeting Length	BetweenGroups	.350	2	.175	.074	.929
	WithinGroups	1573.435	666	2.363		
Participation: Conflicts	BetweenGroups	18.233	2	9.117	2.142	.118
	WithinGroups	3043.054	715	4.256		
Demographic, Cultural, and Personality Factors	BetweenGroups	17.385	2	8.692	2.142	.118
	WithinGroups	2902.071	715	4.059		

Table A15. Analysis of variance of the impact of church location upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	1.531	2	.766	.284	.753
	WithinGroups	1430.394	531	2.694		
Divine Involvement: Transformed Lives	BetweenGroups	10.823	2	5.412	2.333	.098
	WithinGroups	1201.442	518	2.319		
Physical Arrangement	BetweenGroups	6.240	2	3.120	1.021	.361
	WithinGroups	1513.392	495	3.057		
Flexibility	BetweenGroups	139.530	2	69.765	25.760	.000
	WithinGroups	1308.110	483	2.708		
Room Size	BetweenGroups	.940	2	.470	.168	.845
	WithinGroups	1458.712	523	2.789		
Proxemics and Territoriality	BetweenGroups	2.374	2	1.187	.566	.568
	WithinGroups	1094.152	522	20.96		
Aesthetics and Tidiness	BetweenGroups	7.833	2	3.916	1.193	.304
	WithinGroups	1581.870	482	3.282		
Lighting, Writing, and Reading	BetweenGroups	5.628	2	2.814	1.333	.265
	WithinGroups	1024.003	485	2.111		
Temperature, Vent., and Humidity	BetweenGroups	52.379	2	26.189	6.100	.002
	WithinGroups	2206.678	514	4.293		
Odors, Seating, and Noise	BetweenGroups	7.691	2	3.846	1.131	.323
	WithinGroups	1747.163	514	3.399		
Teacher: General	BetweenGroups	.720	2	.360	.156	.855
	WithinGroups	1192.179	518	2.302		
Teacher: Social Interaction	BetweenGroups	3.066	2	1.533	.494	.610
	WithinGroups	1495.767	482	3.103		
Teacher: Classroom Management	BetweenGroups	6.219	2	3.109	1.280	.279
	WithinGroups	1258.157	518	2.429		
Peers: General	BetweenGroups	5.492	2	2.746	1.363	.257
	WithinGroups	1015.656	504	2.015		
Peers: Relationship-Building in Class	BetweenGroups	.949	2	.475	.226	.798
	WithinGroups	1094.891	522	2.097		
Peers: Relationship-Building out. of Class	BetweenGroups	17.992	2	8.996	2.947	.053
	WithinGroups	1602.523	525	3.052		
Group Size	BetweenGroups	42.533	2	21.266	6.399	.002
	WithinGroups	1721.536	518	3.323		
Psychological Factors	BetweenGroups	1.084	2	.542	.245	.782
	WithinGroups	1108.765	502	2.209		
Expectation	BetweenGroups	10.522	2	5.261	2.164	.116
	WithinGroups	1278.575	526	2.431		
Participation: General	BetweenGroups	2.695	2	1.348	.515	.598
	WithinGroups	1332.787	509	2.618		
Participation: Teaching Methods	BetweenGroups	10.881	2	5.441	1.821	.163
	WithinGroups	1508.473	505	2.987		
Participation: Meeting Length	BetweenGroups	7.270	2	3.635	1.541	.215
	WithinGroups	1143.630	485	2.358		
Participation: Conflicts	BetweenGroups	12.357	2	6.179	1.480	.229
	WithinGroups	2178.968	522	4.174		
Demographic, Cultural, and Personality Factors	BetweenGroups	1.910	2	.955	.246	.782
	WithinGroups	2010.355	518	3.881		

Table A16. Analysis of variance of the impact of teaching style upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	17.070	3	5.690	2.086	.101
	WithinGroups	1958.809	718	2.728		
Divine Involvement: Transformed Lives	BetweenGroups	17.354	3	5.785	2.543	.055
	WithinGroups	1619.484	712	2.275		
Physical Arrangement	BetweenGroups	16.201	3	5.400	1.802	.145
	WithinGroups	2004.952	669	2.997		
Flexibility	BetweenGroups	185.130	3	61.710	21.076	.000
	WithinGroups	1923.669	657	2.928		
Room Size	BetweenGroups	11.338	3	3.779	1.382	.247
	WithinGroups	1944.027	711			
Proxemics and Territoriality	BetweenGroups	40.759	3	13.586	6.550	.000
	WithinGroups	1472.837	710	2.074		
Aesthetics and Tidiness	BetweenGroups	63.400	3	21.133	6/503	.000
	WithinGroups	2148.019	661	3.250		
Lighting, Writing, and Reading	BetweenGroups	1.361	3	.454	.210	.890
	WithinGroups	1424.222	658	2.164		
Temperature, Vent., and Humidity	BetweenGroups	17.048	3	5.683	1.338	.261
	WithinGroups	2963.528	698	4.246		
Odors, Seating, and Noise	BetweenGroups	21.906	3	7.302	2.106	.098
	WithinGroups	2419.746	698	3.467		
Teacher: General	BetweenGroups	3.106	3	1.035	.437	.727
	WithinGroups	1666.071	703	2.370		
Teacher: Social Interaction	BetweenGroups	23.059	3	7.686	2.381	.068
	WithinGroups	2120.820	657	3.228		
Teacher: Classroom Management	BetweenGroups	21.819	3	7.273	2.720	.044
	WithinGroups	1885.262	705	2.674		
Peers: General	BetweenGroups	26.178	3	8.726	4.152	.006
	WithinGroups	1443.964	687	2.102		
Peers: Relationship-Building in Class	BetweenGroups	12.826	3	4.275	2.069	.103
	WithinGroups	1473.193	713	2.066		
Peers: Relationship-Building out. of Class	BetweenGroups	50.285	3	16.762	5.615	.001
	WithinGroups	2134.191	715	2.985		
Group Size	BetweenGroups	18.740	3	6.247	1.828	.141
	WithinGroups	2405.904	704	3.417		
Psychological Factors	BetweenGroups	3.242	3	1.081	.468	.705
	WithinGroups	1582.819	685	2.311		
Expectation	BetweenGroups	19.086	3	6.362	2.519	.057
	WithinGroups	1813.270	718	2.626		
Participation: General	BetweenGroups	41.037	3	13.679	5.012	.002
	WithinGroups	1893.899	694	2.729		
Participation: Teaching Methods	BetweenGroups	90.583	3	30.194	10.437	.000
	WithinGroups	1996.202	690	2.893		
Participation: Meeting Length	BetweenGroups	7.340	3	2.447	1.035	.377
	WithinGroups	1565.407	662	2.365		
Participation: Conflicts	BetweenGroups	6.496	3	2.165	.511	.675
	WithinGroups	3000.448	708	4.238		
Demographic, Cultural, and Personality Factors	BetweenGroups	26.975	3	8.992	2.308	.075
	WithinGroups	2742.527	704	3.896		

Table A17. Analysis of variance of the impact of attendance frequency in class upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	16.376	3	5.459	1.976	.116
	WithinGroups	1958.915	709	2.763		
Divine Involvement: Transformed Lives	BetweenGroups	27.864	3	9.288	4.004	.008
	WithinGroups	1625.957	701	2.319		
Physical Arrangement	BetweenGroups	19.060	3	6.353	2.106	.098
	WithinGroups	2000.514	663	3.017		
Flexibility	BetweenGroups	12.743	3	4.248	1.334	.262
	WithinGroups	2057.412	646	3.185		
Room Size	BetweenGroups	20.552	3	6.851	2.489	.059
	WithinGroups	1937.951	704	2.753		
Proxemics and Territoriality	BetweenGroups	4.932	3	1.644	.777	.507
	WithinGroups	1479.124	699	2.116		
Aesthetics and Tidiness	BetweenGroups	19.335	3	6.445	1.920	.125
	WithinGroups	2178.919	649	3.357		
Lighting, Writing, and Reading	BetweenGroups	13.080	3	4.360	2.023	.109
	WithinGroups	1400.712	650	2.155		
Temperature, Vent., and Humidity	BetweenGroups	3.927	3	1.309	.307	.821
	WithinGroups	2942.336	689	4.270		
Odors, Seating, and Noise	BetweenGroups	30.229	3	10.076	2.907	.034
	WithinGroups	2388.446	689	3.467		
Teacher: General	BetweenGroups	.283	3	.094	.040	.989
	WithinGroups	1652.259	693	2.384		
Teacher: Social Interaction	BetweenGroups	5.329	3	1.776	.548	.650
	WithinGroups	2098.228	647	3.243		
Teacher: Classroom Management	BetweenGroups	2.250	3	.750	.277	.842
	WithinGroups	1886.298	697	2.706		
Peers: General	BetweenGroups	11.982	3	3.994	1.858	.135
	WithinGroups	1453.240	676	2.150		
Peers: Relationship-Building in Class	BetweenGroups	10.484	3	3.495	1.679	.170
	WithinGroups	1462.911	703	2.081		
Peers: Relationship-Building out. of Class	BetweenGroups	15.929	3	5.310	1.727	.160
	WithinGroups	2167.619	705	3.075		
Group Size	BetweenGroups	10.364	3	3.455	.998	.393
	WithinGroups	2405.301	695	3.461		
Psychological Factors	BetweenGroups	26.741	3	8.914	3.847	.010
	WithinGroups	1566.265	676	2.317		
Expectation	BetweenGroups	3.908	3	1.303	.507	.678
	WithinGroups	1813.851	706	2.569		
Participation: General	BetweenGroups	13.947	3	4.649	1.650	.177
	WithinGroups	1924.254	683	2.817		
Participation: Teaching Methods	BetweenGroups	9.326	3	3.109	1.027	.380
	WithinGroups	2062.280	681	3.028		
Participation: Meeting Length	BetweenGroups	11.550	3	3.850	1.612	.185
	WithinGroups	1552.297	650	2.388		
Participation: Conflicts	BetweenGroups	284.301	3	94.767	24.386	.000
	WithinGroups	2708.640	697	3.886		
Demographic, Cultural, and Personality Factors	BetweenGroups	20.893	3	6.964	1.752	.155
	WithinGroups	2769.928	697	3.974		

Table A18. Analysis of variance of the impact of retention and attrition upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	15.041	1	15.041	5.456	.020
	WithinGroups	1960.249	711	2.757		
Divine Involvement: Transformed Lives	BetweenGroups	27.850	1	27.850	12.041	.001
	WithinGroups	1625.971	703	2.313		
Physical Arrangement	BetweenGroups	2.723	1	2.723	.898	.344
	WithinGroups	2016.851	665	3.033		
Flexibility	BetweenGroups	.332	1	.332	.104	.747
	WithinGroups	2069.823	648	3.194		
Room Size	BetweenGroups	7.040	1	7.040	2.547	.111
	WithinGroups	1951.463	706	2.764		
Proxemics and Territoriality	BetweenGroups	.444	1	.444	.210	.647
	WithinGroups	1483.613	710	2.116		
Aesthetics and Tidiness	BetweenGroups	2.700	1	2.700	.800	.371
	WithinGroups	2195.555	651	3.373		
Lighting, Writing, and Reading	BetweenGroups	3.254	1	3.254	1.504	.220
	WithinGroups	1410.538	652	2.163		
Temperature, Vent., and Humidity	BetweenGroups	.457	1	.457	.107	.744
	WithinGroups	2945.806	691	4.263		
Odors, Seating, and Noise	BetweenGroups	.079	1	.079	.022	.881
	WithinGroups	2418.597	691	3.500		
Teacher: General	BetweenGroups	.251	1	.251	.106	.745
	WithinGroups	1652.291	695	2.377		
Teacher: Social Interaction	BetweenGroups	2.011	1	2.011	.621	.431
	WithinGroups	2102.546	649	3.238		
Teacher: Classroom Management	BetweenGroups	.319	1	.319	.118	.731
	WithinGroups	1888.229	699	2.710		
Peers: General	BetweenGroups	11.470	1	11.470	5.349	.021
	WithinGroups	1453.752	678			
Peers: Relationship-Building in Class	BetweenGroups	6.446	1	6.446	3.098	.079
	WithinGroups	1466.949	705	2.081		
Peers: Relationship-Building out. of Class	BetweenGroups	9.856	1	9.856	3.206	.074
	WithinGroups	2173.692	707	3.075		
Group Size	BetweenGroups	6.497	1	6.497	1.880	.171
	WithinGroups	2409.169	697	3.456		
Psychological Factors	BetweenGroups	21.415	1	21.415	9.238	.002
	WithinGroups	1571.591	678	2.318		
Expectation	BetweenGroups	1.465	1	1.465	.571	.450
	WithinGroups	1816.294	708	2.565		
Participation: General	BetweenGroups	13.189	1	13.189	4.693	.031
	WithinGroups	1925.012	685	2.810		
Participation: Teaching Methods	BetweenGroups	2.396	1	2.396	.791	.374
	WithinGroups	2069.210	683	3.030		
Participation: Meeting Length	BetweenGroups	4.089	1	4.089	1.709	.192
	WithinGroups	1559.758	652	2.392		
Participation: Conflicts	BetweenGroups	85.756	1	85.756	20.619	.000
	WithinGroups	2907.186	699	4.159		
Demographic, Cultural, and Personality Factors	BetweenGroups	10.068	1	10.068	2.531	.112
	WithinGroups	2780.753	699	3.978		

Table A19. Analysis of variance of the impact of number of close friends in class upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	121.467	6	20.244	7.742	.000
	WithinGroups	1830.423	700	2.615		
Divine Involvement: Transformed Lives	BetweenGroups	134.395	6	22.399	10.470	.000
	WithinGroups	1484.743	694	2.129		
Physical Arrangement	BetweenGroups	40.519	6	6.753	2.255	.037
	WithinGroups	1964.914	656	2.995		
Flexibility	BetweenGroups	8.289	6	1.382	.425	.862
	WithinGroups	2083.482	641	3.250		
Room Size	BetweenGroups	22.434	6	3.739	1.325	.243
	WithinGroups	1960.654	695	2.821		
Proxemics and Territoriality	BetweenGroups	11.327	6	1.888	.881	.508
	WithinGroups	1487.301	694	2.143		
Aesthetics and Tidiness	BetweenGroups	48.281	6	8.047	2.427	.025
	WithinGroups	2135.471	644	3.316		
Lighting, Writing, and Reading	BetweenGroups	9.662	6	1.610	.743	.615
	WithinGroups	1399.373	646	2.166		
Temperature, Vent., and Humidity	BetweenGroups	22.952	6	3.825	.891	.501
	WithinGroups	2920.376	680	4.295		
Odors, Seating, and Noise	BetweenGroups	16.978	6	2.830	.815	.558
	WithinGroups	2364.404	681	2.472		
Teacher: General	BetweenGroups	18.312	6	3.052	1.285	.262
	WithinGroups	1631.054	687	2.374		
Teacher: Social Interaction	BetweenGroups	75.380	6	12.563	3.982	.001
	WithinGroups	2025.314	642	3.155		
Teacher: Classroom Management	BetweenGroups	71.972	6	11.995	4.587	.000
	WithinGroups	1799.242	688	2.615		
Peers: General	BetweenGroups	88.357	6	14.726	7.272	.000
	WithinGroups	1360.833	672	2.025		
Peers: Relationship-Building in Class	BetweenGroups	102.499	6	17.083	8.680	.000
	WithinGroups	1365.923	694	1.968		
Peers: Relationship-Building out. of Class	BetweenGroups	217.232	6	36.205	13.143	.000
	WithinGroups	1922.759	698	2.755		
Group Size	BetweenGroups	36.850	6	6.142	1.793	.098
	WithinGroups	2360.478	689	3.426		
Psychological Factors	BetweenGroups	41.501	6	6.917	2.935	.008
	WithinGroups	1581.295	671	2.357		
Expectation	BetweenGroups	40.007	6	6.668	2.630	.016
	WithinGroups	1776.953	701	2.535		
Participation: General	BetweenGroups	156.068	6	26.011	9.988	.000
	WithinGroups	1763.036	677	2.604		
Participation: Teaching Methods	BetweenGroups	36.504	6	6.084	2.060	.056
	WithinGroups	1990.353	674	2.953		
Participation: Meeting Length	BetweenGroups	27.694	6	4/616	1.959	.069
	WithinGroups	1517.267	644	2.356		
Participation: Conflicts	BetweenGroups	36.764	6	6.127	1.429	.201
	WithinGroups	2962.154	691	4.287		
Demographic, Cultural, and Personality Factors	BetweenGroups	273.969	6	45.662	12.461	.000
	WithinGroups	2528.317	690	3.664		

