

A COMPARATIVE STUDY OF HOME EDUCATED STUDENTS AND
TRADITIONALLY EDUCATED STUDENTS AFTER COMPLETION OF A
MIDWESTERN UNIVERSITY FIRST-YEAR EXPERIENCE PROGRAM

A dissertation presented to
the Faculty of the Graduate School
at the University of Missouri-Columbia

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Jeremey David Wolfe
Dr. Robert Watson, Dissertation Supervisor

December 2015

Copyright by Jeremy David Wolfe

All rights reserved.

The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

A COMPARATIVE STUDY OF HOME EDUCATED STUDENTS AND
TRADITIONALLY EDUCATED STUDENTS AFTER COMPLETION OF A
MIDWESTERN UNIVERSITY FIRST-YEAR EXPERIENCE PROGRAM

Presented by Jeremy Wolfe

A candidate for the degree of Doctor of Education

And hereby certify that, in their opinion, it is worthy of acceptance.

Dr. Robert Watson

Dr. Cynthia MacGregor

Dr. David Brown

Dr. Kim Finch

DEDICATION

I dedicate this to my family, Ann, Lydia, Elijah and Jude.

ACKNOWLEDGEMENTS

I would like to express my thanks to all of those people who have supported me through this endeavor. I would like to thank my advisor who stuck with me till the end, Dr. Robert Watson. His encouragement and perseverance were instrumental in completion. I would also like to thank my committee members; Dr. Cynthia MacGregor, Dr. David Brown, and Dr. Kim Finch who gave their time, effort and assistance.

I would most like to thank my family. Thank you Lydia, Elijah and Jude. Your support and patience throughout this research along with all of my other schooling has been long suffering and constant. The utmost thanks goes to Ann. I see my academic pursuits as partly yours. You have supported and encouraged me throughout the process. You have also picked up the slack when I have been unable to fulfill my other responsibilities. My appreciation is enduring and unending.

TABLE OF CONTENTS

ACKNOWLEDGMENT	ii
LIST OF TABLES	viii
ABSTRACT	ix
CHAPTER 1 INTRODUCTION	1
Background.....	1
Statement of the Problem.....	3
Purpose of the Study	4
Research Questions.....	5
Conceptual Underpinnings for the Study	6
Design and Methods	9
Assumptions	10
Definition of Key Terms.....	10
Significance of the Study.....	12
Limitations.....	14
Summary.....	14
CHAPTER 2 LITERATURE REVIEW	16
Introduction.....	16
History of Homeschooling.....	17

Key Figures in the Homeschooling Movement	23
Reasons for Homeschooling	24
Acceptance of Homeschooling	27
Requirements for Homeschooling	30
Academic Preparation.....	32
History of Acceptance into Higher Education Institutions.....	35
Socialization as as Issue in Homeschooling	36
First-Year Experience and Retention.....	39
First-Year Experience Program Goals	39
Innovations in First-Year Experience Programs.....	43
Success within First-Year Experience Programs.....	44
Refocusing the Goals of First-Year Experience Programs	46
Conclusion	48
Summary of the Literature Review.....	48
CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY	50
Introduction.....	50
Purpose of the Study	51
Design for the Study	53
Population and Sample	54
Data Collection and Instrumentation.....	54

Data Collection Procedures.....	55
Knowledge, Attitudes and Behaviors Item Survey.....	55
Human Subjects Protection.....	56
Data Analysis.....	57
Research Question One.....	58
Research Question Two.....	58
Research Question Three.....	58
Research Question Four.....	59
Reliability and Validity.....	59
Limitations and Assumptions.....	59
Limitations.....	59
Assumptions.....	60
Summary.....	60
CHAPTER 4 RESULTS.....	61
Introduction.....	61
Population and Sample.....	63
Data Collection Instrument.....	64
Internal Reliability.....	65
Data Analysis.....	66
Research Question One.....	66

Summary	77
Research Question Two	78
Research Question Three	80
Research Question Four	82
Summary	84
CHAPTER 5 DISCUSSION	85
Introduction.....	85
Purpose of the Study	85
Summary of Findings	87
Demographics	87
Knowledge	88
Attitudes.....	88
Behavior.....	89
Assumptions	89
Study Limitations.....	90
Discussion.....	91
Implications	93
Recommendations for Further Study.....	94
Summary.....	95
REFERENCES	96

APPENDICES.....	102
Appendix A Knowledge, Attitudes and Behavior Items Survey.....	102
Appendix B Informed Consent.....	107
Appendix C Recruitment Letter.....	108
VITA	109

LIST OF TABLES

1 Internal Reliability of the Knowledge, Attitude and Behavior Survey Subscales	65
2 Descriptive Statistics of Age for the Compared Groups	67
3 Descriptive Statistics of Gender for the Compared Groups	68
4 Descriptive Statistics of Race for the Compared Groups	69
5 Descriptive Statistics of the Educational Experience of Student's Prior to Entering a First-Year Experience Program for the Compared Groups.....	70
6 Descriptive Statistics of the Parent's Level of Education for the Compared Groups	72
7 Descriptive Statistics of the Number of Credit Hours before Participating in a First-Year Experience Program for the Compared Groups	74
8 Descriptive Statistics of the Students' Household Income for the Compared Groups	76
9 Descriptive Statistics of the Students' Cumulative Grade Point Average for College	77
10 Analysis of Variance (ANOVA) for the Knowledge Scale of the Compared Groups...	78
11 Table of Means for the Knowledge Scale of the Compared Groups.....	79
12 Analysis of Variance (ANOVA) for the Attitude Scale of the Compared Groups	81
13 Table of Means for the Attitude Scale of the Compared Groups.....	82
14 Analysis of Variance (ANOVA) for the Behavior Scale of the Compared Groups	83
15 Table of Means for the Behavior Scale of the Compared Groups	84

A Comparative Study of Home Educated Students and Traditionally Educated Students
after Completion of a Midwestern University First-year Experience Program

Jeremy Wolfe

Dr. Robert Watson, Dissertation Supervisor

ABSTRACT

The purpose of this study was to assist educational leaders in developing policy to better understand the home educated students and aspects of their first-year experience. This was achieved using a quantitative approach to gather information from three different student population groups, traditionally educated students, home educated students, and privately educated students. This information was gathered from a Midwestern university using a self-report student survey after the students had completed a first-year experience program.

This quantitative study had 251 respondents, primarily from one Midwestern university. The study utilized the *Knowledge, Attitude and Behavior Items Survey*. The survey contained 39 items separated into a demographic section and three subscales: (a) knowledge, (b) attitudes, and (c) behavior. The survey was adapted from *The University Experience Battery Items* (Schrader & Brown, 2008) by eliminating questions, focusing the language and adding a demographic section.

This study has implications both theoretically and practically. For home educated students the study provides insight into how this specific population compares to other student groups. The data from this study shows home educated students self-reported the practical knowledge, attitudes, and behaviors for a successful transition into higher education. This may encourage home educated students to engage and enroll in first-year

experience programs when entering higher education. This study suggests students finish these programs with those necessary qualities for student success.

The primary recommendation for further study was there was not a significant difference in survey answers for the three student populations. Further examination should be performed on other students groups, pertaining to first-year experience programs. This research only separated the results by the model of education used before entering higher education. Additional investigation on the impact of first-year experience programs with minority groups, socio-economic status, gender, and other demographic categories would lead further development of these programs. Replication of this study to a broader range of universities and higher education institutions would allow for a more diverse population, allowing for improved generalizability.

CHAPTER ONE
INTRODUCTION TO THE STUDY

Background

Home educated students are continuing to increase in elementary and secondary education. As a result, higher education is beginning to see an influx of home educated students into university and college settings. Home educated students initially caused consternation for higher education administration and staff. These students do not fit the mold of the typical student. Should they have to meet different requirements? Are additional requirements appropriate for this population? Should they even be allowed to attend a higher education institution without a GED or high school diploma?

After many legal battles and a cultural shift in beliefs about home education, most higher education institutions are accepting home educated students into their programs (Dumas, Gates & Schwarzer, 2010). Typically home educated students are not required to meet special or additional requirements. Standardized testing and a homeschool diploma are the common requirement for most higher education institutions.

There are still many questions about this population in the higher education environment. Are they as successful as traditionally educated students? Do they fit in to the social environment of the university? Are they capable of navigating through the college system? How do they compare to other student groups?

The social integration of the home educated student into the higher education environment is an important aspect for this population and for the higher education institutions. Satisfactory social integration can lead to retention and success of the student.

The theory of student departure (Tinto, 1993) confirmed students are more likely to remain in education if they are able to socially integrate into the institution. Institutions have attempted to achieve this integration in many different ways. One way which has become common is through the use of a program designed to acculturate first-year students.

A relatively new trend in higher education was the development of first-year experience programs. Most higher education institutions provided a first-year experience program, sometimes called a first-year seminar (Barton & Donahue, 2009). These programs were meant to address the retention of freshman from the first-year of college to the second year. Almost 95% of higher education institutions with four year programs have a first-year experience program of some kind (Jamelske, 2009). These programs have various components. Frequently they include an extended orientation for first-year students but sometimes include student learning communities where groups of students take the same courses.

The first-year programs almost always have courses attached to the program that were mandatory and had a credit and a grade (Clark & Cundiff, 2011). There were often two main reasons given for offering these first-year experience programs (Barton & Donahue, 2009; Clark & Cundiff, 2011). The first reason for offering first-year programs was student retention to the institution from the first to second year of study. The second reason was the success of the student at the higher education institution. Both of these reasons were influenced by the importance placed on social integration of the student into the environment.

Universities and colleges were faced with reduced funding and a more audit focused evaluation environment. The administrators of funding sources wanted to

contribute less money and have more results from each dollar spent. Higher education institutions were increasingly concerned about providing a smooth social transition into the environment and culture of the organization, resulting in students remaining in the institution and having greater success. The goal of these programs was to integrate the student into the community of the higher education institution (Jamelske, 2009). There has been mixed data on the success of first-year experience programs and their ability to produce the desired outcomes.

Since the home educated students were coming from a different experience than those with a more traditional educational background, a comparison of the two groups would provide insight into their differences and similarities. A convenient time period to evaluate the homeschool population when they were in higher education was following the freshman year of matriculation at university or college, after completing the first-year experience program. These results can then be compared with those students who were traditionally educated. This is the basis for the research and dissertation.

Statement of the Problem

Higher education institutions can have an impact on the retention of students entering their campus population. The literature is full of research and theories on the retention and success of students. There are many possible variables (Sparkman, Maulding & Roberts, 2012) affecting the retention and success of students in higher education. While there is considerable research on this subject about students coming from a traditionally educated background, there is a gap in the research on the variables affecting the success and retention of home educated students, particularly as related to first-year experience programs.

Some of the common and widely accepted strategies for addressing retention and student success are: specific first-year programs, programs designed to assist students underprepared for higher education, buy-in by the campus faculty and staff that retention is every person's responsibility, service learning, learning communities and an institutional group or committee whose responsibility and agenda are to address retention (Clark & Cundiff, 2011; Escobeda, 2007). Learning to apply these to home educated students will assist higher education institutions in retaining this population, especially as institutions are targeting the home educated population for admissions to higher education (Ray, 2004).

There needs to be more research filling the gap in literature on home educated students in college. The two groups, home educated and traditionally educated, need to be compared, especially in areas demonstrating identified skills leading to retention, like socialization. The comparison should be completed before, during and after participation in higher education. In particular, contrasting the home educated to the traditionally educated during their matriculation would provide insight into the similarities and differences of the two student groups.

Purpose of the Study

Homeschooling is a phenomenon on the rise, with an increasing number of families deciding to teach their children using this educational construct (Mackey, Reese & Mackey, 2011). Understanding of homeschooling will help educational institutions and organizations make policy decisions relating to their interaction with home educated students. Since homeschooling is on the increase strategies to attract and retain these students, as well as promote their success, is an important, timely consideration. Many

colleges and universities have recognized home educated students as assets to their institutions, and there are a growing number of admission departments actively recruiting this population (Ray, 2004). This study was designed to assist educational leaders in developing policy to better understand the home educated students and aspects of their first-year experience.

First-year experience programs have been evaluated using a survey at the completion of the program in areas of knowledge, attitudes and behavior (Schrader & Brown, 2008). These areas addressed several different skill types taught in first-year experience programs: study, time management, institutional awareness and appropriate interpersonal behavior. Proficiency in the skills indicates an ability to become successful in higher education and the acquisition of necessary social skills.

The purpose of this quantitative, comparative study is to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. There was a relatively small amount of research about home educated students and their first-year experience in higher education. This study added to the research, providing insight for policy decisions.

Research Questions

1. What is the demographic profile of home educated students, private educated, and traditionally educated students completing a first-year experience program in a higher education institution, first-year experience program in the following categories: (a) age, (b) gender, (c) race, (d) student's educational experience, (e) parent's level of

education, (f) number of credit hours before participating in a first year experience program, and (g) student's household income?