Table A20. Analysis of variance of the impact of class gender upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	7.341	2	3.671	1.351	.260
	WithinGroups	1401.981	516	2.717		
Divine Involvement: Transformed Lives	BetweenGroups	37.167	2	18.583	8.487	.000
	WithinGroups	1099.201	502	2.190		
Physical Arrangement	BetweenGroups	.845	2	.423	.138	.871
	WithinGroups	1466.938	478	3.069		
Flexibility	BetweenGroups	14.337	2	7.169	2.382	.093
	WithinGroups	1466.938	469	3.009		
Room Size	BetweenGroups	10.233	2	5.117	1.796	.167
	WithinGroups	1441.708	506	2.849		
Proxemics and Territoriality	BetweenGroups	6.407	2	3.204	1.541	.215
	WithinGroups	1049.693	505	2.079		
Aesthetics and Tidiness	BetweenGroups	10.878	2	5.439	1.633	.197
	WithinGroups	1555.709	467	3.331		
Lighting, Writing, and Reading	BetweenGroups	8.726	2	4.363	2.079	.126
	WithinGroups	984.357	469	2.099		
Temperature, Vent., and Humidity	BetweenGroups	10.064	2	5.032	1.159	.315
	WithinGroups	2157.638	497	4.341		
Odors, Seating, and Noise	BetweenGroups	60.196	2	30.098	9.002	.000
	WithinGroups	1658.301	496	3.343		
Teacher: General	BetweenGroups	15.797	2	7.898	3.423	.033
	WithinGroups	1153.635	500	2.307		
Teacher: Social Interaction	BetweenGroups	35.831	2	17.916	6.234	.002
	WithinGroups	1344.971	468	2.874		
Teacher: Classroom Management	BetweenGroups	46.721	2	23.360	10.207	.000
	WithinGroups	1146.581	501	2.289		
Peers: General	BetweenGroups	19.011	2	9.506	4.995	.007
	WithinGroups	928.720	488	1.903		
Peers: Relationship-Building in Class	BetweenGroups	17.240	2	8.620	4.214	.015
	WithinGroups	1034.948	506	2.045		
Peers: Relationship-Building out. of Class	BetweenGroups	37.389	2	18.695	6.274	.002
	WithinGroups	1513.785	508	2.980		
Group Size	BetweenGroups	24.910	2	12.455	3.685	.026
	WithinGroups	1693.463	501	3.380		
Psychological Factors	BetweenGroups	9.415	2	4.707	2.156	.117
	WithinGroups	1056.610	484	2.183		
Expectation	BetweenGroups	17.041	2	8.521	3.618	.028
	WithinGroups	1198.753	509	2.355		
Participation: General	BetweenGroups	5.831	2	2.916	1.125	.326
	WithinGroups	1275.603	492	2.593		
Participation: Teaching Methods	BetweenGroups	4.032	2	2.016	.684	.505
	WithinGroups	1441.632	489	2.948		
Participation: Meeting Length	BetweenGroups	12.984	2	6.492	2.819	.061
	WithinGroups	1084.712	471	2.303		
Participation: Conflicts	BetweenGroups	4.077	2	2.038	.482	.618
	WithinGroups	2135.898	505	4.230		
Demographic, Cultural, and Personality Factors	BetweenGroups	25.335	2	12.668	3.230	.040
	WithinGroups	1964.823	501	3.922		

Table A21. Analysis of variance of the impact of marital status upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	32.089	4	8.022	2.943	.020
	WithinGroups	1940.990	712	2.726		
Divine Involvement: Transformed Lives	BetweenGroups	28.585	4	7.146	3.114	.015
	WithinGroups	1617.702	705	2.295		
Physical Arrangement	BetweenGroups	13.552	4	3.388	1.144	.334
	WithinGroups	1965.563	664	2.960		
Flexibility	BetweenGroups	31.075	4	7.769	2.455	.045
	WithinGroups	2078.866	657	3.164		
Room Size	BetweenGroups	13.533	4	3.383	1.213	.304
	WithinGroups	1974.635	708	2.789		
Proxemics and Territoriality	BetweenGroups	14.556	4	3.639	1.728	.142
	WithinGroups	1484.775	705	2.106		
Aesthetics and Tidiness	BetweenGroups	16.152	4	4.038	1.211	.305
	WithinGroups	2203.409	661	3.333		
Lighting, Writing, and Reading	BetweenGroups	12.306	4	3.077	1.417	.227
	WithinGroups	1418.192	653	2.172		
Temperature, Vent., and Humidity	BetweenGroups	44.522	4	11.130	2.641	.033
	WithinGroups	2925.144	694	4.215		
Odors, Seating, and Noise	BetweenGroups	32.212	4	8.053	2.342	.054
	WithinGroups	2393.651	696	3.439		
Teacher: General	BetweenGroups	27.177	4	6.794	2.878	.022
	WithinGroups	1650.287	699			
Teacher: Social Interaction	BetweenGroups	38.374	4	9.593	2.990	.018
	WithinGroups	2107.989	657	3.209		
Teacher: Classroom Management	BetweenGroups	33.248	4	8.312	3.114	.015
	WithinGroups	1868.729	700	2.670		
Peers: General	BetweenGroups	11.467	4	2.867	1.333	.256
	WithinGroups	1466.152	682	2.150		
Peers: Relationship-Building in Class	BetweenGroups	20.587	4	5.147	2.480	.043
	WithinGroups	1469.531	708	2.076		
Peers: Relationship-Building out. of Class	BetweenGroups	36.522	4	9.131	2.964	.019
	WithinGroups	2189.958	711	3.080		
Group Size	BetweenGroups	25.993	4	6.498	1.874	.113
	WithinGroups	2423.439	699	3.467		
Psychological Factors	BetweenGroups	23.563	4	5.891	2.545	.038
	WithinGroups	1575.972	681	2.314		
Expectation	BetweenGroups	4.600	4	1.150	.447	.775
	WithinGroups	1834.337	713	2.573		
Participation: General	BetweenGroups	23.546	4	5.886	2.127	.076
	WithinGroups	1912.380	691	2.768		
Participation: Teaching Methods	BetweenGroups	15.051	4	3.763	1.247	.290
	WithinGroups	2060.459	683	3.017		
Participation: Meeting Length	BetweenGroups	16.092	4	4.023	1.713	.145
	WithinGroups	1556.727	663	2.348		
Participation: Conflicts	BetweenGroups	51.468	4	12.867	3.054	.016
	WithinGroups	2961.926	703	4.213		
Demographic, Cultural, and Personality Factors	BetweenGroups	156.978	4	39.244	10.223	.000
	WithinGroups	2690.905	701	2.839		

Table A22. Analysis of variance of the impact of participating church upon learning environment factors

Learning environment factor		Sum of Squares	Df	Mean Square	F	Sig.
Divine Involvement	BetweenGroups	79.363	18	4.409	1.607	.053
	WithinGroups	1951.170	711	2.744		
Divine Involvement: Transformed Lives	BetweenGroups	126.205	18	7.011	3.163	.000
	WithinGroups	1558.366	703	2.217		
Physical Arrangement	BetweenGroups	140.028	18	7.779	2.698	.000
	WithinGroups	1905.735	703	2.883		
Flexibility	BetweenGroups	336.335	18	18.685	6.778	.000
	WithinGroups	1778.195	645	2.757		
Room Size	BetweenGroups	107.102	18	5.950	2.198	.003
	WithinGroups	1906.046	704	2.707		
Proxemics and Territoriality	BetweenGroups	40.644	18	2.258	1.065	.384
	WithinGroups	1498.986	702	2.120		
Aesthetics and Tidiness	BetweenGroups	338.400	18	18.800	6.478	.000
	WithinGroups	1883.588	649	2.902		
Lighting, Writing, and Reading	BetweenGroups	151.642	18	8.245	3.496	.000
	WithinGroups	1294.845	650	1.992		
Temperature, Vent., and Humidity	BetweenGroups	251.517	18	13.973	3.496	.000
	WithinGroups	2757.927	690	3.997		
Odors, Seating, and Noise	BetweenGroups	270.727	18	15.040	4.737	.000
	WithinGroups	2193.962	691	3.175		
Teacher: General	BetweenGroups	82.964	18	4.609	1.987	.009
	WithinGroups	1612.442	695	2.320		
Teacher: Social Interaction	BetweenGroups	156.428	18	8.690	2.814	.000
	WithinGroups	1992.120	645	3.089		
Teacher: Classroom Management	BetweenGroups	248.865	18	13.826	5.759	.000
	WithinGroups	1673.342	697	2.401		
Peers: General	BetweenGroups	97.729	18	5.429	2.625	.000
	WithinGroups	1402.297	678	2.068		
Peers: Relationship-Building in Class	BetweenGroups	73.354	18	4.075	1.999	.008
	WithinGroups	1434.864	704	2.038		
Peers: Relationship-Building out. of Class	BetweenGroups	110.582	18	6.143	2.039	.007
	WithinGroups	2132.854	708	3.013		
Group Size	BetweenGroups	228.291	18	12.683	3.938	.000
	WithinGroups	2241.689	696	3.221		
Psychological Factors	BetweenGroups	30.713	18	1.706	.713	.799
	WithinGroups	1619.264	677	2.392		
Expectation	BetweenGroups	135.559	18	7.531	3.095	.000
	WithinGroups	1725.205	709	2.433		
Participation: General	BetweenGroups	133.763	18	7.431	2.777	.000
	WithinGroups	1835.718	686	2.676		
Participation: Teaching Methods	BetweenGroups	126.052	18	7.003	2.416	.001
	WithinGroups	1974.078	681	2.899		
Participation: Meeting Length	BetweenGroups	68.519	18	3.807	1.644	.045
	WithinGroups	1505.266	650	2.316		
Participation: Conflicts	BetweenGroups	125.929	18	6.996	1.666	.041
	WithinGroups	2935.358	699	4.199		
Demographic, Cultural, and Personality Factors	BetweenGroups	127.388	18	7.077	1.772	.025
	WithinGroups	2792.068	699	3.994		

Table A23. Analysis of variance of the impact of retention and attrition upon factor statements

Statement		Sum of Squares	Df	Mean Square	F	Sig.
1	BetweenGroups	.023	1	.023	.041	.840
	WithinGroups	403.999	728	.555		
2	BetweenGroups	1.676	1	1.676	2.112	.147
	WithinGroups	583.323	735	.794		
3	BetweenGroups	.422	1	.422	.319	.572
	WithinGroups	961.268	727	1.322		
4	BetweenGroups	.001	1	.001	.002	.966
	WithinGroups	513.977	732	.702		
5	BetweenGroups	.001	1	.001	.001	.978
	WithinGroups	769.845	725	1.062		
6	BetweenGroups	7.975	1	7.975	12.785	.000
	WithinGroups	452.860	726	.624		
7	BetweenGroups	1.289	1	1.289	1.450	.229
	WithinGroups	629.331	708	.889		
8	BetweenGroups	1.002	1	1.002	1.609	.205
	WithinGroups	458.990	737	.623		
9	BetweenGroups	3.324	1	3.324	6.168	.013
	WithinGroups	393.890	731	.539		
10	BetweenGroups	1.570	1	1.570	3.346	.068
	WithinGroups	344.450	734	.469		
11	BetweenGroups	2.701	1	2.701	4.563	.033
	WithinGroups	430.404	727	.592		
12	BetweenGroups	.372	1	.372	.619	.432
	WithinGroups	438.230	730	.600		
13	BetweenGroups	.007	1	.007	.010	.920
	WithinGroups	531.082	725	.733		
14	BetweenGroups	.044	1	.044	.029	.865
	WithinGroups	1096.150	719	1.525		
15	BetweenGroups	.003	1	.003	.004	.952
	WithinGroups	593.948	725	.819		
16	BetweenGroups	2.363	1	2.363	5.008	.026
	WithinGroups	346.745	735	.472		
17	BetweenGroups	1.345	1	1.345	2.184	.140
	WithinGroups	451.262	733	.616		
18	BetweenGroups	3.982	1	3.982	5.154	.023
	WithinGroups	556.306	720	.773		
19	BetweenGroups	1.026	1	1.026	.856	.355
	WithinGroups	871.553	727	1.199		
20	BetweenGroups	1.384	1	1.384	2.610	.107
	WithinGroups	375.474	708	.530		
21	BetweenGroups	6.030	1	6.030	10.859	.001
	WithinGroups	402.014	724	.555		
22	BetweenGroups	3.517	1	3.517	4.964	.026
	WithinGroups	522.096	737	.708		
23	BetweenGroups	.301	1	.301	.500	.480
	WithinGroups	444.481	737	.603		
24	BetweenGroups	.041	1	.041	.055	.815
	WithinGroups	543.925	726	.749		

Table A23—*Continued.* Analysis of variance of the impact of retention and attrition upon factor statements

Statement		Sum of Squares	Df	Mean Square	F	Sig.
25	BetweenGroups	.107	1	.107	.110	.740
	WithinGroups	703.018	723	.749		
26	BetweenGroups	.721	1	.721	1.061	.303
	WithinGroups	489.109	720	.679		
27	BetweenGroups	23.299	1	23.299	23.778	.000
	WithinGroups	706.477	721	.980		
28	BetweenGroups	.108	1	.108	.249	.618
	WithinGroups	317.019	729	.435		
29	BetweenGroups	.464	1	.464	.678	.410
	WithinGroups	489.505	715	.685		
30	BetweenGroups	.875	1	.875	1.364	.243
	WithinGroups	463.947	723	.642		
31	BetweenGroups	1.873	1	1.873	2.885	.090
	WithinGroups	467.368	720	.649		
32	BetweenGroups	3.508	1	3.508	5.665	.018
	WithinGroups	445.266	719	.619		
33	BetweenGroups	3.203	1	3.203	4.865	.028
	WithinGroups	472.747	718	.658		
34	BetweenGroups	.281	1	.281	.334	.564
	WithinGroups	596.008	708	.842		
35	BetweenGroups	1.832	1	1.832	2.641	.105
	WithinGroups	494.454	713	.693		
36	BetweenGroups	.134	1	.134	.304	.582
	WithinGroups	320.557	726	.442		
37	BetweenGroups	.923	1	.923	.541	.462
	WithinGroups	1188.234	696	1.707		
38	BetweenGroups	.959	1	.959	2.534	.112
	WithinGroups	274.885	726	.379		
39	BetweenGroups	1.581	1	1.581	4.391	.036
	WithinGroups	259.938	722	.360		
40	BetweenGroups	2.614	1	2.614	2.758	.097
	WithinGroups	675.917	713	.948		
41	BetweenGroups	.075	1	.075	.067	.796
	WithinGroups	807.661	720	1.122		
42	BetweenGroups	.240	1	.240	.615	.433
	WithinGroups	282.217	724	.390		
43	BetweenGroups	2.021	1	2.021	4.606	.032
	WithinGroups	314.957	718	.439		
44	BetweenGroups	.021	1	.021	.022	.882
	WithinGroups	673.226	723	.931		
45	BetweenGroups	1.493	1	1.493	1.289	.257
	WithinGroups	835.206	721	1.158		
46	BetweenGroups	.274	1	.274	.541	.462
	WithinGroups	365.933	723	.506		
47	BetweenGroups	.066	1	.066	.100	.751
	WithinGroups	466.511	709	.658		
48	BetweenGroups	6.887	1	6.887	9.681	.002
	WithinGroups	515.762	725	.711		

Table A23—*Continued.* Analysis of variance of the impact of retention and attrition upon factor statements

Statement		Sum of Squares	Df	Mean Square	F	Sig.
49	BetweenGroups	.068	1	.068	.243	.622
	WithinGroups	190.947	684	.279		
50	BetweenGroups	11.617	1	11.617	11.863	.001
	WithinGroups	706.054	721	.979		
51	BetweenGroups	.869	1	.869	.891	.346
	WithinGroups	699.415	717	.975		
52	BetweenGroups	1.318	1	1.318	.896	.344
	WithinGroups	1055.681	718	1.470		
53	BetweenGroups	1.772	1	1.772	2.249	.134
	WithinGroups	567.458	720	.788		
54	BetweenGroups	.445	1	.445	1.299	.255
	WithinGroups	240.259	702	.342		
55	BetweenGroups	2.522	1	2.522	4.151	.042
	WithinGroups	436.228	718	.608		
56	BetweenGroups	.381	1	.381	.419	.517
	WithinGroups	653.109	719	.908		
57	BetweenGroups	1.556	1	1.556	1.851	.174
	WithinGroups	603.444	718	.840		
58	BetweenGroups	.618	1	.618	1.700	.193
	WithinGroups	262.443	722	.363		
59	BetweenGroups	.894	1	.894	1.289	.257
	WithinGroups	496.510	716	.693		
60	BetweenGroups	5.012	1	5.012	6.403	.012
	WithinGroups	550.301	703	.783		
61	BetweenGroups	1.836	1	1.836	2.418	.120
	WithinGroups	544.351	717	.759		
62	BetweenGroups	.999	1	.999	2.289	.131
	WithinGroups	314.611	721	.436		
63	BetweenGroups	.148	1	.148	.414	.520
	WithinGroups	259.188	726	.357		
64	BetweenGroups	.090	1	.090	.296	.587
	WithinGroups	217.950	716	.304		
65	BetweenGroups	.944	1	.944	1.273	.260
	WithinGroups	532.992	719	.741		
66	BetweenGroups	1.760	1	1.760	2.080	.150
	WithinGroups	606.571	717	.846		
67	BetweenGroups	2.879	1	2.879	4.191	.041
	WithinGroups	495.320	721	.687		
68	BetweenGroups	.776	1	.776	1.143	.285
	WithinGroups	494.320	728	.679		
69	BetweenGroups	.070	1	.070	.070	.791
	WithinGroups	678.328	678	1.000		
70	BetweenGroups	1.841	1	1.841	2.085	.149
	WithinGroups	595.141	674	.883		
71	BetweenGroups	.079	1	.079	.104	.747
	WithinGroups	509.041	673	.756		
72	BetweenGroups	.009	1	.009	.006	.937
	WithinGroups	964.888	669	1.442		

APPENDIX 5

LEARNING ENVIRONMENT FACTORS BY DEMOGRAPHICS

The tables which follow were in response to the sixth research question about how learning environment factors (independent variables) vary by demographic factors (dependent variables). In every case, the learning environment factors were presented in Appendix 1 order to assure easy comparison of data. In some tables, means, standard deviations, and numbers of responses were presented for each learning environment factor by the demographic variables. In other tables, means, standard deviations, medians, modes, highs, lows, and numbers of respondents were presented.

Tables A24-A26 examined learning environment factor responses by church size: small, medium, and large. Tables A27-A29 presented learning environment factors by class attendance (number of persons present). Tables A30 and A31 displayed data about learning environment factors by class gender. Tables A32-A34 presented factors by age. Tables A35-A37 displayed data about learning environment factors by educational level, and Tables A38-A40 displayed data about factors by marital status. Tables A41-A44 presented factors by salvation length. Tables A45-A48 examined learning environment factors by church membership tenure. Finally, Tables A49-A52 displayed data about factors by number of close friends in class.

Table A24. Learning environment factor responses by church size: small

Learning Environment Factor	Small Church $n = 74 - 84$														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Divine Involvement	12.46	2.032	-	-	1	1	-	-	2	9	10	20	11	13	16
Divine Involvement: Transformed Lives	12.39	1.850	-	-	-	-	2	2	2	2	13	27	11	12	13
Physical Arrangement	7.87	1.649	2	1	-	10	13	30	8	7	4	1	-	-	-
Flexibility	8.77	1.575	-	1	1	5	5	21	12	21	7	1	-	-	-
Room Size	11.91	1.635	-	-	-	1	-	1	5	7	9	34	14	6	5
Proxemics and Territoriality	10.29	1.589	-	-	2	-	3	2	12	28	19	11	6	-	-
Aesthetics and Tidiness	11.00	2.144	-	-	1	1	4	4	7	10	12	19	9	6	2
Lighting, Writing, Reading	10.99	1.400	-	-	-	-	1	3	5	16	24	16	8	2	-
Temperature, Ventilation, and Humidity	11.04	1.977	-	-	-	-	4	6	8	12	13	20	8	7	2
Odors, Seating, and Noise	11.73	1.892	-	-	-	3	-	1	3	9	18	21	14	8	5
Teacher: General	12.32	1.777	-	-	-	-	-	1	3	11	7	28	11	6	15
Teacher: Social Interaction	11.51	2.304	1	1	-	-	1	2	5	11	13	21	6	5	9
Teacher: Classroom Management	11.20	2.046	1	-	1	-	1	2	7	15	14	24	7	5	4
Peers: General	12.57	1.726	-	-	-	-	1	1	2	5	5	32	12	10	15
Peers: Relation.-Build. in Class	12.39	1.546	-	-	-	-	1	1	1	3	11	31	16	9	9
Peers: Relation.-Bld. outside of Class	11.75	1.963	-	-	-	-	2	2	5	15	10	25	9	5	11
Group Size	9.74	1.896	-	-	1	1	8	14	12	16	12	12	4	1	-
Psychological Factors	12.05	1.422	-	-	-	-	-	2	1	8	8	33	18	3	5
Expectation	11.24	1.869	-	-	-	1	2	2	5	22	17	17	7	8	4
Participation: General	11.35	1.901	-	-	-	-	2	5	5	16	18	16	10	9	4
Participation: Teaching Methods	10.61	1.850	-	-	-	2	3	3	15	19	12	18	8	3	1
Participation: Meeting Length	11.00	1.404	-	-	-	-	1	4	2	18	22	19	5	3	-
Participation: Conflicts	12.01	1.985	-	-	-	-	2	3	5	7	9	27	9	11	10
Demographics, Cultural, and Personality Factors	10.18	2.277	-	-	4	3	5	6	8	17	12	24	1	1	3

Note: M = mean; SD = standard deviation

Table A25. Learning environment factor responses by church size: medium

Learning Environment Factor	Medium Church n = 293 - 328														
	M	**SD**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Divine Involvement	12.22	1.627	1	-	-	1	3	1	5	26	44	130	51	33	33
Divine Involvement: Transformed Lives	12.28	1.356	-	-	-	-	1	2	2	25	34	138	58	32	23
Physical Arrangement	8.38	1.747	1	5	5	22	44	107	44	43	14	10	2	2	1
Flexibility	8.85	1.884	2	4	11	18	21	68	48	64	42	13	2	-	-
Room Size	11.97	1.686	-	-	-	2	4	2	18	29	33	135	39	30	25
Proxemics and Territoriality	10.29	1.386	-	-	-	1	4	22	52	114	69	38	8	6	2
Aesthetics and Tidiness	11.75	1.744	-	-	1	2	3	5	17	37	45	99	51	21	19
Lighting, Writing, Reading	11.14	1.537	-	-	-	2	4	13	17	58	68	87	41	6	3
Temperature, Ventilation, and Humidity	10.43	2.115	-	-	-	13	15	39	32	49	45	72	22	15	5
Odors, Seating, and Noise	11.69	1.779	-	-	-	2	5	8	20	39	47	84	67	22	16
Teacher: General	12.25	1.532	-	-	-	-	-	3	8	35	28	119	50	38	28
Teacher: Social Interaction	11.82	1.611	-	-	1	-	3	2	16	31	57	99	44	26	16
Teacher: Classroom Management	11.70	1.523	-	-	-	1	1	7	9	49	56	107	43	29	9
Peers: General	12.60	1.347	-	-	-	-	-	1	6	9	16	149	44	46	35
Peers: Relation.- Build. in Class	12.34	1.447	-	-	1	-	-	3	5	18	29	152	41	41	28
Peers: Relation.- Bld.outside ofClass	11.82	1.638	-	-	-	-	3	23	27	39	40	127	50	22	19
Group Size	10.78	1.773	-	-	-	4	10	19	36	63	55	82	26	13	3
Psychological Factors	11.77	1.641	-	-	-	2	3	5	14	34	56	99	45	32	12
Expectation	11.17	1.472	-	-	-	1	3	8	21	61	102	74	31	13	6
Participation: General	11.33	1.650	-	-	1	-	1	14	26	48	62	86	44	16	8
Participation: Teaching Methods	10.21	1.711	-	-	1	5	5	41	41	86	61	36	16	9	2
Participation: Meeting Length	11.00	1.575	-	-	-	-	5	16	25	59	69	85	21	7	7
Participation: Conflicts	11.55	2.155	-	1	1	4	13	14	24	23	26	120	43	13	31
Demographics, Cultural, and Personality Factors	10.67	2.061	1	1	4	12	9	15	31	54	47	104	23	6	6

Note: M = mean; SD = standard deviation

Table A26. Learning environment factor responses by church size: large

Learning Environment Factor	Large Church n = 293 - 325														
	M	SD	3	4	5	6	7	8	9	10	11	12	13	14	15
Divine Involvement	12.09	1.603	-	-	1	-	-	6	14	27	40	114	59	36	22
Divine Involvement: Transformed Lives	12.29	1.598	-	2	-	-	2	2	7	13	49	119	67	30	32
Physical Arrangement	8.09	1.731	4	3	3	35	61	12	29	43	10	12	-	-	1
Flexibility	9.37	1.694	2	5	4	4	17	44	52	109	41	15	3	1	-
Room Size	11.56	1.641	-	-	-	1	3	10	21	41	53	132	27	19	17
Proxemics and Territoriality	10.04	1.483	-	1	-	1	15	31	54	99	75	31	15	1	-
Aesthetics and Tidiness	11.28	1.776	-	1	1	1	6	9	24	49	48	91	39	17	7
Lighting, Writing, Reading	11.00	1.421	-	-	1	1	3	11	13	67	96	68	26	7	2
Temperature, Ventilation, and Humidity	10.06	1.985	-	-	3	8	18	50	48	54	58	53	19	7	4
Odors, Seating, and Noise	10.73	1.803	-	1	2	1	6	32	33	57	63	81	29	10	3
Teacher: General	12.20	1.490	-	-	-	-	-	3	11	25	43	129	50	34	28
Teacher: Social Interaction	11.62	1.832	1	-	-	2	5	10	16	30	50	104	35	26	15
Teacher: Classroom Management	11.74	1.621	-	-	-	1	3	7	13	43	64	99	47	35	12
Peers: General	12.42	1.507	-	-	1	-	1	1	8	13	26	144	45	31	38
Peers: Relation.-Build. in Class	12.26	1.420	-	-	-	1	1	5	4	17	31	151	59	30	24
Peers: Relation.-Bld. outside of Class	11.89	1.819	1	-	-	-	8	7	13	32	45	110	51	36	22
Group Size	10.75	1.875	-	1	1	2	5	30	45	56	62	71	28	15	7
Psychological Factors	11.85	1.468	-	-	1	-	-	3	10	45	46	129	40	29	13
Expectation	11.02	1.645	1	-	1	1	1	15	33	60	80	86	26	13	6
Participation: General	11.08	1.623	-	-	1	2	5	15	22	57	69	100	27	12	4
Participation: Teaching Methods	10.28	1.718	-	-	2	7	6	33	35	95	60	52	13	8	2
Participation: Meeting Length	11.04	1.530	-	-	-	1	5	13	29	51	67	96	28	10	1
Participation: Conflicts	11.49	1.989	1	-	-	5	5	11	27	44	42	97	45	24	21
Demographics, Cultural, and Personality Factors	10.66	1.893	1	-	1	8	9	23	40	49	59	104	13	8	6

Note: M = mean; SD = standard deviation

Table A27. Learning environment factors by class attendance (0-5 and 6-10)

Learning Environment Factor	0-5 Attendance							6-10 Attendance						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	91	12.33	1.469	12	12	15	9	117	12.41	1.703	12	12	15	3
DI: Transformed Lives	90	12.07	1.389	12	12	15	8	112	12.46	1.458	12	12	15	7
Physical Arrangement	85	7.76	1.420	8	8	12	3	111	8.24	1.759	8	8	14	3
Flexibility	83	9.23	1.843	10	10	14	3	109	9.42	1.416	10	10	13	5
Room Size	92	11.77	1.556	12	12	15	8	116	11.87	1.717	12	12	15	6
Proxemics and Territoriality	89	10.03	1.385	10	10	13	7	114	10.52	1.409	10	10	15	7
Aesthetics and Tidiness	81	10.68	2.126	11	12	15	6	110	11.45	1.733	12	12	15	7
Lighting, Writing, Reading	85	11.02	1.165	11	11	13	8	109	11.04	1.420	11	11	14	7
Temperature, Ventilation, and Humidity	88	10.25	2.052	10	10	15	6	112	10.35	2.281	11	12	15	6
Odors, Seating, and Noise	85	10.91	1.968	11	12	15	6	112	11.88	1.735	12	12	15	7
Teacher: General	91	12.13	1.439	12	12	15	8	114	12.32	1.530	12	12	15	8
Teacher: Social Interaction	84	11.62	1.552	12	12	15	8	109	11.92	1.706	12	12	15	6
Teacher: Classroom Mgmt	89	11.40	1.483	11	12	15	8	113	11.34	1.443	11	12	15	8
Peers: General	86	12.26	1.248	12	12	15	8	112	12.71	1.386	12	12	15	9
Peers: Relation.-Building in Class	89	12.18	1.443	12	12	15	7	113	12.37	1.338	12	12	15	9
Peers: Relation.-Bldg out. of Class	90	11.63	1.618	12	12	15	7	115	12.04	1.714	12	12	15	7
Group Size	86	10.08	1.880	10	9	14	6	110	10.56	1.947	11	12	14	4
Psychological Factors	85	11.73	1.467	12	12	15	8	112	11.86	1.643	12	12	15	7
Expectation	91	11.10	1.334	11	11	14	8	117	11.43	1.373	12	12	15	7
Participation: General	85	10.80	1.710	11	10	15	7	114	11.63	1.576	10	12	15	8
Participation: Teaching Methods	87	10.51	1.620	10	10	14	6	111	10.59	1.836	10	10	15	6
Participation: Meeting Length	82	10.73	1.532	11	12	13	6	107	11.03	1.463	11	12	15	8
Participation: Conflicts	90	11.74	2.186	12	12	15	3	116	11.90	1.958	12	12	15	6
Demographics, Cultural, and Personality Factors	88	10.40	1.909	11	12	14	5	112	10.57	2.085	11	12	15	4

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A28. Learning environment factors by class attendance (11-15 and 16-20)

Learning Environment Factor	11-15 Attendance							16-20 Attendance						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	156	12.15	1.720	12	12	15	5	73	11.86	1.378	12	12	15	8
DI: Transformed Lives	158	12.33	1.717	12	12	15	4	71	12.18	1.376	12	12	15	9
Physical Arrangement	154	8.32	1.878	8	8	15	3	63	8.32	1.635	8	8	12	6
Flexibility	146	9.58	1.379	10	10	12	4	65	9.83	1.193	10	10	13	7
Room Size	155	11.55	1.706	12	12	15	6	73	11.68	1.606	12	12	15	6
Proxemics and Territoriality	158	10.23	1.391	10	10	14	7	73	9.92	1.460	10	10	13	6
Aesthetics and Tidiness	147	11.34	1.750	12	12	15	5	65	11.42	1.870	12	12	15	4
Lighting, Writing, Reading	148	10.99	1.606	11	12	15	6	64	10.64	1.407	11	11	14	5
Temperature, Ventilation, and Humidity	157	9.76	2.202	10	10	15	5	72	10.32	1.735	10	9	15	6
Odors, Seating, and Noise	158	10.89	1.925	11	10	15	5	71	11.34	1.424	12	12	14	8
Teacher: General	154	12.29	1.648	12	12	15	8	74	11.93	1.286	12	12	15	9
Teacher: Social Interaction	148	11.88	1.859	12	12	15	3	64	11.17	1.924	12	12	15	6
Teacher: Classroom Mgmt	157	11.78	1.600	12	12	15	6	73	11.41	1.442	12	12	15	7
Peers: General	155	12.50	1.501	12	12	15	5	62	12.58	1.325	12	12	15	9
Peers: Relation.-Building in Class	157	12.18	1.667	12	12	15	5	73	12.36	1.240	12	12	15	9
Peers: Relation.-Bldg out. of Class	160	11.98	1.734	12	12	15	3	74	11.78	1.649	12	12	15	7
Group Size	159	10.64	1.737	11	12	15	6	72	11.32	1.668	11	12	15	7
Psychological Factors	151	11.97	1.483	12	12	15	8	71	11.76	1.281	12	12	15	9
Expectation	159	11.09	1.773	11	12	15	3	73	11.00	1.333	11	11	14	8
Participation: General	157	11.20	1.508	11	12	15	7	70	10.97	1.694	11	12	15	5
Participation: Teaching Methods	158	10.26	1.548	10	10	15	6	71	10.07	1.505	10	10	14	7
Participation: Meeting Length	149	10.67	1.604	11	12	15	7	66	11.27	1.284	12	12	14	9
Participation: Conflicts	159	11.84	2.011	12	12	15	6	71	11.17	1.971	12	12	15	6
Demographics, Cultural, and Personality Factors	158	10.46	1.970	11	12	15	5	72	10.63	1.780	11	12	15	5

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A29. Learning environment factors by class attendance (21-30 and 41+)

Learning Environment Factor	21-30 Attendance							41+ Attendance						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	64	12.19	1.699	12	12	15	5	38	12.37	1.895	12	11	15	9
DI:Transformed Lives	58	12.41	1.415	12	12	15	7	37	13.16	1.463	13	12	15	10
Physical Arrangement	53	8.64	2.058	8	8	15	5	37	7.68	1.132	8	8	11	6
Flexibility	57	7.68	2.343	8	6	12	3	35	8.09	1.422	8	8	13	5
Room Size	58	11.35	1.575	12	12	15	7	38	12.39	1.748	12	12	15	9
Proxemics and Territoriality	58	9.72	1.725	10	10	13	4	38	10.37	1.195	10	10	13	8
Aesthetics and Tidiness	54	11.72	1.433	12	12	15	6	32	12.50	1.218	12	12	15	10
Lighting, Writing, Reading	53	11.58	1.336	12	12	15	9	32	11.66	1.450	12	12	15	8
Temperature, Ventilation, and Humidity	56	10.41	2.122	11	12	15	6	37	10.14	1.653	10	11	14	7
Odors, Seating, and Noise	58	11.14	2.090	11.5	12	15	4	37	11.16	1.482	11	11	14	8
Teacher:General	54	12.39	1.338	12	12	15	10	38	12.32	1.694	12	12	15	8
Teacher: Social Interaction	51	11.88	1.904	12	12	15	7	34	12.24	1.130	12	12	15	10
Teacher: Class. Mgmt	58	12.48	1.547	12	12	15	7	36	12.50	1.444	12	12	15	9
Peers: General	58	12.66	1.421	12	12	15	10	37	12.86	1.636	12	12	15	10
Peers: Relation.-Bldg. in Class	61	12.31	1.336	12	12	15	8	36	12.57	1.405	12	12	15	8
Peers: Relation.-Bldg.out.ofClass	56	11.77	1.849	12	12	15	7	38	12.79	2.069	13	14	15	8
Group Size	60	11.08	1.925	11	12	15	6	39	10.90	1.619	11	10	15	7
Psychological Factors	53	12.02	1.421	12	12	15	8	37	12.24	1.402	12	12	15	9
Expectation	57	11.32	1.681	11	11	15	6	37	11.19	1.868	11	11	15	8
Participation: General	55	11.38	1.545	12	12	15	8	36	11.58	1.663	11	11	15	8
Participation: Teach. Methods	50	9.92	2.248	10	8	14	5	36	10.86	1.710	10	10	15	6
Participation: Meeting Length	54	11.44	1.423	12	12	15	7	35	11.77	1.437	12	11	15	9
Participation: Conflicts	58	11.03	2.294	12	12	15	4	36	11.75	1.713	12	12	15	8
Demographics, Cultural, and Personality	60	11.00	2.155	12	12	15	3	37	11.24	1.754	11	12	15	7