2. What differences in knowledge exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?
3. What differences in attitudes exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?
4. What differences in behaviors exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?

Conceptual Underpinnings for the Study

Success and retention of students seemed to be affected by both the students' academic skills and relationship or socialization skills when entering the environment of the higher education institution. These skills have been difficult to define. Different groups had varying definitions. The academic skills were agreed upon more easily, including areas like note taking, study groups, and library competence. Relationship and socialization skills was more difficult to define. Sociologists defined relationship socialization in terms of adapting to the cultures, learning the societal moral values, and

learning self-awareness and self-image (Macionis & Gerber, 2011). For this study, the conceptual framework was the Model of Institutional Departure (Tinto, 1993).

Tinto (1993) described a college career as stages of passage. Students were moving from one community to another (Mannan, 2007). In the first-year, this movement was from their home community to the college or university community. This required the student to disassociate to some degree from their former communities and then adapt or assimilate to the new community (Tinto, 1993; Mannan, 2007). There were three main components within this model: separation, transition, and incorporation.

The first component of the model was separation and for most students was defined by their place of home residence and their school (Tinto, 1993). The student must begin pulling away from these communities leaving behind some of the habits and patterns found within those communities. These communities were considerably different from the community the student found when they begin attending a college or university. Often this change in communities and separation was manifested as disorientation and stress (Tinto, 1993). When this occurred some students resorted to flight instead of fight and returned to their former communities. Those who chose to remain in the college or university community experienced some amount of separation from their home community and some amount of assimilation into this new community.

The second component of the model was transition (Tinto, 1993). After achieving separation from their past community, the student began to look for the new relationships which defined their experience in the new community. Most students experienced at least some maladjustment when entering a college or university but had sufficient coping skills. Others were unable to weather the storm and departed the community. Students with the

most difficulties were those who belonged to groups different from the majority, or the norm, found in the higher institution community. These differences could be cultural, gender, racial or ethnic groups, and included small sub-groups, like the home educated student.

The third component of the model, incorporation, was the process of the student detaching from their former community and striving to become a competent member of the new community (Tinto, 1993). The primary mode of becoming a member of the new community was through social interaction with members of the community – students, staff, and faculty. These social interactions required a certain level of proficiency in relationship and socialization. Through these social interactions the members of the community learned the formal and informal rules of the new society. Colleges and universities attempted to ease this transition through programs such as: orientation, first-year programs, social events, study groups, and a myriad of others. Often though, students were left on their own to learn to navigate through some parts of the higher education community (Tinto, 1993).

Since home educated students had a unique experience and perspective to their education, and often to their home life, there was an expectation these three stages were difficult for them to traverse. Relationship and socialization skills were an important and necessary skill in navigating into and becoming a part of the new community; the home educated students – and all other students – were needful of this skill. Thinking of relationship and socialization skills in the context of the ability to learn the formal and informal rules found within the community helped clarify the issue. The Model of Institutional Departure also facilitated in explaining the obstacles present in first-year

experience programs for students of all kinds. The first-year experience programs taught knowledge, attitudes, and skills, which demonstrated an acculturation into the new community of higher education (Schrader & Brown, 2008).

Design and Methods

A quantitative, comparative approach was chosen to answer the research questions. This study addressed a problem of practice. The problem of practice was answered by a comparison of home educated and traditionally educated higher education students who completed a first-year experience program. The approach of the study was a non-experimental, cross-sectional survey design using questionnaires. This approach was chosen so the results taken from the sample can be generalized to the population. The data collection was brief with a rapid turnaround, and participation increased as a result of the economy of design. The questionnaire was self-administered, distributed, and collected on the internet.

The population for the study included Midwestern college and university students. There was a consideration to choose a sample of the home educated and traditionally educated students. This idea was rejected with the intent to have as many participants as possible increasing the support for the research. The size of the population depended on the Midwestern universities participating in the study. The population was chosen using a convenience sample. There was no stratification of the population before the sample was taken, also because the estimated small size of the population.

Documents from the higher education institution were reviewed to provide description of the population within the environment. These documents included descriptions of first-year experience programs, retention, and academic success as well as

demographics of the participants. The questionnaire adapted for the study was developed in an earlier research effort (Schrader & Brown, 2008). The questionnaire included sections on knowledge, attitudes, and behaviors.

With the questionnaire data being collected via the internet, SPSS was used to analyze. Data analysis was completed using the common data analysis method of (a) descriptive statistics and (b) an independent samples *t*-test. The descriptive statistics assisted the researcher in summarizing the main points of the collected data.

Assumptions

There were several assumptions to address in this study. The first assumption addressed a design limitation. The survey addressed skills learned through a first-year experience program. The study assumed these were indicators of success and retention in higher education (Schrader & Brown 2008). The second assumption also addressed a design limitation of the study. The study assumed the survey indicated a proficiency in socialization into the new community of higher education (Schrader & Brown, 2008). Both of these assumptions were controlled by using a survey which was already used for these purposes. There was a difference in group size between the two groups, with the homeschool educated students having fewer responses than the traditionally educated students. This was a result of their being a smaller percentage of home educated students in the freshman population.

Definition of Key Terms

The study of first-year experience programs and homeschooling resulted in considerable research (Davis, 2011; Schrader & Brown, 2008; Tinto, 1993). Throughout

the research there were differences in the meaning of some of the key concepts. This section provides the definition of the terms used for this study.

Socialization. Socialization was defined as learning the formal and informal rules found in the new community of higher education (Macionis & Gerber, 2011).

Traditionally educated. Traditionally educated students were students enrolled in higher education that graduated from secondary education in a public or magnet school.

Home educated. Students enrolled in higher education that graduated from secondary education while being educated at home by a parent, tutor, cooperative or parental designee were defined as home educated.

Privately educated. Students in higher education that completed K-12 education through graduation from a private, or religious school.

Success. Success was an increase in the percentage of students who continue from the first-year of matriculation in a higher education setting to the second year of matriculation.

Retention. Retention was the percentage of students who remained at a higher education institution from one academic year to the next (Tinto & Pusser, 2006).

Knowledge. Knowledge was a theoretical dimension found to be important in measuring retention and was defined as the information necessary to increase the retention of a first-year higher education student (Schrader & Brown, 2008).

Attitude. Another theoretical dimension found to be important in measuring retention and was defined as the thinking processes necessary to increase the retention of a first-year higher education student (Schrader & Brown, 2008).

Behavior. The final theoretical dimension found to be important in measuring retention and was defined as the actions necessary to increase the retention of a first-year higher education student (Schrader & Brown, 2008).

First-Year Experience Programs. First-Year Experience Programs were programs instituted by higher education institutions designed to assist students in the transition the high school setting into a college or university setting (Chambers, Smith, Orvis & Caplinger, 2013).

First-Year Seminar Program. An alternate name for a first-year experience program was a seminar program instituted by higher education institutions designed to assist students in the transition the high school setting into a college or university setting (Chambers & et al., 2013).

Separation. One of the stages of departure in which the student was in the act of departing and detaching from the home environment by a student in their first-year at a higher education institution (Tinto, 1993).

Transition. Transition was also one of the stages of departure where the student was in the act of beginning to build social relationships and identify with the higher education institution by a student in their first-year (Tinto, 1993).

Incorporation. The last stage of departure was defined as the act of completing the transition and identifying with the higher education institution by a student in their first-year (Tinto, 1993).

Significance of the Study

This study added to the body of knowledge about home educated students in the higher education setting. There was a paucity of research about home educated students in

higher education (Cogan, 2010). There was research about the educational preparedness for students who are home educated (Dumas, Gates & Scwarzer, 2010), but little that extended beyond that context. Research needed to be extended into the first-year experience programs and how the home educated population adapts to programs designed for the traditionally educated student population. The retention of non-traditional students in higher education was another area where additional research was warranted (Cogan, 2010).

Since homeschooling has been a growing phenomenon in primary and secondary education there was need for additional research in how to integrate and acclimate those students into higher education, which had for several generations been dominated by students educated primarily in public education and to a lesser extent in a private education setting. Additional research had the potential to unearth the differences between these groups and assist faculty and administration in how to adapt first-year-experience programs to accomplish the goal of retention. The difference in culture between these two groups of students needed exploration, particularly how socialization impacts the different groups as they enter higher education institutions.

There were many aspects in first-year experience programs and addressing the needs of the home educated students that may also bring additional understanding for other small groups with little representation. Home educated students were just one of the small sub-populations found in higher education institutions. There was potential for this study to shed light on those other groups: their potential differences, and how to study those differences. These groups included students in racial, ethnic or cultural groups, religious communities, economically disadvantaged and first generation students.

Limitations

This study was limited by the size of the population sample and the relative homogeneity of the population demographics. Additional research with larger samples would have provided a breadth of understanding and allowed the researcher to delve into racial, gender, cultural, and socioeconomic differences within the home educated. There were many facets of study within this subset of the higher education student population that were not studied.

Educational leaders, parents of home educated students, and home educated students all have the potential to benefit from this study. Educational leaders might use the results of this study to tailor first-year experience programs to their home educated students and to adapt policy to assist with the retention of this population of students. Particularly those institutions who are looking to increase recruitment of the home educated. Even those organizations that are only looking to increase retention of this population may find it helpful in providing context and description to the home educated student. Parents of home educated students and the home educated student may find this study provides insight into future obstacles. Gaining a better understanding of this population would serve all of the stakeholders and allow for more informed decisions.

Summary

Home educated students have been a growing population in higher education. Universities and colleges have not yet learned how to tailor programs and services to this subset of the student population. There needs to be more research on the home educated population compared to their traditionally educated counterparts. One area in particular is the first-year experience program. These programs assist the higher education institutions

in acculturating students into the new community of higher education. Research in this area could help universities, colleges, and their administrators make informed decisions on the development of these programs in the future.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Throughout history, homeschooling has had time when it has been controversial, for the government, educators, communities, and families. The United States, while not the only country with a home educated movement, has had one of the strongest. The current home educated movement started as a progressive group of families wanting to educate their children with methods outside the norm and in subjects outside the norm (Gaither, 2008). Homeschooling has become a mainstream, albeit small, movement growing in popularity. While initially reticent, higher education institutions warmed to the idea of home educated students and have instituted policies and procedures allowing these students to matriculate in their institution with relatively little more difficulty than the traditionally educated student (Wilhelm & Firmin, 2009).

First-year experience programs in these institutions have been designed to ease the transition for students from their home environment to higher education environment (Jamelske, 2009). These programs have developed over the past three to four decades. Most often these programs have been directed at the traditional students, but there had been recent progress to modify the programs to meet the needs of minority groups (Phillips & Case, 2013). Homeschooling was one of those groups that has not often been considered as a focus group for the first-year experience programs, leading to little information about the effectiveness of these programs in meeting the needs of the group and fulfilling the goals of the first-year experiences programs.

History of Homeschooling

As far back as Socrates, there have been individuals who have questioned the benefit of a public, civic education or a private, philosophic education (Schaub, 2002). Socrates, a philosopher and teacher, saw the benefit to a private instruction and the encouragement of questioning and contemplation. John Locke, a philosopher and teacher, agreed with private instruction and added that the education should take place at home to promote security and family values, thus making Locke's belief utilitarian rather than philosophic (Schaub, 2002; Tuckness, 2010).

Locke's view on education was twofold, both pedagogical and political (Tuckness, 2010). Pedagogically, he felt education could greatly influence children because they are easily influenced and education makes up the greatest part of adult formation. Politically, Locke believed in liberty and the right of parents to choose education for children even when it appears to be a mistake (Tuckness, 2010). Locke's seminal views helped mold and prepare the mind and culture of North America and eventually was used as a proponent of homeschooling by parents.

In North America, the earliest traditions of education have been it was a private matter and, as a result, it is not found as a right in the constitution (Wilhelm & Firmin, 2009). Circumstances in the early history of the United States dictated private schooling or homeschooling because there was no other option present at that point in history. There were typically strong Christian foundations to educational pursuits because of the cultural makeup of the population within the country. The Bible often served as the primary textbook and as a piece of literature (Wilhelm & Firmin, 2009). Even though in the United States private education or homeschooling was the primary model of education there were

early public schools forming. These tended to be supported by the local government through taxation.

Public education has been present in the United States since the 1600s (Davis, 2011). This happened in spite of John Locke's encouragement to keep education within the home (Schaub, 2002). The first public schools were founded in New England and frequently had a religious component (Davis, 2011). Compulsory education began almost two centuries later in 1789 when Massachusetts passed the first compulsory education law (Davis, 2011). By 1918, all of the states had passed compulsory education laws (Davis, 2011). Prior to public education laws most children were taught by their parents. Even when public education first began it was an extension of the home – the one room schoolhouse (Davis, 2011; Schaub, 2011). When compulsory education laws were passed there was a shift in education toward public education, but home educated and community run private schools were still a part of the educational system used by the citizenship (Wilhelm & Firmin, 2009). These were primarily found in remote areas where it did not make sense to build a school or the school was too far away to allow for regular attendance by the communities' children.

In 1925, in *Pierce vs. Society of Sisters* the Supreme Court ruled against compulsory public school attendance (Davis, 2011). Even though it was unknown at the time, this was a landmark case for the modern home educated movement. Homeschooling from 1990 through 2015 was becoming more popular. Homeschooling was the primary way of educating children in the 19th century and was a generally accepted practice for the basic education of children in both the United States, North America, and in Europe (Klipsch, 1995).

Typically, early public schools were taught by a woman. This woman would have resembled an aunt, and the teaching took place in a group setting with a variety of ages in one class (Schaub, 2011). So even in public education, in the United States, the educational model originally resembled the homeschool roots. It was only over time and with the increase of bureaucracy and consolidation that the original model of the one room community school house dissolved (Schaub, 2011). The industrialization of the United States and the move from rural to urban settings for a large segment of the population also contributed to this need for a new way to provide education.

The countercultural left of the 1960s and 1970s pulled out of society and created alternative societies mostly through communes (Gaither, 2008). Autonomy and personal freedom were important. Education of the children in the communes was no different. Homeschooling and less often commune schools were the standard format of teaching. Researchers consistently found positive outcomes to this type of education. This education style was a reversion back to former principles rather than a rejection of the public education system (Schaub, 2002).

John Holt was at the head of this movement leading back toward homeschooling (Wilhelm & Firmin, 2009). Holt was described as a progressive, left-leaning, counter cultural, libertarian, advocating a decentralization of education with an increase in the rights of parents. Holt supported placing the power and responsibility of education back in the home. This was often cited as the origination of “laissez-faire” homeschooling and the roots of the contemporary trend called “unschooling” (Wilhelm & Firmin, 2009).

The countercultural right of the 1970s and 1980s noticed the cultural changes taking place in society (Gaither, 2008). Society was becoming more liberal and the

countercultural right wanted to insulate itself from the changes in values this cultural shift represented. The countercultural right adopted the educational format of the countercultural left and began a homeschooling movement made up of those with conservative values. There were many changes in state standards from 1975-1993, as a result of these movements in education (Wilhelm & Firmin, 2009). This caused a drastic swing in the legality of homeschooling; in 1980 only 30 states recognized home educated as legal. By 1993, all 50 states had set standards allowing homeschooling to be performed legally (Wilhelm & Firmin, 2009).

Modern homeschooling happened for many reasons. The left-leaning, progressive counterculture became more accepted in the mainstream culture, and some families decided to withdrawal the education of their children from this phenomenon (Gaither, 2008). The rise of suburbs increased the value of privacy in families, leading to a willingness and desire to educate their children apart from the government and values impressed upon by the society. The child was seen by this new homeschool movement as a valuable self, holding great potential. Homeschooling allowed parents to insulate their children from the perceived external negative influences and still be educated, while maintaining their important familial values.

Public schools increased in size, and as a result, bureaucracy increased and local control decreased (Gaither, 2008). This trend led to schools becoming less responsive to local parents and the local community needs. An example of this was the perception by some families their children were being diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) by the educational system unnecessarily (Miles, 2004). Some parents considered the increase in student diagnosis of ADHD as evidence of a problem with the

school system rather than with their children. This group of parents claimed the educational system used this diagnosis as a means of behavior management through medication. Regardless of the veracity of this claim it demonstrated the distrust, by some families within society, of the public school system.

Values clarification which was considered counterculture in the 1960s and the 1970s became a part of teaching in the public school system in the 1980s and 1990s (Wilhelm & Firmin, 2009). Values clarification was a move away from the idea of absolute truth and suggests truth is defined by the reality of the individual and should be determined by valuing. Values clarification was seen by some parents as an emphasis of moral relativity and a rejection of not only absolute truth but also Christian character development (Wilhelm & Firmin, 2009). Some in society, particularly families with conservative beliefs and identifying as Christian, found this to be a secularization of moral and character development. These changes in education contributed to the interest in these families with conservative beliefs to consider home educated. Families who home educated in the 1960s through 1990s often had much at stake in their choice of education. They risked additional financial expense, considerable time commitment by one or both of the parents and potentially breaking the state legislatures' public school compulsory attendance laws (Wilhelm & Firmin, 2009).

Modern homeschooling has been controversial from the early days of homeschooling – 1960s through 1985 – when it was illegal throughout most states. There have been several court cases on the legality of homeschooling and the parent's freedom to choose the educational path of their child. One example of this is a case in Texas, *Leeper vs. Arlington Independent School District* (1987). In the *Leeper* case, homeschooling

families were charged and prosecuted for teaching their children at home. The families were prosecuted using the mandatory attendance education laws. The Arlington School District appealed the decision all of the way to the Texas Supreme Court. The Supreme Court found in favor of the homeschooling families. Many states have a similar case which lead to the legalization of homeschooling.

Even with these numerous legal and cultural forces working against the homeschool movement it continued to grow. In 1991, the United States Department of Education released a study showing the number of home educated students in the United States at approximately 300,000 students (Klipsch, 1995). By 1994, the number of students had risen to 500,000 – 850,000, according to a report by the National Home educated Research Institute (Klipsch, 1995; Wilhelm & Firmin, 2009). The number of home educated students continued to grow. In 2003, over one million were being educated at home and estimates suggest that by 2010 the number would rise to three million (Phillips, 2010). In 2014, the percentage of 3 percent of children as home educated remained constant (U.S. Department of Education, National Center for Education Statistics, 2013). When coupling this “new” way of education with the phenomena of homeschool cooperatives, homeschool families collaborating in an educational group, it is hard not be reminded of the past and how it resembles the one room schoolhouse from the start of public education in the United States (Schaub, 2002).

Homeschool education was not strictly a United States or even North American phenomenon and was found throughout the world (Kraftl, 2013). In the United Kingdom (UK), this amounts to somewhere between 50,000 and 150,000 home educated students (Conroy, 2010). Whereas, in the United States homeschool education was primarily

engaged in by White families. In the UK there was evidence of more diversity within the population of home educated (Kraftl, 2013). Decisions to participate in home educated in countries outside of the United States were affected more by the socio-economic status of the families and the political and legal considerations of providing schooling in a home environment. The UK was an example of a country outside the United States where homeschooling was legal but was being subject to additional scrutiny.

Key Figures in the Homeschooling Movement

There were many key figures in the homeschooling movement, but three of those who were most important in the modern homeschooling movement were John Holt and Raymond and Dorothy Moore. Holt was a proponent of an alternative to public education in the 1950s through the 1980s (Klipsch, 1995, Wilhelm & Firmin, 2009). He was an educator and education reformer who became frustrated in his attempts to improve the public education system, causing him to reconsider the core beliefs of the educational system (Holt, 1999). He identified artificiality in the public school setting as a problem and suggested approaches that encouraged interest-based learning with ties to real world experience

One of the first advocates of the modern homeschooling movement was Raymond and Dorothy Moore. In their book, *Better Late Than Early* (Moore & Moore, 1977), they suggested starting students in education at a later age was a benefit to their long-term education goals. They hypothesized children were not ready developmentally to begin formal education till the age of 8 or 9. The answer by the Moore's to this issue was for parents to teach their children at home, bypassing the public school and giving parents'

responsibility for their children's education. As a result, their book became a champion for the modern homeschooling movement.

Reasons for Homeschooling

There were many reasons for homeschooling. One of the primary reasons given for a family choosing to home school their children was for religious reasons (Klipsch, 1995; Wilhelm & Frimin, 2009). The 1980s saw a revival of conservative viewpoints in both the political and religious arenas. As a result, many of these parents saw homeschooling as an opportunity to have more direction in the educational content and teaching styles presented to their children (Klipsch, 1995). Even though religious reasons were often given as a reason for homeschooling, this reason was just one of the many reasons families gave for choosing this educational model of learning (Klipsch, 1995). Families who home educated for religious reasons fit into a certain category of ideologue; these families primarily want to teach a specific set of values to their children based on their spiritual beliefs (Fields-Smith & Williams, 2009).

The other major category of homeschooling families is pedagogues. These were families who home educated because they were dissatisfied with public and private education or believed they could provide a better education for their children at home. This dissatisfaction was for a variety of reasons, like the child may not be challenged by the material, the school may have poor educational outcomes, or the students' educational needs may be going unmet. Often the students of families in the category of pedagogues were identified as being gifted or having special needs (Fields-Smith & Williams, 2009).

It would be easy to assume that families neatly fit into these categories of ideologues and pedagogues. This was not the case; often the reasons for homeschooling

vary and you might see this more as a continuum with ideologue on one side and pedagogue on the other. Families may have been on one side or the other of this continuum, but they may also fall somewhere in the middle, with reasons for homeschooling in both of these categories.

The ethnicity of the families also played a role in the reasons of families to homeschool. Black parents had a different ethnologic viewpoint of educating at home (Fields-Smith & Williams, 2009; Princiotta & Bielick, 2006). Black students have historically been underserved and are represented disproportionately in both programs for the gifted and remediation. For some Black families, homeschooling was an opportunity to wrest control of their children's education from a historically unfair system and empower the parents to ensure the student's education. These families were able to eliminate the gap in achievement between Black and White students by assuming full and ultimate responsibility and decision-making for the education of their children (Fields-Smith & Williams, 2009).

Black families expressed the current educational system has an underlying racism or prejudice and is built on a monoculture approach (Fields-Smith & Williams, 2009). Black parents valued the integrated learning experience that was possible in homeschooling, utilizing involvement in homeschool associations, educational trips, sports and educational cooperatives. Research has also shown that home educated Black families infuse ethnicity into the educational curriculum as a way to balance White ethnocentric historical perspectives. The ability to modify the curriculum to show a viewpoint more representative of Black people was identified as an important reason to educate at home. Homeschooling allowed Black families to step out of the White majority norm in culture

which presented a negative stereotype of people who are Black. These Black homeschooling families allowed students to form a more positive identity outside of the dominant culture (Fields-Smith & Williams, 2009).

Ethnicity may also include a language besides English. Homeschooling allowed for the inclusion of multilingual education based on the individual student's needs (Carlson, 2009). Families with two languages spoken at home can benefit from instruction in both languages, leading to native spoken fluency in both languages. In some public schools this was happening but primarily with Spanish. If a student wanted or needed education in a language besides Spanish, the homeschool setting had some advantages. Education at home allowed for flexibility, specialization, and individuality that was difficult to accomplish in the traditional public school (Carlson, 2009).

It would be neglectful to write on the reasons for homeschooling without at least briefly mentioning some of the sacrifices to families that occur as a result of undertaking this educational model. Income was a sacrifice often identified as an area where families were at a disadvantage from the majority of other families (Fields-Smith & Williams, 2009). Often this choice of education required one of the parents to remain at home or at least work a part-time job instead of full-time employment. This had a long term effect on the amount of total income the family would make over the course of life, but it also impacted the career of the parent who remained at home. Usually, at least one of the parents decided to postpone a career until homeschooling was complete. Another area of sacrifice was in time. Educating students required time; time to prepare, time to teach, time to evaluate. This was time that otherwise could be spent in the pursuit of other

interests. Even for families with a parent that was not employed there was a substantial time commitment involved in the practice of homeschooling.

Acceptance of Homeschooling

The acceptance of homeschooling within society and society's institutions and structures was not a simplistic matter. There were a multitude of interests, forces, agendas, beliefs and values that impacted a home educated students' acceptance into these societal institutions. In a liberal democracy, educational freedom has always been considered a parental right (Merry & Karsten, 2010). Historically in these democracies, parents have had the right and responsibility to raise their children, including how to educate those children. Even before homeschooling was determined to be legal in the United States, parents were able to have choice in public or private education.

For homeschooling, the conflict comes when trying to balance parental rights, the educational interests of children, and citizenship within the democracy (Merry & Karsten, 2010; Reich, 2002). Early on in the modern homeschool movement there was considerable conflict between some of the state and local public school systems and the families who pursued homeschooling (Isenberg, 2007). These public school systems treated homeschooling as a form of truancy and educational neglect. This included school officials reporting home educated students to truancy officers, social service agencies, and law enforcement.

As late as 2008, the court system has continued to make decisions impacting homeschooling. In the California Court of Appeals one case, *In re Rachel L.*, the court stated the choice to homeschool was not a right of parents (Olson, 2009). This decision changed the current law allowing for homeschooling and made public education

mandatory with a few exceptions, none of those exceptions included participating in homeschooling. This effectively made homeschooling illegal. After a public outcry and petitions by numerous individuals and organizations, the court reversed the finding and reestablished parents' right to direct their own children's education (Olson, 2009). This led to a court precedent giving parents the liberty to direct their children's education. This can be overruled for individual students in cases of abuse and neglect (Olson, 2009). Court rulings like this one show a judicial acceptance of homeschooling, which could lead to a greater acceptance culturally and by society.