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; no responses recorded for classes with attendance 31-40

Table A30. Learning environment factors by class gender (female and male)

Learning Environment Factor	Male							Female						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	34	11.79	1.572	12	12	15	8	116	12.22	1.384	12	12	15	9
DI: Transformed Lives	34	11.38	2.146	11.5	11	15	4	112	12.46	1.322	12	12	15	7
Physical Arrangement	32	8.31	1.424	8	8	12	6	106	8.13	1.821	8	8	14	3
Flexibility	31	9.03	1.303	9	10	11	6	106	9.49	1.436	10	10	13	5
Room Size	33	11.45	1.438	12	12	15	9	116	11.97	1.749	12	12	15	6
Proxemics and Territoriality	34	9.82	.958	10	10	12	8	116	10.31	1.360	10	10	15	7
Aesthetics and Tidiness	31	10.81	1.778	11	12	14	7	103	11.43	1.735	12	12	15	4
Lighting, Writing, Reading	31	10.77	1.203	11	10	13	8	102	10.91	1.523	11	11	14	5
Temp., Vent., and Humidity	34	10.68	2.026	11	11	15	6	109	10.06	2.164	10	11	15	6
Odors, Seating, and Noise	35	10.97	1.581	11	12	14	8	112	11.88	1.531	12	12	15	7
Teacher: General	35	11.63	1.477	12	12	15	9	113	12.19	1.368	12	12	15	8
Teacher: Social Interaction	32	10.91	1.510	11	11	14	8	104	11.63	1.661	12	12	15	7
Teacher: Class. Mgmt	34	10.82	1.585	11	10	15	8	113	11.46	1.203	12	12	14	8
Peers: General	32	11.84	1.526	12	12	15	9	107	12.69	1.144	12	12	15	10
Peers: Relation.-Bldg in Class	35	11.66	1.781	12	12	15	7	113	12.45	1.350	12	12	15	9
Peers: Relation.-Bldg out.of Class	36	10.97	1.890	11	12	15	7	114	11.88	1.730	12	12	15	7
Group Size	34	10.32	1.788	10	10	14	7	108	11.13	1.924	11	12	15	6
Psychological Factors	33	11.39	1.391	12	12	15	9	110	11.95	1.420	12	12	15	7
Expectation	34	10.53	1.522	11	11	14	8	117	11.25	1.364	11	12	15	8
Participation:Gen.	35	10.94	1.862	11	12	14	5	110	11.40	1.587	12	12	15	8
Participation: Teach. Methods	33	10.12	1.166	10	11	12	8	112	10.22	1.863	10	10	15	6
Participation: Meeting Length	30	11.40	1.221	12	12	14	9	104	11.25	1.531	12	12	15	7
Participation: Conflicts	34	11.74	2.050	12	12	15	6	114	11.84	1.921	12	12	15	6
Demo., Cultural, Personality	35	10.11	2.055	10	11	13	5	107	10.97	1.861	11	12	15	4

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A31. Learning environment factor responses by class gender (mixed)

Learning Environment Factor	Mixed						
	n	M	SD	Me	Mo	H	L
Divine Involvement	369	12.28	1.729	12	12	15	3
DI: Transformed Lives	359	12.47	1.451	12	12	15	7
Physical Arrangement	343	8.20	1.757	8	8	15	3
Flexibility	335	9.08	1.851	9	10	14	3
Room Size	360	11.67	1.689	12	12	15	6
Proxemics and Territoriality	358	10.16	1.502	10	10	15	4
Aesthetics and Tidiness	336	11.42	1.856	12	12	15	5
Lighting, Writing, Reading	339	11.17	1.446	11	11	15	6
Temperature, Vent., Humidity	357	10.18	2.064	10	12	15	5
Odors, Seating, and Noise	352	11.05	1.934	11	12	15	4
Teacher: General	355	12.32	1.567	12	12	15	8
Teacher: Social Interaction	335	11.95	1.722	12	12	15	6
Teacher: Class. Management	357	11.90	1.591	12	12	15	6
Peers: General	352	12.61	1.430	12	12	15	7
Peers: Relationship-Bldg in Class	361	12.32	1.417	12	12	15	5
Peers: Relationship-Building outside of Class	361	12.04	1.708	12	12	15	7
Group Size	362	10.65	1.817	11	12	15	4
Psychological Factors	344	11.95	1.503	12	12	15	7
Expectation	361	11.27	1.587	11	11	15	3
Participation: General	350	11.24	1.591	11	12	15	7
Participation: Teaching Methods	347	10.39	1.711	10	10	15	5
Participation: Meeting Length	340	10.92	1.536	11	11	15	6
Participation: Conflicts	360	11.63	2.098	12	12	15	3
Demographic, Cultural, and Personality Factors	362	10.52	2.007	11	12	15	3

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A32. Learning environment factor responses by age (18-29 and 30-39)

Learning Environment Factor	18-29							30-39						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	49	11.57	2.121	12	12	15	5	90	12.18	1.555	12	12	15	8
Divine Involvement: Transformed Lives	49	11.45	1.721	12	12	15	7	91	12.18	1.427	12	12	15	8
Physical Arrangement	48	7.42	1.866	7.5	7	13	3	90	8.13	1.609	8	8	12	3
Flexibility	48	9.02	2.217	10	10	12	3	88	9.58	1.792	10	10	12	3
Room Size	49	11.57	2.111	12	12	15	6	92	11.89	1.464	12	12	15	7
Proxemics and Territoriality	49	10.20	1.803	10	10	15	7	93	10.28	1.417	10	10	14	7
Aesthetics and Tidiness	48	10.83	1.917	11	9	15	7	91	11.41	1.978	11	12	15	5
Lighting, Writing, and Reading	45	11.27	1.095	11	11	13	8	89	11.39	1.345	11	11	15	6
Temperature, Ventilation, and Humidity	49	10.18	2.147	10	12	15	5	91	10.52	1.996	11	12	15	6
Odors, Seating, and Noise	47	11.04	1.744	11	10	15	6	93	11.31	1.841	12	12	15	10
Teacher: General	49	12.24	1.640	12	12	15	8	92	12.42	1.447	12	12	15	7
Teacher: Social Interaction	48	11.48	1.913	12	12	15	4	92	11.67	1.792	12	12	15	7
Teacher: Classroom Management	49	10.96	2.282	11	11	15	3	90	11.34	1.485	11	11	15	7
Peers: General	47	11.89	1.591	12	12	15	7	91	12.37	1.589	12	12	15	7
Peers: Relationship-Building in Class	49	11.71	1.607	12	12	15	5	92	12.28	1.485	12	12	15	8
Peers: Relationship-Building outside of Class	48	11.31	1.870	11.5	11	15	7	93	11.59	1.777	12	12	15	7
Group Size	49	10.02	1.750	10	9	13	6	93	10.25	1.869	10	10	14	5
Psychological factors	45	11.69	1.593	12	12	15	8	90	11.73	1.475	12	12	15	8
Expectation	49	10.98	1.831	11	11	15	6	93	11.08	1.534	11	12	15	8
Participation: General	49	10.06	1.853	10	11	14	6	94	10.86	1.578	11	10	15	7
Participation: Teaching methods	49	9.86	1.791	10	10	13	6	88	10.16	1.715	10	9	14	6
Participation: Meeting length	48	10.35	1.329	11	11	13	7	90	10.67	1.676	11	12	15	6
Participation: Conflicts	49	11.41	2.207	12	12	15	6	94	11.48	2.009	12	12	15	6
Demographics, Cultural, and Personality Factors	49	9.29	1.826	10	10	13	5	90	9.90	1.867	10	12	13	6

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A33. Learning environment factor responses by age (40-49 and 50-59)

Learning Environment Factors	40-49							50-59						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	98	12.35	2.036	12	12	15	3	141	12.42	1.527	12	12	15	9
DI: Transformed Lives	99	12.41	1.629	12	12	15	8	141	12.41	1.695	12	12	15	4
Physical Arrangement	96	8.04	1.930	8	8	15	3	141	8.13	1.612	8	8	14	4
Flexibility	93	9.24	1.625	9	9	14	5	139	9.15	1.719	10	10	13	3
Room Size	96	11.48	1.698	12	12	15	7	144	11.97	1.512	12	12	15	6
Proxemics and Territoriality	99	10.07	1.493	10	10	15	7	142	10.37	1.253	10	10	13	7
Aesthetics and Tidiness	92	10.95	2.045	11.5	12	15	5	139	11.71	1.721	12	12	15	6
Lighting, Writing, Reading	94	10.82	1.593	11	10	14	6	135	11.26	1.486	11	11	15	6
Temperature, Vent, Humidity	99	10.03	1.876	10	9	15	6	144	10.61	2.175	11	12	15	5
Odors, Seating, and Noise	95	10.97	1.888	11	12	14	6	143	11.29	2.075	12	12	15	5
Teacher: General	99	12.35	1.853	12	12	15	8	142	12.55	1.466	12	12	15	8
Teacher: Social Interaction	92	12.00	1.555	12	12	15	7	137	11.95	1.848	12	12	15	3
Teacher: Class. Management	99	11.66	1.762	12	12	15	6	145	11.92	1.512	12	12	15	8
Peers: General	95	12.66	1.513	12	12	15	9	142	12.80	1.500	12	12	15	5
Peers: Relation.-Building in Class	98	12.47	1.445	12	12	15	8	142	12.50	1.529	12	12	15	6
Peers: Relation.-Bldg out of Class	98	12.13	1.697	12	12	15	7	143	11.99	1.928	12	12	15	3
Group Size	99	10.48	1.961	11	12	15	5	142	10.73	1.875	11	11	15	6
Psychological Factors	95	11.94	1.773	12	12	15	5	142	12.08	1.420	12	12	15	8
Expectation	99	10.95	1.820	11	11	15	3	144	11.28	1.610	11	11	15	5
Participation: General	96	11.23	1.792	11	12	15	7	142	11.58	1.536	12	12	15	7
Participation: Teach. Methods	95	10.49	1.656	10	10	15	8	143	10.61	1.906	11	10	15	7
Participation: Meeting Length	93	10.55	1.632	11	10	14	7	139	11.06	1.559	11	12	15	7
Participation: Conflicts	98	11.87	2.019	12	12	15	6	146	11.69	2.174	12	12	15	4
Demographics, Cultural, and Personality	99	10.45	2.305	11	12	15	3	143	10.68	2.171	11	12	15	4

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A34. Learning environment factor responses by age (60-69 and 70+)

Learning Environment Factors	60-69 *n* =							70+ *n* =						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	145	12.33	1.603	12	12	15	8	191	12.05	1.464	12	12	15	5
DI: Transformed Lives	144	12.47	1.399	12	12	15	8	182	12.31	1.388	12	12	15	7
Physical Arrangement	130	8.60	1.673	8	8	15	4	161	8.22	1.672	8	8	12	3
Flexibility	135	8.71	1.774	9	10	13	3	156	8.93	1.757	9	8	13	4
Room Size	147	11.60	1.831	12	12	15	6	181	11.97	1.576	12	12	15	6
Proxemics and Territoriality	145	10.06	1.606	10	10	14	5	179	10.17	1.369	10	10	15	4
Aesthetics and Tidiness	134	11.61	1.875	12	12	15	4	159	11.65	1.538	12	12	15	6
Lighting, Writing, Reading	131	10.98	1.581	11	12	15	5	163	10.87	1.406	11	10	14	7
Temperature, Vent, Humidity	142	10.31	2.128	10	10	15	6	171	10.29	2.007	10	12	14	5
Odors, Seating, and Noise	143	11.43	1.813	12	12	15	6	175	11.37	1.756	12	12	15	4
Teacher: General	141	12.16	1.508	12	12	15	9	177	11.92	1.414	12	12	15	8
Teacher: Social Interaction	135	11.77	1.732	12	12	15	6	156	11.35	1.862	12	12	15	3
Teacher: Class. Management	139	11.72	1.513	12	12	15	8	180	11.76	1.574	12	12	15	5
Peers: General	138	12.52	1.446	12	12	15	8	172	12.42	1.275	12	12	15	9
Peers: Relation.-Building in Class	145	12.32	1.408	12	12	15	7	183	12.22	1.326	12	12	15	8
Peers: Relation.-Bldg out of Class	148	11.99	1.752	12	12	15	7	183	11.70	1.600	112	12	15	7
Group Size	139	10.61	1.820	11	10	15	4	179	11.07	1.804	11	12	15	6
Psychological Factors	139	11.69	1.587	12	12	15	6	173	11.85	1.406	12	12	15	6
Expectation	146	11.18	1.512	11	12	15	8	183	11.07	1.479	11	11	15	6
Participation: General	136	11.38	1.708	12	12	15	5	176	11.34	1.484	12	12	15	7
Participation: Teach. Methods	140	10.39	1.603	10	10	14	5	169	10.03	1.678	10	10	14	5
Participation: Meeting Length	133	11.45	1.384	12	12	15	7	162	11.29	1.391	11	12	14	7
Participation: Conflicts	141	11.54	2.062	12	12	15	6	178	11.50	1.987	12	12	15	3
Demographics, Cultural, and Personality	145	10.97	1.773	11	12	15	5	177	11.07	1.706	12	12	15	6

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A35. Learning environment factor responses by educational level (did not complete high school and graduated high school/GED)

Learning Environment Factor	DNCHS							GHS						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involve.	87	12.29	1.745	12	12	15	5	276	12.27	1.571	12	12	15	6
DI: Transformed Lives	84	12.13	1.782	12	12	15	7	273	12.35	1.453	12	12	15	4
Physical Arrangement	71	8.65	1.631	8	8	15	6	254	8.22	1.751	8	8	15	3
Flexibility	76	8.64	1.757	12	12	15	6	252	8.84	1.889	9	10	13	3
Room Size	83	11.73	1.868	10	11	13	4	276	11.78	1.693	12	12	15	6
Proxemics and Territoriality	83	9.96	1.671	12	12	15	4	276	10.12	1.443	10	10	14	6
Aesthetics and Tidiness	74	11.34	1.815	12	12	15	4	256	11.64	1.759	12	12	15	5
Lighting, Writing, and Reading	77	10.99	1.736	11	12	15	5	252	11.12	1.516	11	12	15	6
Temperature, Ventilation, and Humidity	79	10.15	2.070	10	10	15	6	272	10.41	2.087	11	12	15	5
Odors, Seating, and Noise	82	10.96	2.208	11	13	15	4	271	11.43	1.806	12	12	15	5
Teacher: General	79	11.85	1.665	12	12	15	8	275	12.14	1.567	12	12	15	8
Teacher: Social Interaction	73	11.33	1.650	12	12	15	7	251	11.71	1.754	12	12	15	4
Teacher: Class. Management	81	11.88	1.756	12	12	15	6	274	11.63	1.660	12	12	15	3
Peers: General	74	12.31	1.655	12	12	15	7	268	12.52	1.383	12	12	15	8
Peers: Relation.-building in class	81	12.10	1.530	12	12	15	8	277	12.35	1.389	12	12	15	7
Peers: Relation.-Bldg out of Class	84	11.64	1.662	12	12	15	7	280	11.87	1.788	12	12	15	7
Group Size	83	10.94	2.044	11	10	15	6	272	10.65	1.917	11	12	15	4
Psychological Factors	74	11.53	1.624	12	12	15	6	266	11.87	1.488	12	12	15	7
Expectation	83	11.05	1.745	11	12	15	6	280	11.01	1.603	11	11	15	3
Participation: General	74	11.32	1.597	12	12	15	7	271	11.35	1.598	12	12	15	5
Participation: Teach. Methods	77	10.05	1.849	10	10	14	5	266	10.35	1.661	10	10	15	6
Participation: Meeting Length	75	11.52	1.483	12	12	15	7	256	11.15	1.563	11	12	15	6
Participation: Conflicts	80	11.01	2.400	12	12	15	3	275	11.48	2.099	12	12	15	4
Demographic, Cultural, and Personality	82	10.84	2.099	11.5	12	15	5	276	10.76	1.941	11	12	15	4

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DNCHS = did not complete high school; GHS = graduated high school/GED

Table A36. Learning environment factor responses by educational level (some college and graduated college)