Even in court rulings and precedents there has remained controversy about the application of the parent's rights to choose education for their children (Marples, 2014). There was a belief by some that parents have no rights concerning their children, and responsibility for the children should be shared by the state. This belief was one of the conflicting views demonstrating opposition to homeschooling. Parents should only have a partial say in the choice of education for their children. This partial say was to be weighed by considering the interests and needs of the student, with no presumption of a parental right to decide their child's educational setting. While this is an extreme view, it has been one with a growing voice.

The conflict of the rights of parents and educational interests of children seemed clear, but the conflict of citizenship needs further explanation (Merry & Karsten, 2010). Citizenship, a person who is recognized by a specific nation or state, can be a nebulous concept once the definition strays from the usual use. Citizenship for some also meant an equality of value among beliefs, a shared experience, and the freedom from coercion in the development of beliefs (Reich, 2002). What an individual believes about these three

concepts – parental right, educational interest of children, and citizenship – impacts beliefs on homeschooling.

Citizenship has also been defined by some as including participation and compliance in national beliefs, values, and laws (Merry & Karsten, 2010). Because the public school system functions as more than just a vehicle for educating students, when a segment of the population withdraws from this institution the withdrawal causes problems in the other systems attached to the public school system. For example, immunization laws were often met through the participation of public school systems (Waddell, 2010). Children without the appropriate and correct documentation of immunization could not be enrolled in the public school system. This allowed for the majority of children to be vaccinated and helped stem outbreaks of disease and illness.

Another example of the problem homeschooling causes in societal systems was with the state social service agencies and law enforcement. For many years these institutions could depend on where and when students were occupied in education at the public school (Waddell, 2010). This was no longer the case for home educated students who utilized the freedom of this schedule. Some social service and law enforcement agencies had argued that homeschooling led to a decline in the reporting of abuse and neglect. Abusive parents could decide to remove students from the school system to hide abuse. Problems like these reflected societal and cultural values - population immunization and neglect and abuse reporting – that required institutional change to continue to meet goals and outcomes. These problems impacted home educated acceptance even though they were not strictly focused on the practice of the home educated students but on these other concerns.

A change happened in the 1980s and 1990s through the lobbying efforts of many local and national homeschool groups (Isenberg, 2007). Homeschooling came into the mainstream when 3 to 5 percent of students in the United States were identified as home educated; the culture of society became more accepting of the phenomenon (Isenberg, 2007; Wilhelm & Frieman, 2009). Many community resources began to see the need to respond to these students. Libraries started tailoring specific services to the home educated patrons, partially because of the shared values of literacy and learning throughout life. Public libraries were also a natural fit to the homeschool families. Public libraries began offering additional services outside of literature to benefit the learning taking place in the home. These library services included educational programs, tours, interlibrary loan, access to technology, and numerous other programs (Klipsch, 1995).

Some public school systems had such a drastic move of home educated students from their districts a change was implemented in school philosophy. Schools in some of these districts wanted to attract these students back into the district (Demski, 2010). Districts surveyed the parents and with those results developed creative ways to meet the needs of those parents. These creative solutions included online schools, partial public schooling and Advanced Placement courses – online and in-person – open to home educated students.

Requirements for Homeschooling

Every state in the United States allows for homeschooling. Over the past thirty years homeschooling has moved from illegal or, at best in a legal gray area, to legal. Homeschooling has a favored status in many states currently having little or no regulation (Waddell, 2010). This has often lauded as a result of the strength of the homeschool lobby.

This lack of regulation contributed to the difficulty in estimating the number of total home educated students. Some states have no mechanism to track these students and as a result were only able to estimate the home educated student numbers (Waddell, 2010).

Each of the states regulated the practice of homeschooling differently (Kreager, 2010; Waddell, 2010). There were three types of regulation states were classified into regarding homeschool regulation; “private school laws, equivalency laws, and home educated” (Kreager, 2010, p. 234). States using the private school laws regulated homeschooling like they would any other private school and, as such, designated homeschooling as a private school (Kreager, 2010). This type of regulation can take different forms. Homeschooling could be an individual household, but homeschooling could also be numerous households collaborating together.

The second type of homeschool regulation – equivalency laws – allowed students to be exempted from the compulsory attendance laws so long as the students were receiving equivalent instruction somewhere other than the public school (Kreager, 2010). In a state with equivalency laws, the regulation was typically done through a variety of periodic reviews. These reviews looked at areas like curriculum, time spent schooling, teacher competency and standardized tests. Sometimes the homeschool household must notify and even receive permission from the local school superintendent before beginning to homeschool.

The third type of regulation was designated as home educated. States with these types of law actually label homeschooling as a type of education unto itself (Kreager, 2010). This type of regulation typically gave the homeschooling family the most freedom. Regulation could include standardized tests, but they could also rely almost entirely on the

teacher of the homeschool to ensure education. These states often had minimum requirements which, if met, protected the homeschool household from additional regulation. These requirements encompassed days in yearly instruction, amount of time instructed each day, and performance reviews on the students.

The different states varied not only on how homeschooling is regulated but also on how strict regulation was performed. Standardized testing of some kind was required in 25 states but generally did not dictate the specific test or require the testing be completed annually (Waddell, 2010). Homeschooling advocates defined high regulation as the following: educational requirements for the teachers of homeschool curriculum, review and approval of the educational curriculum, and evaluation and observation of the educational environment and the teaching process. In 2010, six states met the standards of high regulation, as defined by homeschool advocates.

National educational requirements like No Child Left Behind and Common Core State Standards did not apply to students educated at home (Waddell, 2010). There was a two-fold reason for exempting home educated students from these regulations. First public school educators and administrators did not want to be responsible for the scores of students that were not being taught in public schools. Second, the homeschool advocates did not want to be regulated by public school outcomes. The homeschool advocates feared the outcomes would influence the curriculum taught at home and did not want the additional regulation caused by adherence to public school outcomes.

Academic Preparation

When discussing home educated students, or any non-traditionally educated students, academic preparation was often an issue that has been raised. Were home

educated students able to compete with other students? Some in society wanted to know if home educated students were going to suffer academically as a result of their academic history. Some admission officers in higher education have believed home educated students will outperform their traditionally educated counterparts (Cogan, 2010). Some research has shown home educated students came into college with higher ACT scores, earned more credits in their freshman year, and had a higher GPA in their freshman year than traditionally educated students (Cogan, 2010; Ray 2010). Mason (2004) found home educated students had better than average scores on both the ACT and the SAT. Home educated students typically were better prepared academically than their fellow students.

Parents teaching their children have had a variety of academic attainment they bring to the homeschool setting. Over 65% of parents providing instruction had achieved at least a bachelor's degree or higher (Ray, 2010). Their instruction was measured by a variety of standardized tests. A review of all of those tests used by home educated students had a composite score of 86 as a homeschool national percentile mean (home educated students only) compared to the national percentile mean (all students nationwide) of 50 (Ray, 2010). This review is an indication that home educated students were academically prepared as they exited the arena of education at home. There was some correlation between learning attainment by home educated students whose teachers (parents) had a teacher certification. Those students who were taught by parents without the teacher certification showed a slight improvement in scores on the variety of standardized tests over home educated students who were taught by parents without a teacher certification (Ray, 2010).

There has been an assumption the education received by home educated students would be one-sided (Murzluf, 2009). Home educated students would have little experience performing some of the basic skills of education. These skills, beyond the basics, included activities like collaborative learning, preparing portfolios, revising work and participating in peer workshops. Even in areas where home educated students were comfortable and received experience there was concern the beliefs and values of the students' family, and reflected in the curriculum, left the homeschool students unable to consider other viewpoints (Murzulf, 2009). Particularly, texts and curriculum with a Christian value basis were identified as potentially problematic to the students. The concern being that these texts and curriculums were skewed and presented information in a way that either manipulated the information or only presented information that passed the litmus test of the doctrine, values and beliefs of the Christian religion.

Academic ability for home educated students was not often an area of concern, possibly because considerable research supported the ability of homeschool students to perform in the academic world. Most concerns were in the ability of the home educated students to adopt liberal and enlightenment values, like tolerance, privilege, inclusiveness and heterogeneous culture (Murzulf, 2009). This concern stemmed from the classic stereotypes of homeschooling families. These stereotypes included: fundamentalist, independence from the government, and distrust in the culture. This concern has been described as "cocooning," "White flight," and "single-mindedness" (Murzulf, 2009). Some struggled with the idea of a family's ability to decide on educational independence from the public and government, believing the withdrawal from public education can impact the ability to be an active citizen living in a democratic country (Reich, 2002).

Comparative research of social adjustment showed repeatedly home educated students fared well in socialization when compared to their traditionally educated peers (Medlin, 2013). When compared to the publically educated, students who received homeschooling had improved relationships with peers and adults, were more satisfied with their life, felt socially responsible with moral reasoning capabilities, and in general had less emotional instability.

History of Acceptance into Higher Education Institutions

Academically, homeschooling has often been debated. Available research showed home educated students outperform traditionally educated students (Wichers, 2001). Home educated students on average scored between the 65th and 80th percentile on standardized tests. Traditionally educated students averaged the 50th percentile on standardized tests. Research from 1994 found 53% of home educated students fall in the top quartile percentage rank of those taking the standardized tests. The Ohio Department of Education found the home educated were not only being accepted into higher education but are actively being recruited by these institutions (Wichers, 2001). Generally, home educated students have been in demand amongst higher education institutions (Wilhelm & Firmin, 2009). Not only did those students have ACT and SAT scores that were above average, but they also tended to finish their degrees. Most higher education institutions had this as a goal, to improve the rate of degree completion. Admission departments have sought out students who had a history of meeting this goal (McCulloch, Savage & Schmal, 2013). These findings suggest the home educated students are not at a disadvantage when applying for higher education. In fact, they have had some advantages since at least some institutions have made an effort to find home educated students.

There have been difficulties for the home educated students in being admitted to some higher education institutions. Some states have been struggling to update policies to allow for the home educated student. The state of New York, in particular, had specific requirements which were burdensome for home educated students related to the high school diploma and admission to universities and colleges (Callaway, 2004). The policies were not intentionally discriminatory, but they had not kept pace with the changing face of education. This was complicated by the policy's impact of financial aid. This has an impact on the institutions within the state. The home educated students were faced with the decision of a timely, confusing, and frustrating process for admission or choosing to go out of state to find an easier enrollment process.

Stereotypes fueled some of the difficulties experienced by home educated students (McCulloch & et al., 2013). While as many as 90% of admission office staff anticipated home educated students to fare well as well academically as traditional students, only 55% of those staff anticipated those same home educated students to fare well with the social pressures of higher education. This stereotype has led some home educated students to feel additional pressure when entering higher education.

Socialization as an Issue for Home educated Students

A commonly cited criticism of homeschooling has been a lacking in socialization (Romanski, 2006). When a student was educated in the home the conjecture was the student had little or no interaction outside the home leading to an inability to interact socially with others. This belief led to the creation of some presumptions. The child was educated entirely in the home setting and in the course of their day there was little or no contact with people outside the home. The perception of school administrators has been

home educated students do not receive sufficient socialization outside the home (Mayberry, Knowles, Ray & Maclow, 1995). In fact, often times this was the main reason opponents to homeschooling have for their opposition.

The debate on socialization has been divided into two camps of thought (Lebeda, 2007). The first camp believed socialization of children was dependent largely on time with peers. For children to learn to navigate society and become active members within the community they have to spend time with their peers. Without this time together, they were unable to experience social networking within their peer group resulting in stunted development or inability to socialize with others. This affected personality development, the ability to work with others, and the learning of social skills.

The second camp believed socialization was not primarily acquired by spending time with peers (Lebeda, 2007). A more accurate description was that socialization did not have to be primarily acquired by spending time in peer groups. Socialization could be obtained by children interacting with adults as well as children (Lebeda, 2007). Socialization could also be difficult for children to experience depending on the size of the group. A large group of children would limit the opportunities for meaningful and positive social interactions. Many of the interactions that take place within a group of children were negative and could be considered harmful. In this camp there was also a refutation of the idea that socialization takes place merely in a school setting. Socialization could take place outside this setting in community, church, civic, music or sports groups and activities (Lebeda, 2007). This camp of thought saw homeschooling as an opportunity to provide children with independence and autonomy regarding their learning and values.

Children often learn cultural knowledge informally, just by interacting with the outside world. Informal learning has been a hallmark of the homeschool community (Thomas & Pattison, 2013). Even though informal learning frequently happened in home educated there were a variety of methods parents and caregivers used to educate their children. Families involved in homeschooling were able to tailor the education process to the student and to the lifestyle of the family. For some families, this meant an informal learning style.

This informal learning certainly applied to academic preparation, but it also applied to socialization (Thomas & Pattison, 2013). In a socio-cultural context, children were acculturated, in part, to their environment through everyday experiences. These experiences happened with the parent or caregiver frequently being unaware of the learning taking place. Socialization in the home environment was a result not of a direct effort but an indirect consequence and a commitment to the belief that children would learn these socio-cultural standards through daily interaction with the world. In human development, this was called the zone of proximal development (Hodkinson, Biesta, & James, 2008; Thomas & Pattison, 2013).