Learning Environment Factor	SC							GC						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	184	12.29	1.579	12	12	15	7	86	11.63	1.865	12	12	15	3
DI: Transformed Lives	185	12.25	1.476	12	12	15	4	84	12.08	1.450	12	12	15	8
Physical Arrangement	180	8.14	1.707	8	8	13	3	85	7.96	1.476	8	8	12	4
Flexibility	176	9.25	1.742	10	10	13	3	80	9.45	1.483	10	10	12	3
Room Size	185	11.94	1.600	12	12	15	8	86	11.63	1.534	12	12	15	7
Proxemics and Territoriality	183	10.34	1.373	10	10	15	5	85	10.31	1.423	10	10	14	7
Aesthetics and Tidiness	177	11.51	1.975	12	12	15	5	78	10.92	1.892	11	12	15	5
Lighting, Writing, and Reading	175	11.22	1.299	11	11	15	7	77	11.03	1.246	11	11	14	7
Temperature, Ventilation, and Humidity	181	10.48	1.962	11	12	15	5	86	10.00	2.231	10	12	15	5
Odors, Seating, and Noise	182	11.27	1.893	11	12	15	5	83	11.01	1.743	11	12	14	6
Teacher: General	181	12.46	1.352	12	12	15	9	84	12.18	1.522	12	12	15	9
Teacher: Social Interaction	179	11.74	1.812	12	12	15	3	80	11.61	1.825	12	12	15	7
Teacher: Class. Management	183	11.72	1.499	12	12	15	7	86	11.28	1.753	11.5	12	15	7
Peers: General	179	12.47	1.447	12	12	15	5	82	12.49	1.542	12	12	15	7
Peers: Relation.-Building in Class	186	12.47	1.556	12	12	15	5	86	12.08	1.339	12	12	15	7
Peers: Relation.-Bldg. out. of Class	185	12.28	1.777	12	12	15	3	85	11.39	1.677	12	12	15	7
Group Size	184	11.98	1.762	11	11	15	6	84	10.62	1.612	11	12	14	5
Psychological Factors	181	10.53	1.508	12	12	15	6	83	11.83	1.395	12	12	15	7
Expectation	184	11.93	1.593	11	11	15	5	86	11.23	1.412	11	11	14	7
Participation: General	183	11.16	1.655	11	12	15	5	85	10.87	1.660	11	11	15	6
Participation: Teaching Methods	178	10.25	1.799	10	10	15	5	83	10.28	1.640	10	10	14	6
Participation: Meeting Length	177	11.12	1.493	11	12	15	7	80	10.31	1.489	10	10	14	7
Participation: Conflicts	184	11.74	1.869	12	12	15	7	85	11.71	2.029	12	12	15	6
Demographic, Cultural, and Personality Factors	183	10.52	1.941	11	12	15	5	86	10.08	1.984	10	12	13	5

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; SC = some college; GC = graduated college

Table A37. Learning environment factor responses by educational level (some graduate work and completed graduate degree)

Learning Environment Factor	SGW							CGD						
	n	M	SD	Me	Mo	H	L	n	M	SD	Me	Mo	H	L
Divine Involvement	27	12.04	2.066	12	12	15	7	52	12.50	1.540	12	12	15	9
DI:Transformed Lives	25	12.28	2.011	12	11	15	8	55	12.93	1.464	13	12	15	9
Physical Arrangement	25	7.88	1.965	8	8	12	3	53	8.00	1.932	8	8	12	3
Flexibility	23	8.83	1.969	9	9	12	4	53	9.74	1.546	10	10	14	6
Room Size	24	11.63	1.527	12	12	15	7	55	11.84	1.675	12	12	15	9
Proxemics and Territoriality	26	9.73	1.218	10	10	12	7	54	10.39	1.559	10	10	15	7
Aesthetics and Tidiness	24	10.67	1.834	11	10	14	6	54	11.69	1.371	12	12	15	9
Lighting, Writing, and Reading	23	10.74	1.685	10	10	15	7	53	10.70	1.624	11	11	13	6
Temperature, Vent, Humidity	26	10.35	2.244	11.5	12	15	8	54	10.24	1.922	10	10	14	6
Odors, Seating, and Noise	26	11.19	1.898	12	12	15	9	54	11.39	1.676	11	11	15	8
Teacher: Gen.	26	12.73	1.756	12	12	15	9	54	12.65	1.568	12	12	15	9
Teacher: Social Interaction	24	11.58	1.909	12	12	15	8	54	12.31	1.646	12	12	15	9
Teacher: Class. Management	26	11.58	1.677	12	12	15	8	53	12.08	1.328	12	12	15	9
Peers: General	27	12.33	1.544	12	12	15	9	54	13.06	1.497	13	12	15	8
Peers: Relation.-Building in Class	25	12.48	1.475	12	12	15	10	54	12.76	1.386	13	12	15	10
Peers: Relation.-Bldg out of Class	26	11.62	1.835	12	12	15	7	55	12.38	1.727	12	12	15	8
Group Size	25	10.12	1.787	10	10	14	7	55	10.87	2.055	11	12	15	6
Psychological Factors	24	11.58	2.205	12	12	15	5	55	12.07	1.451	12	12	15	9
Expectation	26	11.15	1.933	11	11	15	8	55	11.71	1.301	12	12	14	9
Participation: General	27	10.67	2.219	11	12	15	7	54	11.54	1.819	12	11	15	8
Participation: Teach. Methods	27	9.59	1.907	10	9	13	6	54	10.91	1.674	11	10	14	6
Participation: Meeting Length	23	10.61	1.406	11	11	12	7	54	10.57	1.326	11	11	14	8
Participation: Conflicts	26	12.04	2.163	12	12	15	9	55	12.02	1.920	12	12	15	7
Demographic, Cultural, and Personality	25	10.44	2.844	11	11	15	3	52	10.77	1.986	11	11	15	6

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; SGW = some graduate work; CGD = completed graduate degree

Table A38. Learning environment factor responses by marital status (divorced and married)

Learning Environment Factor	Divorced							Married						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	55	12.71	1.629	12	12	15	9	516	12.19	1.629	12	12	15	5
Divine Involvement: Transformed Lives	53	12.75	1.555	13	12	15	8	520	12.29	1.473	12	12	15	4
Physical Arrangement	51	8.43	1.664	8	8	12	4	492	8.21	1.719	8	8	15	3
Flexibility	53	9.28	1.486	9	10	13	6	487	9.14	1.797	10	10	14	3
Room Size	56	12.02	1.578	12	12	15	7	517	11.72	1.639	12	12	15	6
Proxemics and Territoriality	54	10.59	1.548	10	10	14	7	520	10.15	1.436	10	10	15	4
Aesthetics and Tidiness	54	11.69	1.872	12	12	15	5	491	11.43	1.808	12	12	15	5
Lighting, Writing, and Reading	51	11.31	1.378	11	12	15	8	487	11.10	1.456	11	11	15	6
Temperature, Ventilation, and Humidity	53	10.66	2.157	11	12	15	6	514	10.32	2.034	10	12	15	5
Odors, Seating, and Noise	52	11.63	1.804	12	12	15	7	517	11.15	1.915	11	12	15	4
Teacher: General	56	12.38	1.544	12	12	15	9	513	12.31	1.549	12	12	15	8
Teacher: Social Interaction	52	11.65	1.959	12	12	15	5	486	11.82	1.744	12	12	15	3
Teacher: Classroom Management	54	11.56	1.501	12	12	15	8	516	11.75	1.584	12	12	15	6
Peers: General	52	12.81	1.401	12	12	15	10	505	12.51	1.409	12	12	15	5
Peers: Relationship-Building in Class	53	12.75	1.254	12	12	15	10	518	12.30	1.457	12	12	15	5
Peers: Relationship-Building outside of Class	54	12.24	1.854	12	12	15	8	522	11.89	1.720	12	12	15	3
Group Size	55	10.71	1.663	11	12	14	7	517	10.61	1.838	11	12	15	5
Psychological Factors	54	12.02	1.642	12	12	15	8	506	11.89	1.479	12	12	15	5
Expectation	56	11.24	1.678	11	10	15	8	520	11.15	1.571	11	11	15	3
Participation: General	53	11.32	1.554	11	12	15	8	509	11.21	1.662	11	12	15	5
Participation: Teaching Methods	53	10.51	1.846	10	10	15	7	500	10.33	1.686	10	10	15	5
Participation: Meeting Length	54	11.11	1.462	11	12	15	8	491	10.99	1.547	11	12	15	6
Participation: Conflicts	55	11.44	1.941	12	12	15	7	520	11.67	2.024	12	12	15	5
Demographic, Cultural, and Personality	54	10.74	2.216	11	12	15	5	516	10.66	1.973	11	12	15	3

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DI = divine involvement

Table A39. Learning environment factor responses by marital status (separated and single)

Learning Environment Factor	Separated							Single						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	5	11.80	.837	12	11	13	11	42	11.57	2.539	12	12	15	3
DI: Transformed Lives	4	11.50	2.517	11	11	15	9	44	11.75	2.092	12	11	15	7
Physical Arrangement	5	7.60	.894	7	7	9	7	42	7.74	2.307	8	8	13	3
Flexibility	4	9.25	1.708	9.5	7	11	7	41	8.32	2.219	9	9	12	3
Room Size	5	11.20	2.588	12	12	14	7	44	12.14	1.924	12	12	15	6
Proxemics and Territoriality	5	9.60	2.966	10	5	13	5	44	10.43	1.690	11	11	13	7
Aesthetics and Tidiness	5	10.00	2.739	10	6	13	6	38	11.39	2.060	11	11	15	8
Lighting, Writing, Reading	4	11.50	1.732	12	12	13	9	38	10.97	1.404	11	11	13	7
Temperature, Vent., Humidity	4	9.50	1.00	10	10	10	8	43	11.02	1.858	11	11	15	7
Odors, Seating, and Noise	5	10.80	1.643	10	10	13	9	41	11.59	1.975	12	12	15	6
Teacher: General	4	13.50	1.291	13.5	12	15	12	43	12.00	1.864	12	12	15	9
Teacher: Social Interaction	4	11.25	1.708	11.5	9	13	9	41	11.34	1.983	12	12	15	4
Teacher: Class. Management	4	12.00	1.633	12	12	14	10	45	10.89	2.318	11	12	15	3
Peers: General	4	11.75	2.363	11	10	15	10	43	12.19	2.073	12	12	15	7
Peers: Relation.-Building in Class	5	11.00	1.871	11	11	13	8	45	12.31	1.635	12	12	15	8
Peers: Relation.-Bldg out of Class	5	10.40	1.673	10	10	12	8	44	11.27	2.171	11.5	9	15	7
Group Size	5	11.80	2.387	13	13	14	8	43	10.23	2.103	11	11	13	4
Psychological Factors	5	10.20	.837	10	10	11	9	41	11.41	1.871	12	12	15	7
Expectation	5	11.00	.707	11	11	12	10	45	11.18	2.135	11	11	15	6
Participation: General	5	10.00	.707	10	10	11	9	43	10.77	2.057	11	10	15	6
Participation: Teach. Methods	5	9.00	1.581	9	7	11	7	44	10.02	1.935	10	10	14	6
Participation: Meeting Length	5	10.00	2.550	9	8	14	8	41	10.76	1.609	11	10	14	7
Participation: Conflicts	4	8.25	3.862	8.5	4	12	4	44	11.48	2.257	12	12	15	6
Demographic, Cultural, and Personality	5	8.40	2.074	9	10	10	5	45	9.09	2.141	9	9	14	5

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DI = divine involvement

Table A40. Learning environment factor responses by marital status (widowed)

Learning Environment Factor	Widowed						
	n	M	SD	Me	Mo	H	L
Divine Involvement	99	12.26	1.290	12	12	15	9
Divine Involvement: Transformed Lives	89	12.44	1.340	12	12	15	7
Physical Arrangement	79	8.14	1.412	8	8	12	6
Flexibility	77	8.87	1.576	9	10	12	5
Room Size	91	11.89	1.716	12	12	15	6
Proxemics and Territoriality	87	10.11	1.223	10	10	13	7
Aesthetics and Tidiness	78	11.63	1.722	12	12	15	4
Lighting, Writing, and Reading	78	10.76	1.653	11	10	14	5
Temperature, Ventilation, and Humidity	85	9.91	2.218	10	10	15	5
Odors, Seating, and Noise	86	11.66	1.411	12	12	15	8
Teacher: General	88	11.83	1.271	12	12	15	8
Teacher: Social Interaction	79	11.14	1.866	12	12	15	3
Teacher: Classroom Management	86	11.56	1.584	12	12	15	5
Peers: General	83	12.53	1.434	12	12	15	8
Peers: Relationship-Building in Class	92	12.18	1.317	12	12	15	9
Peers: Relationship-Building outside of Class	91	11.69	1.678	12	12	15	7
Group Size	84	11.01	1.973	11.5	12	15	6
Psychological Factors	80	11.84	1.530	12	12	15	7
Expectation	92	10.91	1.465	11	11	15	7
Participation: General	86	11.50	1.547	12	12	15	7
Participation: Teaching Methods	86	10.23	1.858	10	10	15	6
Participation: Meeting Length	77	11.32	1.362	12	12	14	8
Participation: Conflicts	85	11.44	2.096	12	12	15	3
Demographic, Cultural, and Personality Factors	86	11.16	1.563	12	12	15	7

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low

Table A41. Learning environment factor responses by salvation length (not a Christian and under 1 year)

Learning Environment Factor	Not a Christian							Under 1 Year						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	1	12.00	-	12	12	12	12	4	13.00	1.826	13	11	15	11
DI: Transformed Lives	2	11.50	.707	11.5	11	12	11	3	10.67	1.528	11	9	12	9
Physical Arrangement	1	9.00	-	9	9	9	9	4	8.00	1.155	8	7	9	7
Flexibility	1	9.00	-	9	9	9	9	4	9.25	1.708	9.5	7	11	7
Room Size	2	12.00	1.414	12	11	13	11	4	11.50	.577	11.5	11	12	11
Proxemics and Territoriality	2	11.50	.707	11.5	11	12	11	4	10.25	.957	10.5	11	11	9
Aesthetics and Tidiness	2	10.50	.707	10.5	10	11	10	4	11.25	2.217	11	9	14	9
Lighting, Writing, Reading	2	11.50	.707	11.5	11	12	11	4	12.00	.816	12	12	13	11
Temperature, Vent, Humidity	2	11.50	.707	11.5	11	12	11	4	12.25	2.062	12	12	15	10
Odors, Seating, and Noise	2	11.50	.707	11.5	11	12	11	4	11.50	2.380	10.5	10	15	10
Teacher: General	2	12.00	-	12	12	12	12	4	12.25	1.258	12	12	14	11
Teacher: Social Interaction	1	11.00	-	11	11	11	11	3	11.33	1.528	11	10	13	10
Teacher: Class. Management	2	12.00	-	12	12	12	12	4	12.00	2.160	11.5	10	15	10
Peers: General	2	12.00	-	12	12	12	12	4	13.50	1.732	13.5	12	15	12
Peers: Relation.-Building in Class	1	12.00	-	12	12	12	12	4	13.50	1.732	13.5	12	15	12
Peers: Relation.-Bldg out of Class	2	10.50	2.121	10.5	9	12	9	4	11.00	3.162	10.5	8	15	8
Group Size	2	10.00	-	10	10	10	10	4	12.50	1.915	12	11	15	11
Psychological Factors	2	10.50	2.121	10.5	9	12	9	4	12.50	1.915	12	11	15	11
Expectation	2	10.00	-	10	10	10	10	4	12.25	2.062	12.5	14	14	10
Participation: General	2	11.00	1.414	11	10	12	10	4	11.75	1.708	11.5	10	14	10
Participation: Teach. Methods	2	10.00	1.414	10	9	11	9	4	11.50	1.000	11	11	13	11
Participation: Meeting Length	2	11.50	.707	11.5	11	12	11	4	11.00	2.708	10	10	15	9
Participation: Conflicts	2	10.50	2.121	10.5	9	12	9	4	12.00	-	12	12	12	12
Demographics, Cultural, and Personality	2	9.50	.707	9.5	9	10	9	4	11.25	2.217	11	9	14	9

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DI = divine involvement

Table A42. Learning environment factor responses by salvation length (1-2 years and 3-5 years)

Learning Environment Factor	1-2 Years							3-5 Years						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	14	12.29	2.614	12	12	15	5	30	12.63	1.691	12	12	15	10
DI: Transformed Lives	15	12.53	1.767	13	13	15	8	30	12.37	1.564	12	12	15	10
Physical Arrangement	14	8.14	2.349	8.5	9	12	3	31	7.84	1.393	8	7	13	6
Flexibility	14	9.14	1.956	9	9	12	5	29	8.59	1.881	9	8	11	4
Room Size	15	12.13	2.356	13	14	15	6	30	11.67	1.647	12	12	14	8
Proxemics and Territoriality	15	10.40	1.639	11	9	13	8	31	10.00	1.342	10	10	13	7
Aesthetics and Tidiness	13	11.46	2.470	12	13	15	5	30	11.57	1.870	12	12	15	8
Lighting, Writing, Reading	13	10.69	1.437	11	11	13	8	30	11.60	1.380	12	12	13	7
Temperature, Vent, Humidity	15	10.07	2.344	11	11	14	6	31	10.26	2.016	10	8	14	6
Odors, Seating, and Noise	14	10.36	2.307	11	12	13	6	31	11.39	1.856	11	11	15	7
Teacher: General	14	12.50	1.951	12.5	11	15	9	31	12.23	1.944	12	12	15	8
Teacher: Social Interaction	14	12.07	1.685	12	14	14	9	30	11.87	1.737	12	12	15	9
Teacher: Class. Management	15	11.87	1.885	12	12	14	7	31	11.71	1.918	12	13	15	8
Peers: General	12	12.58	2.353	12.5	15	15	7	30	12.57	1.501	12	12	15	9
Peers: Relation.-Building in Class	15	12.87	1.506	13	14	15	10	29	12.55	1.429	12	12	15	10
Peers: Relation.-Bldg out of Class	15	11.53	2.031	12	13	15	8	31	12.29	1.532	12	12	15	10
Group Size	15	10.07	1.580	10	11	12	7	31	10.48	1.691	11	11	14	8
Psychological Factors	13	11.62	1.121	12	12	14	10	31	11.81	1.376	12	12	15	9
Expectation	15	11.33	2.469	11	11	15	7	31	11.29	1.395	11	11	14	8
Participation: General	15	11.20	1.612	11	12	14	8	31	10.48	1.610	10	10	14	8
Participation: Teach. Methods	13	10.46	2.222	11	8	14	7	30	10.53	1.502	10	10	14	8
Participation: Meeting Length	14	10.71	1.326	11	10	13	8	30	10.73	1.721	11	11	14	7
Participation: Conflicts	15	10.27	2.344	10	12	14	6	31	11.58	2.487	12	12	15	4
Demographics, Cultural, and Personality	14	10.29	2.335	10.5	10	13	6	31	9.94	2.220	10	10	14	5

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DI = divine involvement

Table A43. Learning environment factor responses by salvation length (6-10 years and 11-20 years)

Learning Environment Factor	6-10 Years							11-20 Years						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	33	12.76	1.370	12	12	15	10	98	12.09	1.817	12	12	15	6
DI: Transformed Lives	33	12.00	1.677	12	12	15	7	98	12.07	1.379	12	12	15	7
Physical Arrangement	33	8.18	1.811	8	9	12	3	91	7.99	1.792	8	8	15	3
Flexibility	32	9.63	1.773	10	10	12	4	91	9.32	1.954	10	10	13	3
Room Size	32	11.25	2.314	11.5	10	15	7	99	11.85	1.612	12	12	15	6
Proxemics and Territoriality	32	10.28	1.326	10	9	12	7	98	10.15	1.556	10	10	14	7
Aesthetics and Tidiness	33	11.61	1.749	11	11	15	8	96	11.09	2.143	12	12	15	5
Lighting, Writing, Reading	28	11.57	1.425	12	12	15	8	98	11.38	1.366	11	11	15	8
Temperature, Vent, Humidity	32	10.38	2.136	11	12	15	5	97	10.41	2.014	11	11	15	6
Odors, Seating, and Noise	32	11.03	2.071	11	12	15	7	98	11.47	1.754	12	12	15	6
Teacher: General	33	12.76	1.640	13	12	15	8	98	12.17	1.513	12	12	15	8
Teacher: Social Interaction	33	11.73	1.957	12	12	15	7	93	11.70	1.864	12	12	15	4
Teacher: Class. Management	32	11.47	1.951	12	12	14	6	95	11.44	1.761	12	12	15	3
Peers: General	32	12.28	1.727	12	121	15	8	96	12.36	1.564	12	12	15	7
Peers: Relation.-Building in Class	33	11.85	2.181	12	12	15	5	98	12.28	1.383	12	12	15	8
Peers: Relation.-Bldg out of Class	33	11.70	1.571	12	12	15	9	95	11.67	1.899	12	12	15	7
Group Size	33	10.24	1.985	10	12	14	6	96	10.28	2.040	10	9	15	5
Psychological Factors	32	11.38	2.075	12	12	15	6	95	11.99	1.388	12	12	15	8
Expectation	33	11.48	1.523	11	10	14	7	99	11.03	1.619	11	11	15	6
Participation: General	33	10.79	1.746	11	12	14	7	94	10.88	1.671	11	12	15	6
Participation: Teach. Methods	33	9.97	1.912	10	10	15	6	97	10.26	1.883	10	10	14	5
Participation: Meeting Length	33	10.70	1.571	11	12	15	8	93	10.68	1.701	11	10	15	6
Participation: Conflicts	32	11.38	2.211	11.5	12	15	7	96	11.93	1.865	12	12	15	6
Demographics, Cultural, and Personality	32	9.56	2.184	10	12	15	5	97	10.21	2.141	10	12	15	5

Note: M = mean; SD = standard deviation; Me = median; Mo = mode; H = high; L = low; DI = divine involvement

Table A44. Learning environment factor responses by salvation length (21-30 years and 31+ years)

Learning Environment Factor	21-30 Years							31+ Years						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	126	12.40	1.660	12	12	15	8	411	12.09	1.571	12	12	15	3
DI: Transformed Lives	123	12.36	1.694	12	12	15	4	406	12.36	1.497	12	12	15	4
Physical Arrangement	119	8.09	1.657	8	8	15	3	377	8.28	1.721	8	8	14	3
Flexibility	125	8.90	1.911	9	10	13	3	366	9.06	1.678	9	10	14	3
Room Size	128	11.77	1.781	12	12	15	6	403	11.82	1.575	12	12	15	6
Proxemics and Territoriality	127	10.02	1.613	10	10	15	4	402	10.24	1.393	10	10	15	5
Aesthetics and Tidiness	122	11.57	1.924	12	12	15	4	367	11.50	1.674	12	12	15	5
Lighting, Writing, and Reading	120	11.03	1.511	11	11	15	5	363	10.91	1.487	11	12	15	6
Temperature, Ventilation, and Humidity	125	10.62	1.962	11	12	15	7	394	10.22	2.093	10	10	15	5
Odors, Seating, and Noise	123	11.20	1.867	11	11	15	4	396	11.29	1.859	12	12	15	5
Teacher: General	128	12.30	1.736	12	12	15	8	395	12.19	1.436	12	12	15	8
Teacher: Social Interaction	122	11.74	1.862	12	12	15	3	367	11.66	1.775	12	12	15	3
Teacher: Classroom Management	125	11.75	1.659	12	12	15	8	401	11.68	1.558	12	12	15	5
Peers: General	125	12.60	1.601	12	12	15	5	386	12.52	1.345	12	12	15	8
Peers: Relationship-Building in Class	129	12.29	1.459	12	12	15	6	404	12.30	1.385	12	12	15	7
Peers: Relationship-Building outside of Class	125	12.08	1.953	12	12	15	3	411	11.82	1.671	12	12	15	7
Group Size	125	10.65	1.927	11	10	15	6	398	10.80	1.803	11	12	15	4
Psychological Factors	121	11.91	1.565	12	12	15	8	388	11.85	1.509	12	12	15	5
Expectation	130	10.93	1.881	11	11	15	3	404	11.13	1.478	11	11	15	6
Participation: General	125	11.34	1.694	11	12	15	7	392	11.36	1.644	12	12	15	5
Participation: Teaching Methods	123	10.41	1.683	10	10	14	6	387	10.27	1.713	10	10	15	5
Participation: Meeting Length	125	11.08	1.490	11	12	15	7	366	11.14	1.476	11	12	15	7
Participation: Conflicts	129	11.57	2.083	12	12	15	6	399	11.57	2.040	12	12	15	3
Demographic, Cultural, and Personality Factors	126	10.70	2.001	11	12	15	6	400	10.84	1.895	11	12	15	3

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low

Table A45. Learning environment factor responses by church membership tenure (not a church member and under 1 year)

Learning Environment Factor	Not a church member							Under 1 Year						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	26	12.04	2.068	12	12	15	5	47	11.96	1.574	12	12	15	8
DI: Transformed Lives	26	12.08	1.521	12	12	15	8	47	11.68	1.337	12	11	15	9
Physical Arrangement	23	7.83	1.723	8	8	11	4	45	8.53	1.646	8	8	12	4
Flexibility	25	9.16	1.573	9	10	12	6	44	9.34	1.554	9.5	10	12	4
Room Size	28	12.04	2.081	12	12	15	6	47	12.09	1.558	12	12	15	9
Proxemics and Territoriality	27	10.30	1.706	10	10	14	5	48	10.50	1.384	10	10	14	8
Aesthetics and Tidiness	26	12.04	1.755	12	12	15	7	44	11.93	1.561	12	12	15	8
Lighting, Writing, Reading	26	11.12	1.366	11	11	15	9	43	11.63	1.070	12	12	15	10
Temperature, Vent, Humidity	24	10.79	1.956	11	12	15	7	48	10.98	2.037	11	12	15	6
Odors, Seating, and Noise	27	11.56	2.154	12	11	15	6	47	11.62	1.468	12	12	15	9
Teacher: General	27	12.11	1.826	12	12	15	8	46	11.96	1.445	12	12	15	9
Teacher: Social Interaction	24	11.96	1.574	12	11	15	9	43	11.60	1.198	12	12	15	10
Teacher: Class. Management	26	11.77	1.704	12	12	15	7	47	11.79	1.531	12	12	15	8
Peers: General	24	12.54	1.865	12	12	15	7	45	12.71	1.236	12	12	15	11
Peers: Relation.-Building in Class	26	12.46	1.923	12.5	12	15	7	48	12.33	1.616	12	12	15	5
Peers: Relation.-Bldg out of Class	27	11.63	1.925	12	12	15	7	48	11.75	1.756	12	12	15	7
Group Size	27	11.22	1.948	12	12	14	7	46	10.76	1.923	11	11	15	6
Psychological Factors	26	11.85	1.515	12	12	15	9	44	11.89	1.482	12	12	15	8
Expectation	28	11.18	1.827	11	10	15	7	48	11.25	1.263	11	11	15	9
Participation: General	27	11.63	1.418	12	12	14	9	47	11.34	1.550	11	10	15	8
Participation: Teach. Methods	27	10.30	1.540	10	10	13	6	47	10.45	1.791	10	10	15	6
Participation: Meeting Length	25	11.60	1.472	11	11	15	8	44	11.18	1.467	11	12	15	8
Participation: Conflicts	26	11.00	1.980	11.5	12	14	6	48	11.71	1.738	12	12	15	8
Demographics, Cultural, and Personality	26	9.46	2.486	10	12	12	5	47	10.04	2.340	11	12	15	4

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A46. Learning environment factor responses by church membership tenure (1-2 years and 3-5 years)

Learning Environment Factor	1-2 Years							3-5 Yrs						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	67	12.40	1.567	12	12	15	6	117	12.22	1.713	12	12	15	7
DI: Transformed Lives	66	12.30	1.889	12	12	15	4	118	12.17	1.560	12	12	15	8
Physical Arrangement	61	8.49	1.938	9	8	13	3	110	7.98	1.842	8	8	15	3
Flexibility	66	9.21	1.877	9.5	10	12	4	107	9.07	1.831	10	10	14	4
Room size	66	11.62	1.743	12	12	15	7	115	11.34	1.600	12	12	15	7
Proxemics and territoriality	66	10.38	1.634	10	10	15	7	119	9.78	1.632	10	10	14	5
Aesthetics and tidiness	67	11.63	2.073	12	12	15	5	112	11.28	1.880	12	12	15	5
Lighting, writing, reading	59	11.32	1.407	11	11	15	7	108	11.04	1.623	11	12	14	6
Temperature, vent., humidity	64	10.67	1.952	11	12	15	6	115	10.03	1.919	10	10	14	5
Odors, seating, and noise	65	11.23	1.703	12	12	15	8	115	11.16	1.750	11	12	15	6
Teacher: Gen.	66	12.55	1.416	12	12	15	10	118	12.21	1.648	12	12	15	8
Teacher: Social Interaction	64	12.05	1.864	12	12	15	4	112	11.55	1.902	12	12	15	3
Teacher: Class. Management	64	11.92	2.002	12	12	15	3	117	11.42	1.777	12	12	15	5
Peers: General	65	12.69	1.667	13	12	15	8	112	12.35	1.469	12	12	15	7
Peers: Relation.-building in class	66	12.48	1.610	12	12	15	7	113	12.23	1.570	12	12	15	8
Peers: Relation.-bldg out of class	67	12.09	1.832	12	12	15	7	118	12.05	1.643	12	12	15	7
Group size	65	11.05	1.745	11	10	15	7	113	10.34	1.939	11	11	14	5
Psychological factors	65	11.80	1.583	12	12	15	8	112	11.85	1.453	12	12	15	6
Expectation	66	11.14	1.814	11	11	15	6	120	11.12	1.706	11	10	15	3
Participation: General	62	11.29	1.583	11	11	15	7	117	10.75	1.542	11	10	14	7
Participation: Teach. methods	65	10.48	1.855	11	11	14	6	115	10.37	1.729	10	10	14	6
Participation: Meeting length	65	10.94	1.321	12	12	15	3	112	10.74	1.592	11	12	14	7
Participation: Conflicts	63	11.38	2.365	12	12	15	3	119	11.65	2.085	12	12	15	6
Demographic, cultural, and personality	65	10.28	1.965	10	12	15	5	119	10.35	2.098	11	12	15	5

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A47. Learning environment factor responses by church membership tenure (6-10 years and 11-20 years)

Learning Environment Factor	6-10 Yrs							11-20 Yrs						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	114	12.19	1.779	12	12	15	5	120	12.27	1.586	12	12	15	7
DI:Transformed Lives	110	12.27	1.718	12	12	15	4	121	12.48	1.373	12	12	15	8
Physical Arrangement	109	8.09	1.813	8	8	12	3	118	8.25	1.788	8	8	15	3
Flexibility	105	9.16	1.819	10	10	12	4	122	9.00	1.911	9	10	13	3
Room size	114	11.71	1.515	12	12	15	7	121	11.96	1.660	12	12	15	7
Proxemics and territoriality	113	10.29	1.258	10	10	14	7	119	10.08	1.480	10	10	14	4
Aesthetics and tidiness	107	11.18	1.902	12	12	15	6	118	11.43	1.687	12	12	15	6
Lighting, writing, reading	106	11.00	1.345	11	11	14	7	117	11.21	1.431	11	11	15	8
Temperature, vent., humidity	113	10.19	1.884	10	12	15	6	120	10.33	2.034	10	10	15	6
Odors, seating, and noise	114	11.23	1.877	12	12	15	6	119	11.14	2.018	11	12	15	4
Teacher: Gen.	114	12.43	1.469	12	12	15	9	119	12.44	1.587	12	12	15	8
Teacher: Social Interaction	106	11.44	2.061	12	12	15	3	120	11.76	1.829	12	12	15	5
Teacher: Class. Management	114	11.58	1.629	12	12	15	7	123	11.84	1.656	12	12	15	8
Peers: General	110	12.41	1.610	12	12	15	5	118	12.78	1.439	12	12	15	9
Peers:Relation.-bldg in class	114	12.04	1.554	12	12	15	6	123	12.49	1.190	12	12	15	10
Peers:Relation.-bldg out ofclass	110	11.52	2.003	12	12	15	3	121	11.94	1.733	12	12	15	7
Group size	113	10.57	1.875	11	12	15	6	120	10.40	1.840	10	9	15	7
Psychological factors	109	11.81	1.443	12	12	15	6	120	11.97	1.614	12	12	15	5
Expectation	111	10.96	1.667	11	11	15	5	123	11.30	1.599	11	12	15	8
Participation: General	112	10.88	1.815	11	12	15	5	116	11.35	1.785	11	12	15	5
Participation: Teach.methods	107	10.09	1.713	10	10	15	6	118	10.31	1.875	10	10	14	5
Participation: Meeting length	108	10.72	1.490	11	12	14	7	123	11.10	1.591	11	12	15	6
Participation: Conflicts	113	11.65	1.949	12	12	15	4	123	11.58	2.236	12	12	15	6
Demographic, cultural, and personality	112	10.41	2.043	10.5	10	15	5	121	10.99	2.010	12	12	15	3

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A48. Learning environment factor responses by church membership tenure (21-30 years and 31+ years)