The zone of proximal development described a child's ability to accomplish tasks, learn strategies, and develop skills with the help of an adult or a more capable peer (Thomas & Pattison, 2013). This theory could be applied to socialization development in the homeschool environment. In a traditional public school setting, the teaching of social skills was often explicit, described, and planned with a specific curriculum. Homeschool children have often achieved this informally by developing social skills within the zone of proximal development provided by a parent or caregiver. These children have been aided

in their social development through modeling by parents, imitation of adults and more advanced peers, and direct assistance by parents and caregivers.

Some opponents of homeschooling have suggested that homeschooling can be used to isolate children (Barnett, 2013). The children were intentionally isolated, by parents, away from the community and the environment. This was done to facilitate abuse and neglect or to impose strict values including the development of socialization skills. Difficulties arose when trying to critique these claims for a couple reasons. Homeschool regulations in many states were non-restrictive, and research was not readily available. As a result, socialization has continued to be an area of debate.

First-year Experience and Retention

A relatively new trend for most institutions in higher education was the development of first-year experience programs. The first programs originated approximately 40 years ago but have experienced steady growth in universities, colleges and community colleges. These programs were meant to increase the retention of freshman from the first-year of college to the second year. Almost 95% of higher education institutions with four year programs had a first-year experience program of some kind (Jamelske, 2009). There were a few areas that were important to understand in regards to First-Year Experience programs: First-Year Experience program goals, innovations in First-Year Experience programs, Success within First-Year Experience programs, and refocusing the goals of First-Year Experience programs.

First-Year Experience Program Goals

First-Year Experience programs were comprised of various components. Frequently they included an extended orientation for first-year students but sometimes

included student learning communities where groups of students take the same courses. The first-year programs almost always had courses attached to the program that were mandatory and had a credit and a grade. The goal of these programs was to integrate the student into the community of the higher education institution (Jamelske, 2009). There was mixed data on the success of first-year experience programs and their ability to produce the stated desired outcomes.

Nevertheless, universities, colleges, junior colleges, and community colleges have been using these programs in an attempt to address the one in four students who were not prepared for higher education (Clark & Cundiff, 2011; Escobedo, 2007). Retention has often been defined as the ability of the higher education organization to retain a student from admission until the completion of a degree. The interventions provided by these programs had a few criteria identified that were necessary to be successful in the arena of retention. First of all the program needed to have an early identification of at risk students, followed by an intervention that was continuous, early and intensive (Escobedo, 2007). The model of institutional departure (Tinto, 1993) identified integration in both the academic and social arenas and encouraged the student to become a part of the organizational culture which lead to a result of higher retention within the institution.

Academic success has frequently been measured by reviewing student records. This was accomplished by looking at the GPA of the students in higher education coursework, how much time the student spent in studying, how much the student enjoyed learning, and how well the individual identified as a student (Clark & Cundiff, 2011). This has often been the focus of retention programs. It has been more difficult to measure the social aspect of the student. Retention programs have measured social integration through

the number and quality of friendships the student developed at the institution of higher education, along with the amount of time spent with faculty members outside of the classroom and involvement in social groups or organizations.

Some of the interventions used in retention programs have affected both the academic and the social aspect of the student. Learning communities and student mentoring impacted both. In learning communities, the students shared values, struggles, and relationships with fellow students. The students involved in these communities have described the higher education experience as richer, both academically and socially (Braxton, McKinney, & Reynolds, 2006). Student mentoring has led to retention of students as well, in part, because of the shared relationship that developed in the mentoring service.

Attrition has been defined as the lack of completion of academic goals and educational objectives, which in turn lead to exiting the higher education institution (Schuetz, 2008). The cause of attrition in higher education has been constantly under debate. Faculty, staff, and administrators in institutions of higher education have frequently given the cause of attrition as the admission of students who were not qualified or less qualified than students from previous cohorts (Brown, 2012). This seemed to be a false statement. Less than 25% of students in higher education drop out because they were unable to succeed academically (Schrader & Brown, 2008; Schuetz, 2008; Morrow & Ackerman, 2012). Seventy-five percent of students drop out because the students' interests and skills were not a good fit at the institution. If student fit in the higher education environment is a barrier in attrition, student fit could be impacted in several ways. Students could make changes to match the institution environment, the institution

could make changes to match the student environment, or both could make changes to achieve a better fit (Scheutz, 2008).

There is evidence that attrition has been impacted by fit to the environment. This fit to the environment was more likely to be successful when the student felt a sense of belonging, competence, and autonomy (Morrow & Ackerman, 2012; Scheutz, 2008). There were many ways these three areas were successfully impacted: close and supportive relationships where the individual was valued, the ability to master the environment and perform well in the environment, and the ability to self-determine what they value in objectives and then the ability to succeed in attaining those objectives. When students achieved these three areas, they became more engaged and less likely to result in attrition at the institution (Schuetz, 2008; Allen, Robbins, Casillas, & Oh, 2008).

Attrition was also affected by students who matriculated at more than one institution or transferred institutions (Johnson & Muse, 2012). Three in five students took courses at more than one institution (Peter, Cataldi, & National Center for Education Statistics, 2012). Some of these students were transfer students from 2 year or community colleges, but it proved difficult for institutions to track those students because they often would take a hiatus between institutions. So even in a simple sounding evaluation of attrition there were many affecting influences.

Even though there had been progress in impacting attrition and retention in a positive manner, the rate of degree completion for students had not appreciably changed over the past 20 plus years (Tinto & Pusser, 2006). Approximately 60% of students who were admitted to a college for a 2 or 4 year degree did not complete that degree within six years (Aud, Hannes, & National Center for Education Statistics, 2011; Sparkman & et al,

2012). This was particularly evident when comparing students based on income. Students identified as coming from high income families (family annual income over \$70,000) graduated with a degree over 55% of the time in six years. Students identified as coming from low income families (family annual income under \$25,000) graduated in 6 years only 25% of the time (Tinto & Pusser, 2006). Students with a lower socioeconomic status had less access to important resources in the social, cultural, financial, and academic domains (Wells, 2008). Higher education institutions have spent much effort at developing programs which resulted in little impact on long-term retention and did not accommodate the wide range of students attending the institutions.

Innovations in First-Year Experience Programs

Higher education institutions have attempted to address these concerns through comprehensive programs. When building a model of institutional action for student success there were several areas on which to focus. Specific programs – for example a business program – within an institution attempted to influence retention on a mezzo, rather than a macro basis (Cox, Schmitt, Bobrowski, & Graham., 2005). More frequently institutions develop a comprehensive program across all programs. Typically, this results in a first-year experience program.

Newer innovations in first- year experience programs led to bridge programs, directly assisting students from their last year of high school into their first-year of higher education (Cabrera, Miner & Milem, 2013). These programs were designed primarily to help students in minority and low-income groups. The focus of these programs was to connect them to both faculty, increase their social connections, and also to teach basic academic skills (Strayhorn, 2011). These skills included time management and study

skills, but also accessing the institutions services, like writing and learning centers and utilizing various library services (Cabrera, et al., 2013). The stated goal of most of these programs was to assist students in transitioning both academically and socially, with the hope of preparing those students with the skills necessary to overcome the common barriers found in transitioning to a higher education setting.

Just like with other first-year experience programs this innovation was attempting to increase academic resilience (Garcia & Paz, 2009). Academic resilience was defined as student persistence in spite of antagonistic conditions (Cabrera & et al., 2013). This resilience was primarily considered a product of individual traits but was also identified as impacted by the available resources from the higher education institution and the community that were available to the individual. Research suggested these targeted programs were a beginning in addressing specific groups found in overall population of freshman cohorts. When budgetary issues arose these were the first programs to be eliminated. This made it difficult to provide ongoing research on innovative programs targeted on minority and special population groups.

Success within First-Year Experience Programs

There have been divergent opinions on what makes a first-year experience program successful. The model for institutional success identified five conditions that must be present for a goal of student success (Tinto & Pusser, 2006). Four of the five conditions are centered on the institution. These conditions were areas where the organization was able to change that would result in improvement with student success. The conditions were commitment, expectations, support, feedback, and involvement (Tinto & Pusser, 2006). Institutions that have a strong commitment and remain committed, including the

investment of resources, have improved outcomes in this area. The institution needs to have high expectations academically, pushing the students to participate in studying outside the classroom. These high expectations need to be coupled with sufficient and helpful advisement. Resources for student support provided students with the necessary additional help when encountering areas the student was unprepared (Tinto & Pusser, 2006). All of these areas needed monitoring through student feedback. Institutions receiving feedback were able to adjust to needs for the students. The last condition relied heavily on the student. Students involved and integrated academically and socially were more likely to have success, particularly in that critical period of the first-year.

Predictors of student success have typically been related to cognitive factors, like ACT, SAT scores, and GPA (Sparkman et al., 2012). But while these were the strongest predictors of student GPA in college, the ability to predict using these was only modest. These were somewhat predictive of GPA, there was no correlation or predictive value in regards to college graduation (Schuh, 1999). Other non-academic achievement factors needed to be considered. Including these factors would give a fuller picture of the student and could add to the predictive possibilities. There was already research suggesting emotional intelligence might play a role in student success and graduation (Sparkman et al., 2012). Some of the emotional intelligence qualities, like empathy, social responsibility, flexibility and impulse control, did predict student success in graduation.

Beyond emotional intelligence other non-cognitive factors that led to student success and persistence in higher education were encouragement by family, positive professor relationships, and class experiences (Kelly, Lavergne, Boone, & Boone, 2012). The non-cognitive aspects moved students toward motivation and social connectedness

which directly impacted on student retention (Allen et al., 2008). This combination of factors led to satisfaction with the academic experience and an increased social support system in the educational organization. Students were less likely to “burn out” and more persistent when these factors were present. Additionally, students felt more accomplished and more emotionally stable. This seemed to be true across racial lines as well, with African American students having similar trends as White students (Hausman, Schofield, & Woods, 2007). These factors along with the emotional intelligence suggested that beyond just academic predictors and support relationship oriented attributes also impact retention.

Transitions into higher education institutions were also impacted by the ability of the student to take previously learned strategies and attitudes and adapt them into the new environment of the institution (Christie, Barron & D’Annunzio-Green, 2013). In addition, students needed to be able to make that transition in a short amount of time (Zepke & Leach, 2010). The most impactful skills were time management and learning independently (Christie & et al., 2013). When the transition was abrupt, happening in a short amount of time, these skills played more of a leading role in retention. This seemed like a basic assumption; the more time the student was able to take in acclimating to the new environment led to more positive outcomes in the programs. Students presented with a short time for transition struggled with loneliness and frustration, identifying faculty and staff as remote.

Refocusing the Goals of First-Year Experience Programs

Higher education institutions used a variety of approaches to addressing the obstacles of first-year freshman. One approach was to identify one specific area and focus

the program on addressing the various aspects of that need. One example was Georgia Southern University (GSU). The institution identified information literacy as the specific area that would produce an impact on retention (Chambers, & et al., 2013). One goal was to focus first-year experience program efforts towards a more academic tone, which prompted GSU to concentrate on library services. The basis of this decision was the change in the amount of information and the increase in the necessary skills to sift through the information towards a desired outcome.

Incoming freshman confidently self-identified as possessing the ability to find, retrieve, and use information, but that perception was often found inaccurate, resulting in a deficiency of ability in information literacy (Gross & Latham, 2009; Phillips & Case, 2013). This was partly attributed to a faculty bias in teaching these skills. Faculty often wanted students to learn through doing (Chambers et al., 2013). Students were expected to learn information literacy through the completion of coursework that required the use of the library resources. Since this was found to be effective for only a part of the incoming freshman, information literacy became a focus in the GSU first-year experience program. This resulted in a narrow set of programs goals, allowing more sophisticated implementation and success in that single area. This specific program was deemed successful. At least a part of the success was attributed simply to a large buy-in by both the faculty and library staff. This made it difficult to determine how much of the success was attributed to information literacy and how much was a result of commitment and motivation by faculty and staff.

California State University (CSU) also identified information literacy as an area that was commonly deficient in first-year students (Phillips & Case, 2013). The university

created a library module to their first-year seminar program. This included a reader component that ran throughout the first-year of matriculation for the student. The reader component helped accomplish some of the overall goals for the first-year experience seminar but also intentionally supported the goal of information literacy. The CSU students were primarily minority students or first generation students. The university was able to familiarize the students in library resources and enabled the students to become more comfortable in using the library services. This was accomplished in part through the reader program but also through an increase in the relationship developed between the students and the library staff.

Conclusion

First-Year Experience Programs were initially developed to ease the transition for students from the home environment into the new community of the higher educational institution. Success was measured through retention and attrition, students remaining at the institution or departing to another institution. After the initial development, programs began adapting to meet the needs of specific groups leading to innovation in the program model. After several decades operation models of what constituted success were able to develop, offering blueprints on how to have successful programs. These operation models also helped to define the specific areas to focus on to impact the retention and attrition of students in the institution. With this new focus, higher education institutions began reorganizing their programs to address these new specific areas of focus.