Learning Environment Factor	21-30 Yrs							31+ Yrs						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	73	12.34	1.601	12	12	15	9	151	12.10	1.628	12	12	15	3
DI:Transformed Lives	73	12.47	1.324	12	12	15	10	147	12.41	1.466	12	12	16	7
Physical Arrangement	70	8.26	1.293	8	8	15	5	135	8.12	1.579	8	8	12	3
Flexibility	71	8.92	1.826	9	10	13	3	121	9.04	1.588	9	8	13	4
Room size	75	11.89	1.828	12	12	15	6	145	11.92	1.652	12	12	15	6
Proxemics and territoriality	71	10.31	1.420	10	10	14	7	147	10.26	1.266	10	10	15	7
Aesthetics and tidiness	70	11.60	1.868	12	12	15	5	121	11.44	1.751	12	12	15	4
Lighting, writing, reading	63	10.97	1.402	11	11	14	8	135	10.76	1.627	11	10	14	5
Temperature, vent., humidity	72	10.28	2.303	11	11	15	6	143	10.25	2.215	10	12	15	5
Odors, seating, and noise	69	10.99	2.004	11	12	15	6	143	11.52	1.872	12	12	15	5
Teacher: Gen.	73	12.10	1.583	12	12	15	8	140	12.04	1.456	12	12	15	9
Teacher: Social Interaction	69	11.65	1.722	12	11	15	9	124	11.77	1.648	12	12	15	7
Teacher: Class. Management	70	11.67	1.452	12	12	15	8	143	11.55	1.452	12	12	15	8
Peers: General	69	12.49	1.313	12	12	15	9	142	12.33	1.335	12	12	15	9
Peers:Relation.-bldg in class	74	12.16	1.414	12	12	15	7	147	12.35	1.238	12	12	15	9
Peers:Relation.-bldg out of class	73	12.11	1.621	12	12	15	8	151	11.67	1.676	12	12	15	7
Group size	74	10.43	2.048	10	10	15	4	145	10.93	1.653	11	12	14	6
Psychological factors	71	11.72	1.542	12	12	15	8	139	11.88	1.576	12	12	15	7
Expectation	76	11.12	1.469	11	11	14	8	144	11.03	1.477	11	12	15	7
Participation: General	75	11.47	1.590	12	12	15	6	140	11.48	1.602	12	12	15	7
Participation: Teach.methods	68	10.62	1.639	11	10	15	6	140	10.08	1.636	10	10	15	5
Participation: Meeting length	69	10.86	1.574	11	11	14	7	121	11.39	1.497	12	12	15	7
Participation: Conflicts	73	11.77	2.072	12	12	15	7	143	11.59	1.936	12	12	15	6
Demographic, cultural, and personality	70	10.89	1.822	11	12	15	7	146	11.05	1.605	12	12	15	6

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A49. Learning environment factor responses by number of close friends in class (0 and 1)

Learning Environment Factor	0 Friends							1 Friend						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	60	11.07	2.154	11	12	15	3	76	11.89	1.630	12	12	15	7
DI:Transformed Lives	63	11.38	1.631	11	12	15	7	75	11.69	1.724	12	12	15	4
Physical Arrangement	61	7.90	1.640	8	8	12	3	72	7.97	1.565	8	8	12	3
Flexibility	56	8.89	1.637	9	9	11	4	71	8.90	2.146	9	10	14	4
Room Size	62	11.39	1.832	12	12	15	7	77	11.70	1.557	12	12	15	7
Proxemics and Territoriality	63	10.25	1.481	10	10	14	7	77	9.86	1.285	10	10	13	7
Aesthetics and Tidiness	57	11.18	1.804	11	10	15	7	73	11.32	1.992	12	12	15	6
Lighting, Writing, Reading	57	10.95	1.469	11	11	14	7	75	10.99	1.511	11	11	14	6
Temperature, Vent., Humidity	63	10.73	1.977	11	12	15	7	76	10.24	2.019	11	12	14	5
Odors, Seating, and Noise	61	11.00	1.807	11	12	15	6	75	11.39	1.762	11	11	15	7
Teacher: Gen.	62	12.15	1.458	12	12	15	8	76	12.14	1.449	12	12	15	9
Teacher: Social Interaction	57	11.28	1.849	12	12	15	4	74	11.28	1.724	11.5	12	15	3
Teacher: Class. Management	62	11.23	2.012	11.5	12	15	3	75	11.27	1.671	11	12	15	8
Peers: General	60	11.63	1.850	12	12	15	7	77	12.10	1.586	12	12	15	5
Peers:Relation.-Bldg. in Class	61	11.43	1.688	12	12	15	5	76	11.74	1.350	12	12	15	6
Peers:Relation.-Bldgout.ofClass	63	10.94	1.813	11	12	15	7	76	10.96	2.049	11.5	12	15	3
Group Size	62	10.19	2.063	10	11	15	5	77	10.42	1.802	11	10	14	5
Psychological Factors	60	11.43	1.750	12	12	15	7	74	11.39	1.711	12	12	14	5
Expectation	63	10.57	1.643	11	11	15	6	77	10.87	1.559	11	11	15	5
Participation: General	63	10.73	1.807	11	11	15	7	76	10.47	1.785	11	12	14	6
Participation: Teach.Methods	63	9.98	1.905	10	11	14	6	71	10.06	1.796	10	10	14	6
Participation: Meeting Length	57	10.89	1.543	11	12	14	7	70	10.73	1.483	11	12	15	8
Participation: Conflicts	63	11.08	2.172	11	12	15	7	76	11.64	1.816	12	12	15	6
Demographic, Cultural, and Personality	62	9.31	2.085	9	9	15	5	75	9.83	2.304	10	12	15	3

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A50. Learning environment factor responses by number of close friends in class (2 and 3)

Learning Environment Factor	2 Friends							3 Friends						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	118	12.17	1.543	12	12	15	8	106	12.35	1.441	12	12	15	8
DI:Transformed Lives	116	12.09	1.336	12	12	15	8	105	12.58	1.392	12	12	15	7
Physical Arrangement	114	8.02	1.809	8	8	13	3	98	8.19	1.870	8	8	15	3
Flexibility	111	9.04	1.883	9	10	12	3	101	9.13	1.724	9	10	12	3
Room Size	119	11.75	1.643	12	12	15	6	107	11.78	1.615	12	12	15	8
Proxemics and Territoriality	118	10.14	1.414	10	10	14	5	104	10.15	1.460	10	10	15	7
Aesthetics and Tidiness	112	10.99	1.910	11	12	15	5	100	11.76	1.577	12	12	15	7
Lighting, Writing, Reading	111	11.14	1.174	11	11	14	8	96	10.99	1.586	11	11	15	6
Temperature, Vent., Humidity	115	10.18	1.931	10	11	14	5	103	10.46	2.081	11	12	15	6
Odors, Seating, and Noise	115	11.18	1.740	11	12	15	6	100	11.18	2.226	12	12	15	5
Teacher: Gen.	114	12.05	1.492	12	12	15	9	103	12.34	1.672	12	12	15	8
Teacher: Social Interaction	109	11.29	1.892	12	12	15	6	100	12.15	1.678	12	12	15	7
Teacher: Class. Management	115	11.27	1.346	12	12	14	7	106	12.06	1.614	12	12	15	6
Peers: General	112	12.40	1.311	12	12	15	9	102	12.70	1.318	12	12	15	9
Peers:Relation.-Bldg. in Class	116	12.26	1.445	12	12	15	8	105	12.54	1.455	12	12	15	8
Peers:Relation.-Bldg.out.ofClass	119	11.45	1.788	12	12	15	7	105	12.25	1.580	12	12	15	7
Group Size	118	10.62	1.704	11	12	14	7	104	10.60	1.814	10	12	15	4
Psychological Factors	115	11.77	1.320	12	12	15	8	95	11.96	1.421	12	12	15	9
Expectation	119	10.99	1.399	11	11	15	6	105	11.14	1.778	11	10	15	7
Participation: General	113	10.73	1.758	11	11	15	5	102	11.22	1.565	11	12	15	6
Participation: Teach. Methods	115	10.09	1.715	10	10	14	6	101	10.39	1.679	10	10	15	6
Participation: Meeting Length	113	10.74	1.602	11	11	15	6	99	11.21	1.593	11	12	15	8
Participation: Conflicts	118	11.40	1.882	12	12	15	6	102	11.41	2.154	12	12	15	6
Demographic, Cultural, and Personality	116	10.34	2.005	11	12	15	5	102	10.40	1.852	11	12	15	6

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A51. Learning environment factor responses by number of close friends in class (4 and 5)

Learning Environment Factor	4 Friends							5 Friends						
	n	M	SD	Me	Mo	H	L	*n*	M	SD	Me	Mo	H	L
Divine Involvement	75	12.47	1.501	12	12	15	9	46	12.91	1.330	13	12	15	10
DI: Transformed Lives	77	12.49	1.324	12	13	15	9	46	12.72	1.241	12	12	15	10
Physical Arrangement	67	7.91	1.554	8	8	14	4	47	8.72	1.802	8	8	14	6
Flexibility	68	9.31	1.695	10	10	13	4	45	9.11	1.824	10	10	12	3
Room Size	74	11.66	1.882	12	12	15	6	46	12.20	1.721	12	12	15	7
Proxemics and Territoriality	70	10.27	1.569	10	11	14	6	47	10.28	1.297	10	10	12	6
Aesthetics and Tidiness	66	11.59	2.075	12	12	15	4	44	11.55	1.823	11.5	11	15	8
Lighting, Writing, Reading	70	11.06	1.578	11	12	14	5	46	11.46	1.471	12	12	15	8
Temperature, Vent., Humidity	72	10.39	2.140	10	12	15	5	46	10.63	1.866	11	12	14	6
Odors, Seating, and Noise	70	11.23	1.779	11	11	15	8	45	11.73	1.514	12	12	15	9
Teacher: Gen.	71	12.58	1.451	12	12	15	10	47	12.53	1.530	12	12	15	9
Teacher: Social Interaction	69	11.80	1.771	12	12	15	5	45	12.04	1.745	12	11	15	9
Teacher: Class. Management	72	11.99	1.506	12	12	15	8	47	11.96	1.532	12	12	15	8
Peers: General	71	12.77	1.386	12	12	15	9	46	12.87	1.258	12	12	15	10
Peers:Relation.-Bldg. in Class	73	12.70	1.371	12	12	15	8	47	12.64	1.510	12	12	15	7
Peers: Relation.-Bldg.out.ofClass	73	12.23	1.577	12	12	15	8	46	12.30	1.428	12	12	15	10
Group Size	74	10.61	1.834	11	12	15	6	44	10.75	1.954	11	12	15	6
Psychological Factors	72	11.76	1.588	12	12	15	7	47	12.13	1.777	12	12	15	6
Expectation	73	11.25	1.526	11	11	14	8	46	11.54	1.456	11	11	15	9
Participation: General	68	11.66	1.502	12	12	15	8	47	11.81	1.262	12	12	15	10
Participation: Teach. Methods	72	10.17	1.744	10	10	13	5	48	10.71	1.304	10	10	15	8
Participation: Meeting Length	68	10.99	1.616	11	12	14	7	45	11.42	1.097	11	12	14	8
Participation: Conflicts	70	11.63	2.188	12	12	15	6	47	11.60	2.102	12	12	15	5
Demographic, Cultural, and Personality	74	11.31	1.323	12	12	14	7	48	11.35	1.804	12	12	15	5

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

Table A52. Learning environment factor responses by number of close friends in class (6+)

Learning Environment Factor	6+ Friends						
	n	M	SD	Me	Mo	H	L
Divine Involvement	226	12.37	1.653	12	12	15	5
Divine Involvement: Transformed Lives	219	12.67	1.500	12	12	15	4
Physical Arrangement	204	8.41	1.735	8	8	15	4
Flexibility	196	9.04	1.736	9	10	13	3
Room Size	217	11.90	1.646	12	12	15	6
Proxemics and Territoriality	222	10.27	1.542	10	10	15	4
Aesthetics and Tidiness	199	11.65	1.731	12	12	15	5
Lighting, Writing, and Reading	198	11.04	1.511	11	11	15	6
Temperature, Ventilation, and Humidity	212	10.20	2.203	10	8	15	6
Odors, Seating, and Noise	222	11.29	1.883	12	12	15	4
Teacher: General	221	12.22	1.584	12	12	15	8
Teacher: Social Interaction	195	11.91	1.765	12	12	15	3
Teacher: Classroom Management	218	11.77	1.658	12	12	15	5
Peers: General	211	12.77	1.373	12	12	15	7
Peers: Relationship-Building in Class	223	12.50	1.269	12	12	15	7
Peers: Relationship-Building outside of Class	223	12.32	1.495	12	12	15	7
Group Size	217	10.94	1.882	11	12	15	6
Psychological Factors	215	12.06	1.489	12	12	15	6
Expectation	225	11.27	1.639	12	12	15	3
Participation: General	215	11.67	1.534	12	12	15	8
Participation: Teaching Methods	211	10.53	1.727	10	10	15	5
Participation: Meeting Length	199	11.10	1.537	11	12	15	7
Participation: Conflicts	222	11.83	2.133	12	12	15	3
Demographic, Cultural, and Personality Factors	220	11.07	1.888	12	12	15	4

Note: M = mean; SD = standard deviation; Me = medium; Mo = mode; H = high; L = low; DI = divine involvement

APPENDIX 6

PARTICIPATING CHURCHES

The research contained in these pages would not have been possible without the help of pastors, ministers of education, and Sunday School directors in the churches listed below. Appreciation was also extended to the adult class teachers and members of the churches who completed and returned the research instruments. These were all Kentucky Baptist Convention churches and members of the Long Run Association. They were listed by Sunday School attendance size and alphabetically. Following the list of churches, seven tables were presented with learning environment factor means by participating church. Churches in the tables were listed in the order in which their completed instruments were received by the researcher. The first four tables, A53-A56, presented factors in Appendix 1 order. The second set of three tables, A57-A59, presented factors in ranked mean order.

Small Churches (0-49 in attendance)	**Medium Churches (50-149 in attendance)**	**Large Churches (150+ in attendance)**
Brookview	Brooks	Carlisle Avenue
Fairmount	Eastern Gate	Cloverleaf
Foster Avenue	Eastern Parkway	Parkland
Fourth Avenue	Gethsemane	West Broadway
People of the Way	Green Acres	
Sunnyside	Jeffersontown	
Thixton Lane	Lyndon	
	Rockford Lane	

Table A53. Learning environment factor means by participating church (churches 1-5)

Learning Environment Factor	Church 1		Church 2		Church 3		Church 4		Church 5	
	n	M	n	M	n	M	n	M	n	M
Divine Involvement	8	14.13	71	12.32	4	12.50	15	11.40	11	12.45
Divine Involvement: Transformed Lives	8	14.50	68	12.09	4	13.25	15	11.40	11	11.55
Physical Arrangement	7	7.29	66	8.41	4	7.50	13	7.54	11	7.55
Flexibility	8	8.50	65	8.46	4	7.00	12	8.92	11	8.55
Room Size	8	13.25	69	12.03	4	13.25	13	11.62	11	12.09
Proxemics and Territoriality	8	11.00	68	10.12	4	9.50	15	10.80	11	10.18
Aesthetics and Tidiness	8	13.63	67	12.42	4	12.75	13	10.23	11	10.55
Lighting, Writing, and Reading	7	12.29	66	12.03	4	10.75	15	10.73	10	10.80
Temperature, Ventilation, and Humidity	8	12.25	68	10.65	4	11.25	15	11.40	11	11.45
Odors, Seating, and Noise	8	12.63	68	11.99	4	13.25	15	11.33	11	12.18
Teacher: General	8	14.25	67	12.34	4	12.75	14	11.93	11	12.45
Teacher: Social Interaction	8	14.25	67	12.25	4	12.50	13	11.08	11	11.00
Teacher: Classroom Management	8	13.38	68	12.44	4	12.00	14	10.71	11	10.27
Peers: General	8	14.25	66	12.82	4	13.00	15	11.93	11	12.45
Peers: Relationship-Building in Class	8	14.00	70	12.19	4	11.75	14	12.21	11	11.91
Peers: Relationship-Building out of Class	8	13.13	69	12.13	4	12.25	16	11.13	11	10.91
Group Size	8	10.71	69	10.71	4	9.25	16	9.88	10	8.20
Psychological Factors	8	13.25	63	11.98	4	12.25	11	11.82	10	11.90
Expectation	8	13.25	70	11.21	4	11.75	15	10.00	11	10.27
Participation: General	8	13.50	65	10.92	4	11.25	15	11.53	11	10.55
Participation: Teaching Methods	8	12.86	64	9.84	4	12.00	16	10.13	10	9.60
Participation: Meeting Length	8	11.88	65	11.37	4	12.00	12	10.50	11	10.73
Participation: Conflicts	8	13.25	68	10.96	4	12.50	14	11.57	11	13.00
Demographics, Cultural, and Personality Factors	8	8.75	71	10.69	4	9.25	16	9.00	11	10.73

Note: M = Mean

Table A54. Learning environment factor means by participating church (churches 6-10)

Learning Environment Factor	Church 6		Church 7		Church 8		Church 9		Church 10	
	n	M	*n*	M	*n*	M	*n*	M	*n*	M
Divine Involvement	50	12.42	131	12.18	98	12.28	56	11.70	24	12.33
Divine Involvement: Transformed Lives	49	12.20	133	12.49	99	12.34	57	11.82	24	12.13
Physical Arrangement	42	8.50	126	8.53	92	7.50	52	8.29	22	9.23
Flexibility	40	8.05	122	9.85	92	8.34	52	9.77	23	8.70
Room Size	47	11.60	132	11.48	99	11.61	58	11.60	25	11.72
Proxemics and Territoriality	46	10.09	131	10.08	98	9.98	59	10.17	24	10.29
Aesthetics and Tidiness	44	11.36	123	11.11	86	11.70	53	11.08	23	11.52
Lighting, Writing, and Reading	44	10.86	123	10.93	89	11.43	52	10.58	22	11.00
Temperature, Ventilation, and Humidity	48	10.65	133	10.42	95	9.80	58	9.86	24	10.37

Note: M = Mean

Table A54—*Continued.* Learning environment factor means by participating church (churches 6-10)