Summary of the Literature Review

Homeschooling has been a growing phenomenon over the past five decades. There has been significant controversy over the legality, practice, and regulation of

homeschooling. Homeschooling has been accepted into higher education for the most part and is a small group within the population of students found in higher education institutions. Higher education institutions have developed First-Year Experience programs to assist students with the transition into the institution community. Home educated students are just one of the groups that need to be considered when adapting these First-Year Experience Programs to meet the needs of these various groups.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

There has been an influx of home educated students entering the higher education institutions (Dumas, Gates & Schwarzer, 2010). With the growing homeschool movement, universities and colleges needed to compare the home educated students with the traditionally educated students. Institutions of higher education would benefit from knowing how these two groups differ and the similarities between these groups that can be built upon.

Leaders in higher education looked closely at the first-year experience of students in the hopes of increasing retention and ultimately student's success (Barton & Donahue, 2009). First-year experience programs were developed in an attempt to address these concerns. These programs included a variety of components: credit courses, study groups, student activities, service learning and learning communities (Clark & Cundiff, 2009). School leaders were anxious to invest in these programs because of the intended impact on the important hopes of retention and student success.

The first-year experience programs were encouraged for students entering higher education for the first time. The programs addressed the need for students to acculturate into their new community as they departed from the student's home community (Morrow & Ackerman, 2012; Tinto, 1993). Measuring the success of first-year programs and the effect on retention and student success was difficult for universities and colleges to institute (Braxton, McKinney & Reynolds, 2006). One way of measuring success utilized

was observing students' change in knowledge, attitudes, and behaviors after completion of a first-year experience program (Schrader & Brown, 2008). Knowledge, attitudes, and behaviors showed a change indicating integration of the student into the college culture.

A comparison of the participant responses indicated the usefulness of first-year experience programs for the home educated students as compared to the traditionally educated students. The comparison showed the success not only of the program but also the students' acculturation to the new community. The purpose of the study was to measure the effectiveness of first-year programs through the comparison of the two groups, home educated and traditionally educated.

Purpose of the Study

Homeschooling has been a phenomenon on the rise, with an increasing number of families deciding to teach their children using this educational construct (Mackey, Reese & Mackey, 2011). Understanding of homeschooling can help leaders of educational institutions and organizations make policy decisions relating to their interaction with home school students. Since homeschooling has been on the increase, strategies to attract and retain these students, as well as promote their success, was an important, timely consideration. Many colleges and universities have recognized home educated students as assets to their institutions, and there is a growing number of admission departments actively recruiting this population (Ray, 2004). This study was designed to assist educational leaders in developing policy to better understand the homeschool students and aspects of their first-year experience.

Some first-year experience programs have been evaluated using a survey at the completion of the program in areas of knowledge, attitudes, and behavior (Schrader &

Brown, 2008). These areas addressed several different skill types taught in first-year experience programs: study, time management, institutional awareness, and appropriate interpersonal behavior. Proficiency in the skills indicated an ability to become successful in higher education and the acquisition of necessary social skills.

The purpose of this quantitative comparative study was to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. There was a relatively small amount of research about home educated students and their first-year experience in higher education. This study added to the research providing insight for policy decisions.

Research Questions

There are four research questions for this study. The questions were developed to provide insight into the difference between the two identified groups.

1. What is the demographic profile of home educated students, private educated, and traditionally educated students completing a first-year experience program in a higher education institution, first-year experience program in the following categories: (a) age, (b) gender, (c) race, (d) student's educational experience, (e) parent's level of education, (f) number of credit hours before participating in a first year experience program, and (g) student's household income?
2. What differences in knowledge exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?

3. What differences in attitudes exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?
4. What differences in behaviors exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?

Design for the Study

When deciding on a research design for a study there was no accepted design or type which was universally accepted as the best approach, instead there were many factors to consider when choosing the design (Creswell, 2009). Because a quantitative approach was used there were specific research questions which needed answers. The questions each required descriptive or correlational data collected through historical documentation and surveys through the higher education institutions and the two student groups respectively, because of this, the research design was quantitative. In this study, the investigator is asking close ended questions with identified variables in an unbiased approach which led to the decision of using a quantitative design (Creswell, 2009). The survey was administered to students in a Midwestern university using a cross-section sample of the population with the intent of generalization to the population (Creswell, 2009).

Population and Sample

The participants in this study were students who completed their freshman year and a first-year experience program, more specifically university students at a Midwestern university. There was a consideration to use a random sample of the post-freshman students who completed a first-year experience program. This consideration was set aside in favor of receiving more participants to better support the findings. A convenience sample was used in this study allowing for additional participants. Stratification was not used as this was a convenience sample. Participants were recruited through their university email accounts including a letter of introduction, information about ethical concerns, and a link to the survey online. The entire population of students who have completed the first-year experience program in the university were included. The study had a goal of 30% participation. Participation by home educated students was anticipated to be difficult because of the relatively small percentage of home educated students when compared to traditionally educated students. A special recruitment letter was sent to homeschool students at the Midwestern university to increase participation in this research study.

Data Collection and Instrumentation

It was important in the study for the data collection to be both accurate and complete so the study would be valid and reliable (Creswell, 2009). This was achieved by using typical and accepted research practices. The following sections address the data collection procedures, a description of the survey instrument used, and an explanation of human subjects' protection and other ethical considerations.

Data Collection Procedures

The data were collected through an online survey program in the First-Year Experience program within the university. The survey included an informed consent letter. The letter provided participants with information regarding their rights, how those rights would be protected, an introduction to the study, and contact information for the researcher, Institutional Review Board, and dissertation supervisor.

Knowledge, Attitudes and Behaviors Item Survey

The survey instrument used in the study was adapted for this research from the The University Experience Battery Items survey (Schrader & Brown, 2008). The name of the survey for this study is the Knowledge, Attitudes and Behaviors Item Survey. The questions were edited for readability, some of the questions were removed, and the answers were converted to a 6 point Likert scale. Standard procedures were used to obtain validity and reliability as well as construct validity – the measuring of hypothetical concepts (Creswell, 2009). For this study, the survey instrument was reviewed again and the researcher reviewed the reliability of the three subscales found with the instrument using Cronbach's coefficient alpha which measures internal consistency (McIntire & Miller, 2007). Validity was insured in the study after an exhaustive review of the literature on first-year experience programs. The survey items were already chosen to measure students who have completed first-year experience programs and was then reviewed for this study by the researcher. Additionally, the survey was reviewed by professors involved with first-year experience programs. The self-administered survey included 20 questions on a six point Likert scale for the first 22 questions – knowledge and attitudes. The 10

behavior questions were on a 6 point frequency scale. The following includes a sample of questions from each of the sections – knowledge, attitudes, and behaviors:

Knowledge

1. I know how to best focus my attention on coursework.
2. I know how to motivate myself for coursework.
3. I know how to consider ethical factors and implications in the decision making process.

Attitudes

1. I find it important to focus on my coursework.
2. I believe it is important to motivate myself in my coursework.
3. I believe it is important to consider ethical factors and implications in the decision making process.

Behaviors

1. I focus my attention upon my schoolwork.
2. I motivate myself in my coursework.
3. I consider ethical factors and implications in the decision making process.

The instrument was emailed using an online survey program in the First-Year Experience program within the university. The email included a letter of introduction, information human subject protection and other ethical considerations, and informed consent.

Human Subjects Protection

Human subjects who participate in research are all offered certain rights – respect for persons, beneficence and justice (US Department of Health and Human Services, 1979). These rights guarantee participants have voluntarily entered into the research, understand the potential benefits of the study for the participant, and most importantly the

participant will not be harmed. This is confirmed through the use of an Institutional Review Board. The Institutional Review Board reviewed this research to determine the potential risks to participants and the procedures put in place to protect the participants.

As a part of the protection to the participants, they all received in their email an informed consent form before the participants proceeded with the survey. The participants were insured the completion of the survey was voluntary and they could discontinue the survey at any point. All of the collected data was kept confidential on a password protected computer in a locked office. All identifying information was kept confidential and anonymous during the study. Access to the data was made available only to the research team.

Data Analysis

The data were collected from the Knowledge, Attitudes, and Behaviors Item Survey and analyzed using the SPSS statistical program version 19. For each of the research questions, a specific statistical analysis was utilized. Before data analysis was completed, the raw data were configured to permit analysis with the computer program.

After collection of the data, subscales were created on each of the three survey instruments sections (Knowledge, Attitudes and Behaviors) for every student. The subscale was created by totaling the score of the responses for each section and dividing by the total number of questions for the section. Common quantitative procedures were used in the data analysis: (a) descriptive statistics and (b) the Analysis of Variance (ANOVA) statistical test (Field, 2009). The significance level of .05 was used to compare the means of the variables (Field, 2009). The independent variable for each of the research questions

was the type of schooling (traditional or home educated), and the dependent variable was knowledge, attitudes and behaviors, respectively for each question.

Research question one. The first research question asked, “What is the demographic profile of home educated students, private educated, and traditionally educated students completing a first-year experience program in a higher education institution, first-year experience program in the following categories: (a) age, (b) gender, (c) race, (d) student’s educational experience, (e) parent’s level of education, (f) number of credit hours before participating in a first year experience program, and (g) student’s household income?” Descriptive data were used to answer this question and to paint a thicker, richer description of the two groups, home educated and traditionally educated.

Research question two. The second question asked, “What differences in knowledge exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” An ANOVA statistical test was used to determine if there was a significance difference between the scores of the home educated students and the traditionally educated students with the independent variable as the student being home educated or traditionally educated and the dependent variable as the scores found in the Knowledge section of the survey.

Research question three. The third question asked, “What differences in attitudes exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” An ANOVA statistical test was used to determine if there was a significance difference between the

scores of the home educated students and the traditionally educated students with the independent variable as the student being home educated or traditionally educated and the dependent variable as the scores found in the Attitudes section of the survey.

Research question four. The fourth question asked, “What differences in behaviors exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” An ANOVA statistical test was used to determine if there was a significance difference between the scores of the home educated students and the traditionally educated students with the independent variable as the student being home educated or traditionally educated and the dependent variable as the scores found in the Behavior section of the survey.

Limitations and Assumptions

The following section describes the limitations and assumptions found in this study. The limitations were regarding the population and the sample. The assumptions concerned the survey and the acculturation into higher education.

Limitations

There were some limitations to this study. One limitation was restricting the participants in the study to just one Midwestern university. Access to multiple higher education institutions was not feasible for this study resulting in this outcome. Further research could include a range of higher education institutions. Another limitation was the selection process of the participants. With a goal of increasing the sample size, the survey was sent to the whole population of students who completed the first-year experience program at the university. This allowed for a self-selection of the participants.

Assumptions

There were several assumptions to address in this study. The first assumption addresses a design limitation of the study. The survey addressed skills learned through a first-year experience program. The study assumed these were indicators of success and retention in higher education (Schrader & Brown 2008).

The second assumption also addressed a design limitation of the study. The study assumed the survey indicated a proficiency in socialization into the new community of higher education (Schrader & Brown, 2008). Both of these assumptions were controlled by using a survey which was already used for these purposes. There was a difference in size between the two groups, with the homeschool educated students having fewer responses than the traditionally educated students. This was a result of having a smaller percentage of home educated students in the freshman population.

Summary

The Research and Design Methodology of this study provided a detailed description of the quantitative methods utilized. The purpose of this comparative study was to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. Analyzing of the data was performed using the ANOVA statistical test. The statistical program SPSS version 19 was used for the calculations.

CHAPTER FOUR

RESULTS

Introduction

Recent history has shown homeschooling to be both debatable and divisive (Davis, 2011; Gaither, 2008). Even with conflict from parties on both sides of the issue, homeschooling has continued to grow (U.S. Department of Education, National Center for Education Statistics, 2013). With the growth of homeschooling, it has become important to understand how these home educated students will measure up in higher education. Since the traditional K-12 education experience is public or private education, it makes sense to compare homeschoolers to those two groups. In higher education, a common component of the undergraduate educational experience is a first year experience program and a common student experience to conduct comparative research.

The purpose of this study was to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. The nature of the proposed research questions led to a quantitative method of research analysis. In this study, the survey data were examined to compare the knowledge, attitudes, and behaviors of student groups who had completed a first-year experience program. The examination of the data allowed for the research questions to be answered.

Schrader and Brown (2008) identified three areas of import when considering the transition into higher education. These areas were a conceptual model to allow for the evaluation of first-year experience programs. The three areas, knowledge, attitudes and

behavior allowed for a pragmatic and efficient evaluation of the program impact on students. The knowledge scale was developed to measure the information related to first-year retention. For the attitude scale, the scale items included areas related to the thinking processes related to retention. While the behavior scale focused on the actions students take that lead to retention.

These scales were combined to create the Knowledge, Attitudes and Behavior Items Survey. These data combined with demographic data to answer the following research questions:

1. What is the demographic profile of home educated students, private educated, and traditionally educated students completing a first-year experience program in a higher education institution, first-year experience program in the following categories: (a) age, (b) gender, (c) race, (d) student's educational experience, (e) parent's level of education, (f) number of credit hours before participating in a first year experience program, and (g) student's household income?
2. What differences in knowledge exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?
3. What differences in attitudes exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?

4. What differences in behaviors exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?

All of the research questions were answered by a quantitative analysis using the descriptive demographic statistics, a statistical analysis or a combining of the two analysis processes. The subsequent chapter contains the results of the research results along with the reliability statistics for the Knowledge, Attitudes and Behavior Items Survey. The concluding section of the chapter is comprised of a description of the statistical analysis for each of the research questions and the findings of the analysis.

Population and Sample

The population for this study was students in a Midwestern university setting, specifically students who had completed a first-year experience program and were still participating in coursework at the higher education institution. Initially all of the respondents came from one university. This was to provide a common experience within the first-year experience program. This was abandoned because of the low number of respondents for the homeschool students. A convenience sample was taken from additional home educated students to increase the total number of home educated students in the sample.

There were a total of 251 respondents to the Knowledge, Attitudes and Behavior Item Survey. All of the respondents were gathered from the Midwest. The initial survey invitation was sent to all of the students who had completed the first-year experience program at the university since 2011 or 2963 students. The response rate was 235 of 2963

students contacted online or 7.9% of the students surveyed from the university.

Additionally, 14 more home educated students were surveyed apart from the university to increase the number of homeschool respondents. There were three attempts within a 2 week window to gather participants within the Midwestern university before gathering the additional respondents with the convenience sample.

Data Collection Instrument

An electronic survey sent via the internet to the university students was used to obtain the data for this study. The Knowledge, Attitude and Behavior Items Survey, included in Appendix A, was adapted from The University Experience Battery Items survey (Schrader & Brown, 2008). The survey was designed to measure the knowledge, attitudes and behaviors from students focusing on areas that connect with retention and successful transition into the university community.

The Knowledge, Attitude and Behavior Items Survey contained thirty-nine items. There were ten items for each of the knowledge, attitude and behavior sections along with nine demographic questions. For the thirty items found in the knowledge, attitude and behavior sections there was a score from a Likert scale. There was a six point scale for the knowledge and attitude sections, with a score of one signifying “strongly disagree” and six signifying “strongly agree.” There was a five point scale in the behavior section, with a score of one signifying “never” and a score of five signifying “frequently.” A subscale was then created by totaling the score of the responses for each section and dividing by the total number of questions for the section.

Internal Reliability

The determination of internal reliability for the Knowledge, Attitude and Behavior Items Survey was completed by analyzing internal consistency of the knowledge, attitude and behavior subscales in the survey (Table 1). Table 1 displays the results of a subscale reliability analysis for each of the subscales by use of Cronbach's alpha measuring the consistency between items within the subscale (Field, 2009). The generally accepted value for satisfactory reliability coefficients in educational research is .70 value (Field, 2009).

Two of the scales met the standard of .70 coefficient value. The knowledge and attitudes both scored above the acceptable standard and the behavior scaled below raising questions about the internal consistency of the subscale. This suggests the behavior subscale is an outlier and may not consistently measure the behavior of the participants.

Table 1

Internal Reliability of the Knowledge, Attitude and Behavior Survey Subscales

Test/Subscale	Reliability Coefficient
Internal Reliability of Knowledge Subscale	.806
Internal Reliability of Attitude Subscale	.716
Internal Reliability of Behavior Subscale	*.689

Note. Each subscale contained 20 items. * The interreliability score of .70 was not met for the Behavior Subscale.

Data Analysis

The research questions in this study focused on comparing the participants' self-report of knowledge, attitudes and behavior. The two main groups compared were traditionally educated students and home educated students, additionally private educated students were included as a group because they make part of the total population. The study used the following quantitative data analysis methods: (a) descriptive statistics to answer all four of the research questions and (b) an ANOVA statistical test to answer research questions 2, 3 and 4. A .05 level of confidence was used to determine statistical significance when applying the ANOVA statistical test.

Research Question One

Research question one asked, "What is the demographic profile of home educated students, private educated, and traditionally educated students completing a first-year experience program in a higher education institution, first-year experience program in the following categories: (a) age, (b) gender, (c) race, (d) student's educational experience, (e) parent's level of education, (f) number of credit hours before participating in a first year experience program, and (g) student's household income?" The descriptive statistics gathered in the survey help to explain the similarities and differences among the comparative groups. Table 2 shows the N, mean and standard deviation of the age for each of the three groups. The mean of the ages for the three groups were 20.21. The mean of the ages for the three groups were similar falling within less than half of a year difference. This was the age of students at the time of completing the survey for the research project. The question did not differentiate the age of the students when they

began in a higher education program. It does describe the age of students in the population who have completed a first-year experience program.

Table 2

Descriptive Statistics of Age for the Compared Groups

Group	<i>N</i>	Mean	<i>SD</i>
Traditionally Educated	199	20.21	2.19
Privately Educated	29	19.86	1.25
Home educated	23	19.87	2.16

The survey results included a demographic question to determine the gender of the participants (Table 3). The traditionally educated and privately educated students had more similar gender breakdowns than the home educated students. Approximately 70% of the traditionally educated students were female and 30 % of those students male, with one of the students identifying as other. Almost 80% of the privately educated students were female and 20% male. The home educated students were more evenly divided by gender. The female students made of 52% of the home educated population and the males 48%. The groups combined were approximately 67% female, 23% male and less than 1% identified as other. The privately educated students had a lower standard deviation (1.25) than the traditionally educated (2.19) and home educated students (2.16). This was

indicative of a more narrow range of ages for the privately educated students than the other two groups.

Table 3

Descriptive Statistics of Gender for the Compared Groups

Group	<i>N</i>	Female	Male	Other
Traditionally Educated	199	133 (70%)	65 (30%)	1 (<1%)
Privately Educated	29	23 (80%)	6 (20%)	0 (0%)
Home educated	23	12 (52%)	11 (48%)	0 (0%)
Total	251	168 (67%)	82 (23%)	1 (<1%)

A demographic inquiry in the survey included a question to determine the race of the students in the total population and within the compared groups (Table 4). There was similarity in the groups with none of the groups having substantial diversity within the groups and as a whole. The traditionally educated group was almost 92% White. This group had the most other races represented in the population with 4% identifying as Black or African American, 2% identifying as American Indian or Alaska Native, and 2% as Asian. The private school group was made up with approximately 97% White students. This group had the least representation by other groups. Approximately 3%, 1 student, identified as American Indian or Alaska Native. The home educated group had the highest percentage of diversity. In this group, almost 87% of the students identified as White and

13% or 3 of the students identified as American Indian or Alaska Native. The homeschool group like the private school group only had one other race represented besides White. All of the groups combined had a representation of 92% identifying as White, 3% identifying as American Indian or Alaska Native, 3% identifying as Black or African American and 1.5% identifying as Asian.

Table 4

Descriptive Statistics of Race for the Compared Groups

Group	<i>N</i>	American Indian or Alaska Native	Asian	Black or African American	White
Traditionally Educated	198	4 (2%)	4 (2%)	8 (4%)	182 (92%)
Privately Educated	29	1 (3%)	0 (0%)	0 (0%)	28 (97%)
Home educated	23	3 (13%)	0 (0%)	0 (0%)	20 (87%)
Total	250	8 (3%)	4 (2%)	8 (3%)	230 (92%)

Additional areas of inquiry were included in the research to further describe the population of the total group and the groups when separated. These areas included the educational experience of the student when entering a first-year experience program, the parents' level of education, the number of hours attained before entering a first-year experience program, and the annual household income for the students' household. These areas provided additional richness to the contextual description of the population.

Table 5

Descriptive Statistics of the Educational Experience of Student's Prior to Entering a First-Year Experience Program for the Compared Groups

Group	<i>N</i>	No College Credit	Advanced Placement	Dual Enrollment	Transfer Student	Completion of an Associate's Degree
Traditionally Educated	198	80 (40%)	41 (21 %)	56 (28%)	18 (9%)	3 (2%)
Privately Educated	29	11 (40%)	13 (45%)	4 (14%)	1 (3%)	0 (0%)
Home educated	23	9 (39%)	1 (4%)	11 (48%)	1 (4%)	1 (4%)
Total	250	100 (40%)	55 (22%)	71 (28%)	20 (8%)	4 (2%)

There was more variability in the educational experience of the students before entering a first-year experience program (Table 5) when compared to the areas of age, gender, and race. In the traditionally educated group, 40% of the students identified as having no college credit, 21% reported having advanced placement hours, 28% were dual enrollment, 9% were transfer students, and 2% had completed an associate's degree. The private school group also had almost 40% with no college credit, 45% had advanced placement, almost 14% participated in dual enrollments, 3% were transfer students, and none of this group had completed an associate's degree. The homeschool group had a similar percentage of students with no college credit at 39%, 4% (1 student) had participated in advanced placement. The homeschool group had the highest percentage of

dual enrollment at approximately 48%. Transfer students and students who had completed an associate's degree each had 1 home educated student or 4% of the homeschool group. For the total population, 40% of the students had received no college credit when entering the first-year experience program, 22% had been enrolled in advanced placement, 28% had dual enrollment hours, 8% were transfer students, and 2% had completed associate's degrees.

The parents' level of education (Table 6) had more diversity in the responses by the students. The traditionally educated students had 2% of students identifying their parent's level of education as less than a high school diploma. The private educated group had no students that identified having parents with less than a high school diploma. The home educated group had the highest percentage at 4% (1 student) of parents with this educational experience.

For the traditionally educated students, the parents with a high school graduate including equivalency was approximately 24% of the group. The private educated students identified 10% of their parents with this education level. The home educated students were in between the other two groups with 18% of the parents in this category.

Parents with some college or an associate's degree had the highest percentage at 31 in the traditionally educated students. The parents of private educated students were around half of the traditionally educated at 17%. Home educated had the smallest percentage of the groups with just 9% of the parents with this educational level.

Traditionally educated parents with a bachelor's degree made up almost 28% of that group. Parents with bachelor's degree made up the largest percentage of the private

educated group at almost 40%. This was the case for the home educated group as well at almost 41%.

Graduate or professional degrees were less common for parents in the traditionally educated students (16%) when compared to the other two groups. Private educated had the highest percentage of parents with this educational level at just over 34% of the group. The home educated parents fell into the middle with 27% of the parents with a graduate or professional degree.

Table 6

Descriptive Statistics of the Parent's Level of Education for the Compared Groups

Group	<i>N</i>	Less than a High School Diploma	High School Graduate Includes Equivalency	Some College or Associate's Degree	Bachelor's Degree	Graduate or Professional Degree
Traditionally Educated	199	3 (2%)	47 (24%)	62 (31%)	55 (28%)	32 (16%)
Privately Educated	29	0 (0%)	3 (10%)	5 (17%)	11 (40%)	10 (34%)
Home educated	23	1 (5%)	4 (18%)	2 (9%)	9 (41%)	6 (27%)
Total	250	4 (2%)	54 (22%)	69 (28%)	75 (30%)	48 (19%)

The majority of all three groups of students had credit hours before beginning a first-year experience program (Table 7). The highest category for all three of the groups was students who had completed 1 to 15 credit hours. This made up 57% of the total population. The students with a private education were higher than the average for the total population (76%). Students with 16 to 30 credit hours were found in primarily two groups: the students who had a traditional education (25%) and students with a homeschool education (22%). These two groups, students with a homeschool education and students with a traditional education, were similar, but the students with a private education had a lower percentage (7%). The students with a private education did not have any students in the population with 31 credit hours or more. Students with 31 to 45 credit hours were split between those with a homeschool education (9%) and a traditional education (5%). Students with 46 or more credit hours was a rarity. Students with a private education were not represented; students with a traditional education and a homeschool education each had 1 student.

For the population as a whole, 77% had at least some credit hours before entering a first-year experience program. Only 16% of the students in the total population had no hours before entering a first- year experience program. Finally, just 5% of the population had more than 31 hours.

Table 7

Descriptive Statistics of the Number of Credit Hours before Participating in a First-Year Experience Program for the Compared Groups

Group	N	No Hours	1 to 15 Credit Hours	16 to 30 Credit Hours	31 to 45 Credit Hours	46 or More Credit Hours
Traditionally Educated	199	29 (15%)	111 (58%)	49 (25%)	9 (5%)	1 (<1%)
Privately Educated	29	5 (17%)	22 (76%)	2 (7%)	0 (0%)	0 (0%)
Home educated	23	6 (26%)	10 (43%)	5 (22%)	2 (9%)	0 (0%)
Total	250	40 (16%)	143 (57%)	56 (22%)	11 (4%)	1 (<1%)

There was some diversity among the groups when considering the annual household income for the student families (Table 8). The students who had a traditional education had 21 % of the group making less than \$24,999 in annual household income. This was similar to students with a homeschool education; 22% of households in this group made less than \$24,999 in annual household. Students who received a private education had the smallest percentage of families making less than \$24,999 at 7%.