Learning Environment Factor	Church 6		Church 7		Church 8		Church 9		Church 10	
	n	M	*n*	M	*n*	M	*n*	M	*n*	M
Odors, Seating, and Noise	46	11.35	129	10.40	97	11.02	57	10.82	22	11.00
Teacher: General	46	12.00	132	12.33	98	12.29	58	11.98	23	12.65
Teacher: Social Interaction	42	11.55	123	11.88	89	11.56	51	10.96	22	11.23
Teacher: Classroom Management	47	11.23	133	11.93	97	11.96	58	11.50	24	11.08
Peers: General	44	12.55	130	12.59	96	12.40	50	11.94	24	12.38
Peers: Relationship-Building in Class	47	12.49	134	12.39	97	12.26	57	11.89	23	12.04
Peers: Relationship-Building out of Class	49	11.71	135	12.12	97	11.84	58	11.29	23	11.13
Group Size	46	10.57	130	11.15	100	10.50	58	10.38	22	9.82
Psychological Factors	45	11.49	127	11.80	98	11.94	58	11.83	24	11.82
Expectation	46	10.83	134	11.25	96	10.95	58	10.59	25	10.88
Participation: General	44	11.07	130	11.08	94	11.10	55	10.91	23	11.43
Participation: Teaching Methods	46	10.00	130	10.41	93	10.17	55	10.04	24	10.29
Participation: Meeting Length	44	10.77	125	11.02	93	11.05	53	11.11	22	10.45
Participation: Conflicts	44	11.48	132	11.68	98	11.42	57	11.53	24	11.71
Demographics, Cultural, and Personality Factors	46	11.02	132	10.61	96	10.65	58	10.67	24	10.67

Note: M = Mean

Table A55. Learning environment factor means by participating church (churches 11-15)

Learning Environment Factor	Church 11		Church 12		Church 13		Church 14		Church 15	
	n	M	*n*	M	*n*	M	*n*	M	*n*	M
Divine Involvement	7	12.14	20	12.25	47	11.96	42	12.17	27	12.04
Divine Involvement: Transformed Lives	7	11.29	20	12.70	45	12.62	39	12.69	26	11.92
Physical Arrangement	6	8.33	19	8.53	45	7.93	41	7.85	26	8.35
Flexibility	6	7.50	19	9.53	42	9.69	40	9.43	26	9.19
Room Size	7	11.43	20	11.60	47	11.68	41	11.71	27	12.41
Proxemics and Territoriality	7	9.86	21	10.00	47	10.51	42	10.36	26	10.58
Aesthetics and Tidiness	5	11.60	19	11.11	43	12.05	38	10.84	27	10.37
Lighting, Writing, and Reading	6	9.83	16	10.69	45	10.42	38	11.13	26	11.15
Temperature, Ventilation, and Humidity	7	10.57	20	10.30	44	10.00	41	9.68	25	11.44
Odors, Seating, and Noise	7	10.71	20	11.75	45	12.27	42	11.79	25	11.84
Teacher: General	7	11.00	19	12.11	48	12.42	40	11.80	26	12.04
Teacher: Social Interaction	6	11.50	18	11.28	41	12.00	41	11.73	26	11.81
Teacher: Classroom Management	7	10.71	18	11.44	45	12.00	41	10.95	26	10.85
Peers: General	7	11.29	20	12.70	46	12.91	41	12.46	23	12.39
Peers: Relationship-Building in Class	7	11.43	20	12.35	455	12.67	42	12.14	26	12.15
Peers: Relationship-Building out of Class	7	11.43	21	11.86	46	12.22	41	12.10	27	11.11

Note: M = Mean

Table A55—*Continued.* Learning environment factor means by participating church (churches 11-15)

Learning Environment Factor	Church 11		Church 12		Church 13		Church 14		Church 15	
	n	M	*n*	M	*n*	M	*n*	M	*n*	M
Group Size	6	9.83	20	10.60	46	11.46	39	11.23	27	10.11
Psychological Factors	5	11.60	21	12.00	44	11.77	40	11.80	26	11.88
Expectation	7	11.14	21	11.05	48	11.79	40	10.95	27	11.22
Participation: General	7	9.43	21	11.38	47	11.98	40	11.30	26	11.23
Participation: Teaching Methods	6	9.71	21	10.67	45	10.93	40	10.53	25	10.40
Participation: Meeting Length	7	11.67	18	11.44	42	10.74	37	10.62	26	11.08
Participation: Conflicts	6	10.43	20	11.75	47	11.94	42	11.86	26	11.88
Demographics, Cultural, and Personality Factors	4	9.83	21	10.48	42	10.93	39	10.26	27	10.59

Note: M = Mean

Table A56. Learning environment factor means by participating church (churches 16-19)

Learning Environment Factor	Church 16		Church 17		Church 18		Church 19	
	n	M	*n*	M	*n*	M	*n*	M
Divine Involvement	34	11.91	25	11.88	42	12.38	18	12.94
Divine Involvement: Transformed Lives	34	12.12	22	11.59	42	12.60	19	12.68
Physical Arrangement	33	7.76	21	8.71	37	8.62	17	7.76
Flexibility	31	9.87	21	7.81	36	9.25	14	9.00
Room Size	35	11.63	21	11.81	40	12.83	19	11.68
Proxemics and Territoriality	34	9.82	23	9.91	40	10.50	19	10.37
Aesthetics and Tidiness	31	11.16	23	11.74	35	12.83	15	9.80
Lighting, Writing, and Reading	31	10.74	20	10.35	38	11.26	17	11.53
Temperature, Ventilation, and Humidity	36	9.75	19	8.95	38	11.21	15	10.87
Odors, Seating, and Noise	35	10.97	20	10.90	42	11.55	17	11.41
Teacher: General	35	11.80	19	12.00	40	12.63	19	12.32
Teacher: Social Interaction	31	11.84	19	11.05	37	12.00	15	10.80
Teacher: Classroom Management	36	10.81	19	11.47	41	12.46	19	10.95
Peers: General	32	12.53	22	11.64	40	12.90	18	12.67
Peers: Relationship-Building in Class	35	12.34	23	11.83	42	12.83	18	12.67
Peers: Relationship-Building out of Class	35	12.14	21	11.43	42	11.79	17	12.12
Group Size	35	10.66	23	10.70	39	11.00	18	9.22
Psychological Factors	33	11.82	20	11.35	40	11.85	19	11.89
Expectation	35	11.06	22	11.45	42	10.98	19	12.05
Participation: General	35	11.29	20	10.85	41	11.80	19	11.47
Participation: Teaching Methods	35	10.49	20	9.90	39	9.90	19	10.68
Participation: Meeting Length	30	10.97	22	11.14	36	11.47	15	10.07
Participation: Conflicts	35	10.94	21	11.05	41	11.78	19	12.00
Demographics, Cultural, and Personality Factors	35	10.86	22	9.91	42	10.81	18	11.50

Note: M = Mean

Table A57. Learning environment factors ranked by participating church means (churches 1-7)

Rank	Church 1		Church 2		Church 3		Church 4		Church 5		Church 6		Church 7	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M
1	2	14.50	14	12.82	2	13.25	15	12.21	23	13.00	14	12.55	14	12.59
2	11	14.25	13	12.44	5	13.25	11	11.93	1	12.45	15	12.49	2	12.49
3	12	14.25	7	12.42	10	13.25	14	11.93	11	12.45	1	12.42	15	12.39
4	14	14.25	11	12.34	14	13.00	18	11.82	14	12.45	2	12.20	11	12.33
5	1	14.13	1	12.32	7	12.75	5	11.62	10	12.18	11	12.00	1	12.18
6	15	14.00	12	12.25	11	12.75	23	11.57	5	12.09	16	11.71	16	12.12
7	7	13.63	15	12.19	1	12.50	20	11.53	15	11.91	5	11.60	13	11.93
8	20	13.50	16	12.13	12	12.50	1	11.40	18	11.90	12	11.55	12	11.88
9	13	13.38	2	12.09	23	12.50	2	11.40	2	11.55	18	11.49	18	11.80
10	5	13.25	5	12.03	16	12.25	9	11.40	9	11.45	23	11.48	23	11.68
11	18	13.25	8	12.03	18	12.25	10	11.33	12	11.00	7	11.36	5	11.48
12	19	13.25	10	11.99	13	12.00	16	11.13	16	10.91	10	11.35	19	11.25
13	23	13.25	18	11.98	21	12.00	12	11.08	8	10.80	13	11.23	17	11.15
14	16	13.13	22	11.37	22	12.00	6	10.80	22	10.73	20	11.07	7	11.11
15	21	12.86	19	11.21	15	11.75	8	10.73	24	10.73	24	11.02	20	11.08
16	10	12.63	23	10.96	19	11.75	13	10.71	7	10.55	8	10.86	22	11.02
17	8	12.29	20	10.92	9	11.25	22	10.50	20	10.55	19	10.83	8	10.93
18	9	12.25	17	10.71	20	11.25	7	10.23	13	10.27	22	10.77	24	10.61
19	22	11.88	24	10.69	8	10.75	21	10.13	19	10.27	9	10.65	9	10.42
20	6	11.00	9	10.65	6	9.50	19	10.00	6	10.18	17	10.57	21	10.41
21	17	10.71	6	10.12	17	9.25	17	9.88	21	9.60	6	10.09	10	10.40
22	24	8.75	21	9.84	24	9.25	24	9.00	4	8.55	21	10.00	6	10.08
23	4	8.50	4	8.46	3	7.50	4	8.92	17	8.20	3	8.50	4	9.85
24	3	7.29	3	8.41	4	7.00	3	7.54	3	7.55	4	8.05	3	8.53

Note: F = Factor; M = Mean

Table A58. Learning environment factors ranked by participating church means (churches 8-14)

Rank	Church 8		Church 9		Church 10		Church 11		Church 12		Church 13		Church 14	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M
1	14	12.40	11	11.98	11	12.65	1	12.14	2	12.70	14	12.91	2	12.69
2	2	12.34	14	11.94	14	12.38	22	11.67	14	12.70	15	12.67	14	12.46
3	11	12.29	15	11.89	1	12.33	7	11.60	15	12.35	2	12.62	1	12.17
4	1	12.28	18	11.83	2	12.13	18	11.60	1	12.25	11	12.42	15	12.14
5	15	12.26	2	11.82	15	12.04	12	11.50	11	12.11	10	12.27	16	12.10
6	13	11.96	1	11.70	18	11.82	5	11.43	18	12.00	16	12.22	23	11.86
7	18	11.94	5	11.60	5	11.72	15	11.43	16	11.86	7	12.05	11	11.80
8	16	11.84	23	11.53	23	11.71	16	11.43	10	11.75	13	12.00	18	11.80
9	7	11.70	13	11.50	7	11.52	2	11.29	23	11.75	12	12.00	10	11.79
10	5	11.61	16	11.29	20	11.43	14	11.29	5	11.60	20	11.98	12	11.73

Note: F = Factor; M = Mean

Table A58—*Continued.* Learning environment factors ranked by participating church means (churches 8-14)

Rank	Church 8		Church 9		Church 10		Church 11		Church 12		Church 13		Church 14	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M
11	12	11.56	22	11.11	12	11.23	19	11.14	22	11.44	1	11.96	5	11.71
12	8	11.43	7	11.08	16	11.13	11	11.00	13	11.44	23	11.94	20	11.30
13	23	11.42	12	10.96	13	11.08	10	10.71	20	11.38	19	11.79	17	11.23
14	20	11.10	20	10.91	10	11.00	13	10.71	12	11.28	18	11.77	8	11.13
15	22	11.05	10	10.82	8	11.00	9	10.57	7	11.11	5	11.68	13	10.95
16	10	11.02	24	10.67	19	10.88	23	10.43	19	11.05	17	11.46	19	10.95
17	19	10.95	19	10.59	24	10.67	6	9.86	8	10.69	21	10.93	7	10.84
18	24	10.65	8	10.58	22	10.45	8	9.83	21	10.67	24	10.93	22	10.62
19	17	10.50	17	10.38	9	10.37	17	9.83	17	10.60	22	10.74	21	10.53
20	21	10.17	6	10.17	6	10.29	24	9.83	24	10.48	6	10.51	6	10.36
21	6	9.98	21	10.04	21	10.29	21	9.71	9	10.30	8	10.42	24	10.26
22	9	9.80	9	9.86	17	9.82	20	9.43	6	10.00	9	10.00	9	9.68
23	4	8.34	4	9.77	3	9.23	3	8.33	4	9.53	4	9.69	4	9.43
24	3	7.50	3	8.29	4	8.70	4	7.50	3	8.53	3	7.93	3	7.85

Note: F = Factor; M = Mean

Table A59. Learning environment factors ranked by participating church means (churches 15-19)

Rank	Church 15		Church 16		Church 17		Church 18		Church 19	
	F	M	F	M	F	M	F	M	F	M
1	5	12.41	14	12.53	11	12.00	14	12.90	1	12.94
2	14	12.39	15	12.34	1	11.88	15	12.83	2	12.68
3	15	12.15	16	12.14	15	11.83	5	12.83	14	12.67
4	1	12.04	2	12.12	5	11.81	7	12.83	15	12.67
5	11	12.04	1	11.91	7	11.74	11	12.63	11	12.32
6	2	11.92	12	11.84	14	11.64	2	12.60	16	12.12
7	23	11.88	18	11.82	2	11.59	13	12.46	19	12.05
8	18	11.88	11	11.80	13	11.47	1	12.38	23	12.00
9	10	11.84	5	11.63	19	11.45	12	12.00	18	11.89
10	12	11.81	20	11.29	16	11.43	18	11.85	5	11.68
11	9	11.44	7	11.16	18	11.35	20	11.80	8	11.53
12	20	11.23	19	11.06	22	11.14	16	11.79	24	11.50
13	19	11.22	10	10.97	12	11.05	23	11.78	20	11.47
14	8	11.15	22	10.97	23	11.05	10	11.55	10	11.41
15	16	11.11	23	10.94	10	10.90	22	11.47	13	10.95
16	22	11.08	24	10.86	20	10.85	8	11.26	9	10.87
17	13	10.85	13	10.81	17	10.70	9	11.21	12	10.80
18	24	10.59	8	10.74	8	10.35	17	11.00	21	10.68
19	6	10.58	17	10.66	24	9.91	19	10.98	6	10.37
20	21	10.40	21	10.49	6	9.91	24	10.81	22	10.07

Note: F = Factor; M = Mean

Table A59—*Continued.* Learning environment factors ranked by participating church means (churches 15-19)

Rank	Church 15		Church 16		Church 17		Church 18		Church 19	
	F	M	F	M	F	M	F	M	F	M
21	7	10.37	4	9.87	21	9.90	6	10.50	7	9.80
22	17	10.11	6	9.82	9	8.95	21	9.90	17	9.22
23	4	9.19	9	9.75	3	8.71	4	9.25	4	9.00
24	3	8.35	3	7.76	4	7.81	3	8.62	3	7.76

Note: F = Factor; M = Mean

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ABSTRACT

AN ANALYSIS OF THE IMPACT OF LEARNING ENVIRONMENT FACTORS ON RETENTION AND ATTRITION IN ADULT SUNDAY SCHOOL CLASSES

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This dissertation identified and analyzed the impact of learning environment factors on the retention and attrition of members of adult Sunday School classes in Kentucky Baptist Convention churches. The study was delimited to spiritual, physical, and social learning environment factors internal to adult classes meeting at church on Sunday led by the same teacher for the previous twelve months. The research questions focused on the strength and relationships of these factors and demographic data gathered.

Precedent literature was investigated next. First, since adults in Sunday School study the Bible, an understanding of the impact of God and theological assumptions was presented. Then, adult learning assumptions, learning environment factors, and retention and attrition (assimilation) issues were applied to the context of adult Sunday School classes. Because limited literature was available addressing these issues in the church, resources from a diversity of fields were utilized, analyzed, and applied to this setting.

The methodological design of the research involved creating and validating a research instrument, contacting and training church leaders, surveying classes on Sunday morning, and mailing instruments to no/low attenders. The random proportionally

stratified sample included teachers and members of adult classes in nineteen KBC churches of the Long Run Baptist Association (Louisville area). The two instruments (teacher and member) contained seventy-two statements utilizing a Likert response scale along with twenty-two and sixteen demographic variables, respectively. Chronbach alpha reliability testing of the 762 instruments produced a score of .8801.

In the analysis of findings, means, modes, medians, standard deviations, rankings, cross tabulations, percentages, and ANOVA data were provided to help answer the six research questions. The statements were combined into twenty-four triangulated learning environment factors in response to precedent literature. The strength of spiritual, physical, and social factors were examined along with the impact of retention (high/average attenders) and attrition (low/no attenders) and various demographic variables. Tables and figures helped to display findings in helpful ways.

Conclusions drawn from the research findings were that spiritual and social learning environment factors did impact retention and attrition of the adult Sunday School classes in the sample. The impact of friends upon high/average attenders was evident, as was the impact of the teacher upon low/no attenders. Even though physical factors did not impact retention and attrition, several findings need application in the local church such as flexibility and physical arrangement. Several suggestions for further research were presented, including replication and utilization of the instrumentation and methodology in other locations and other denominations. Focusing on part of the learning environment factors could also produce helpful results.

KEYWORDS: adults, adult learning, andragogy, assessment, attrition, Baptist, Bible study, classroom climate, church, learning environment, persistence, physical environment, retention, social environment, and Sunday School

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