The students who had a traditional education with household incomes between \$25,000 and \$49,999 was 26% of the total population. Students from private schools had the same percentage (26%) in this category. In comparison, students with a homeschool education had a higher percentage (36%) in this category.

The household incomes of the students were similar throughout the population. Two of the groups, students with a traditional education and students with a homeschool education, had the same percentage (36%) of their respective populations with household incomes between \$50,000 and \$99,999. The private school households made up the largest percentage when compared to the other groups at almost 41%.

The final category of annual household income was \$100,000 or more had the traditionally educated student households with 16% of the group. Privately educated had the highest percentage among the groups at almost 26%. Homeschoolers had the smallest percentage of households with this income at 5% (1 household). The traditionally educated and homeschool household had the most similar household incomes. The private educated students had the most affluent households with almost 67% of the households having \$50,000 or more as an annual income. In comparison, the traditionally educated student households had 52% above \$50,000 in annual household income and the homeschool households just under 41%.

Table 8

Descriptive Statistics of the Students' Household Income for the Compared Groups

Group	<i>N</i>	Less than \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 or more
Traditionally Educated	199	42 (21%)	52 (26%)	71 (36%)	32 (16%)
Privately Educated	27	2 (7%)	7 (26%)	11 (41%)	7 (26%)
Home educated	22	5 (22%)	8 (36%)	8 (36%)	1 (5%)
Total	246	49 (20%)	67 (27%)	90 (37%)	40 (16%)

The cumulative Grade Point Average (GPA) for the student groups were similar throughout the population (Table 9). The question asked, “What is your cumulative GPA for college?” All three of the groups fell within less than .10 point on a 4 point scale. Students with a private education had a slightly higher GPA than the other two groups.

Table 9

Descriptive Statistics of the Students' Cumulative Grade Point Average for College

Group	<i>N</i>	Cumulative GPA
Traditionally Educated	195	3.47
Privately Educated	28	3.56
Home educated	22	3.48
Total	245	3.48

Summary. In summary, reviewing the average descriptive trends of the students for the total population would add to the narrative of the demographic profile. The average student was approximately 20 years old (mean age of 20.21). Two-thirds of the student participants were female (67%) and one-third were male (23%). There was little diversity in the population sample. White students made up 92% of the population with three other groups represented, American Indian or Alaskan Native (3%), Asian (2%), and Black or African American (3%). Most of the students (60%) were involved in a higher education program beyond high school – like Advance Placement, Dual Enrollment, Transfer Student, and Completion of an Associate’s Degree – before entering a first-year experience program. The majority of the parents had an education beyond high school (71%). More than three quarters of the students (77%) had some credit hours before entering a first-year experience program, with an average GPA of 3.48. Finally, the household income for the students most frequently (72%) were between \$25,000 and \$99,999.

Research Question Two

Research questions two asked, “What differences in knowledge exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” This research question grouped together the questions under the knowledge section of the survey to determine if there was a significant difference in the response between the compared groups, specifically traditionally educated and home educated but, additionally, private school students were included. A subscale was created for the Knowledge section of the survey by totaling the scores of the responses for each group and by dividing the total number of questions for the section. A one –way ANOVA was completed on these knowledge subscales for each of the groups (traditionally educated, home educated and private educated) to determine if there was a significant difference in the means of the groups (Table 10).

Table 10

Analysis of Variance (ANOVA) for the Knowledge Scale of the Compared Groups

Knowledge Subscale	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Between Groups	.402	2	.201	.621	.538
Within Groups	79.029	244	.324		
Total	79.431	246			

The dependent variable was the knowledge subscale for each of the groups and the independent variable was the three different groups. Statistical significance was determined using a .05 alpha level. There was no statistical significance found between the groups; Knowledge $F(2, 244) = .621, p = .538$. Since there was no statistical significance determined on the knowledge scale between the groups it is important to note the similarity of the means (Table 11).

Table 11

Table of Means for the Knowledge Scale of the Compared Groups

Knowledge Subscale	<i>N</i>	Mean	Standard Deviation
Traditionally Educated	195	5.112	.530
Privately Educated	29	5.217	.688
Home educated	23	5.204	.710
Total	247	5.133	.568

Note. Likert scale used: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree

Table 11 shows a comparison in the means of the knowledge subscales for each of the groups and then from the groups combined. The means were not significantly different. The Likert scale used for the questions included in this subscale ranged from 1 (Strongly Disagree) and 6 (Strongly Agree). The mean for the total population was 5.133 which is

between Agree and Strongly Agree on the chosen Likert scale. The difference between all of the groups was less than .12, and the difference between the traditionally educated and the home educated was less than .11.

Research Question Three

Research question three is similar to research question two, focusing on attitudes rather than knowledge. Question three asked, “What differences in attitudes exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” Like research question two, this research question grouped together the questions under the attitude section, rather than knowledge section, of the survey investigating if there was a significant difference in the compared group responses. An attitude subscale was created from the survey by totaling the scores of the responses for each group and by dividing the total number of questions for the section. A one –way ANOVA was completed on these knowledge subscales for each of the groups (traditionally educated, home educated and private educated) to determine if there was a significant difference in the means of the groups (Table 12). The dependent variable was the attitude subscale for each of the groups and the independent variable was the three different groups. Statistical significance was determined using a .05 alpha level. Like research question two there was no statistical significance found between the groups; Attitude $F(2, 241) = .917, p = .401$.

Table 12

Analysis of Variance (ANOVA) for the Attitude Scale of the Compared Groups

Attitude Subscale	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Between Groups	.321	2	.161	.917	.401
Within Groups	42.238	241	.175		
Total	42.559	243			

Since the Analysis of Variance did not indicate a statistically significant difference, it is important to take note of the similarity in means (Table 13). The Likert scale used for the questions included in this subscale ranged from 1 (Strongly Disagree) and 6 (Strongly Agree). The mean for the total population was 5.133 which is between Agree and Strongly Agree on the chosen Likert scale. The means all fell within a .12 margin with the traditionally educated and home educated students within .04 of their means.

Table 13

Table of Means for the Attitude Scale of the Compared Groups

Attitude Subscale	<i>N</i>	Mean	Standard Deviation
Traditionally Educated	193	5.312	.416
Privately Educated	29	5.424	.438
Home educated	23	5.345	.412
Total	244	5.328	.418

Note. Likert scale used: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree

Research Question Four

In research question four, the attention shifts from knowledge and attitude to the behaviors the students reported on the survey. Question four asked, “What differences in behaviors exist between home educated students completing a first-year experience program in a higher education institution compared to traditionally educated and privately educated students after participating in the same first-year experience program?” The behavior questions in the survey were analyzed examining if there was a significant difference in the compared group responses. A behavior subscale was created from the survey by totaling the scores of the responses for each group and by dividing the total number of questions for the section. A one –way ANOVA was completed on these knowledge subscales for each of the groups (traditionally educated, home educated and

private educated) to determine if there was a significant difference in the means of the groups (Table 14). The dependent variable was the behavior subscale for each of the groups and the independent variable was the three different groups. Statistical significance was determined using a .05 alpha level. Like research questions 2 and 3 there was no statistical significance found between the groups; Behavior $F(2, 243) = .780, p = .459$.

Table 14

Analysis of Variance (ANOVA) for the Behavior Scale of the Compared Groups

Behavior Subscale	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Between Groups	.290	2	.145	.780	.459
Within Groups	45.078	243	.186		
Total	45.367	245			

The Analysis of Variance did not indicate a statistically significant difference; it is important to take note of the similarity in means (Table 15). The Likert scale used for the questions included in this subscale ranged from 1 (Never) and 5 (Frequently). The mean for the total population was 4.222 which is between Occasionally and Frequently on the developed Likert scale. The means all fell within a .10 margin.

Table 15

Table of Means for the Behavior Scale of the Compared Groups

Behavior Subscale	<i>N</i>	Mean	Standard Deviation
Traditionally Educated	194	4.224	.408
Privately Educated	29	4.279	.428
Home educated	23	4.130	.591
Total	246	4.222	.430

Note. Likert scale used: 1 = Never, 2 = Rarely, 3 = Seldom, 4 = Occasionally, and 5 = Frequently

Summary

Chapter Four contained the data that were collected using the Knowledge, Attitudes and Behavior Item Survey. The data were used to compare the responses between the two primary student groups of the traditionally educated and the home educated along with the additional privately educated student group. This was used to answer the four research questions using quantitative analysis methods. Within the demographics (research question 1) all three of the groups had similarities with a few differences. There was not a significant difference in the group responses for the knowledge (research question 2), attitudes (research question 3) and behavior (research question 4) sections. Chapter Five includes a description of the research findings, implications of the findings, and recommendations for future research.

CHAPTER FIVE

DISCUSSION

Introduction

This study compared the knowledge, attitudes, and behaviors of students after completing a first-year experience program. The students were divided into two primary groups, traditionally educated and home educated, and one secondary group, private educated. This was completed by using a self-completed survey of 60 items. The population of students were from the Midwest and made up primarily of one regional state university.

Chapter Five provides a review of the purpose of the study, a summary of the findings, assumptions made in the design of the research, and the limitations found in the study. Additionally, this chapter includes a discussion of the results, the implications suggested by those results, and recommendations for further study. A summary of the discussion completes the chapter.

Purpose of the Study

Homeschooling families and students continued to increase in the United States, with more families choosing this educational model for their students in primary and secondary education (Mackey, Reese, & Mackey, 2011). Policymakers and administrators in educational institutions and organizations would benefit from a greater understanding of homeschool students and the students' educational needs. Because homeschooling continued to increase strategies to entice and maintain this student population, and contribute to the homeschool student success as well as promote their success is an

appropriate, opportune concern. Increasingly, higher education institutions and organization have acknowledged home educated students as a beneficial resource with admissions departments actively seeking out and recruiting these students to attend the institutions (Ray, 2004). The research for this study is meant to improve and increase the information of educational leaders as the leaders change and adapt policies for the home educated students, specifically as the students relate to the first-year experience program of the institution.

One way to evaluate the effectiveness of a first-year experience program is through a survey of knowledge, attitudes, and behaviors of students at completion of the program (Schrader & Brown, 2008). Within these three areas, several different skill types were addressed in the first-year experience programs including: study, time management, institutional awareness, and appropriate interpersonal behavior. Research posited these skills led to adaptation into the higher education community (Tinto & Pusser, 2006). When students were shown to have an aptitude in the skills, this was also indicative of the ability to achieve success in higher education. In addition, acquisition of these skills suggested a social preparedness for the new community.

The purpose of this quantitative, comparative study is to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. There was a relatively small amount of research about home educated students and their first-year experience in higher education. This study added to the research in at least two different fields both the home educated population and also for

first-year experience programs in undergraduate programs, providing insight for policy decisions.

Summary of Findings

Upon analyzing the data from the Knowledge, Attitudes and Behaviors Item Survey, the results indicated there was some difference in self-report between the groups. However, the difference in responses for traditionally educated students, home educated students, and privately educated did not indicate a significant difference. This may have implied little difference between these three student groups, having more in common than expected.

Demographics

There was a little difference in the demographic make-ups of the groups. The average student was approximately 20 years old, with 75% of the students identifying as female. Most of the students were White (92%) and had been involved in a program to prepare them for participation in higher education before entering the first-year experience program. The majority of the parents had an education beyond high school (71%). More than three quarters of the students (77%) had some credit hours before entering a first-year experience program. Finally, the household income for the students most frequently (72%) were between \$25,000 and \$99,999. There was considerable homogeneity within the population.

A few of the demographic areas had some diversity in the responses. The students who received a homeschool education were almost evenly split in gender, with 52% female and 48% male. The students with a traditional education was the only group with Asian (2%) and Black or African American (4%) students. The students with a private education

had only 17% that participated in dual enrollment, was a transfer student, or completed an Associate's Degree before participating in first-year experience program while the students with a traditional education had 37%, and students with a homeschool education 56%. Lastly, the students with a private education had a household income over \$100,000 more than a quarter or 26% of the time, and those with a traditional education at 16% and the homeschool educated at just 5%. While there were many similarities, there were some differences in the demographic profile.

Knowledge

A comparison of the aggregated quantitative data from the survey found similarities in the responses for all of the groups. The majority of students describe themselves as possessing the necessary knowledge to succeed in higher education following a first-year experience program. The mean of the subscale for each of the groups were between the answers of "agree" and "strongly agree" for the questions found in the knowledge section. There was no statistically significant difference between the knowledge scores for traditionally educated, home educated, and privately educated students.

Attitudes

The data collected in the attitudes section of the survey also showed a similarity among the mean scores of the groups. Again students in all three of the groups identified themselves as holding the essential attitudes for success in higher education. Like the knowledge section, the mean of the attitude subscale were between the "agree and "strongly agree" answers for the questions from the attitude section of the survey. This showed there was no statically significant difference between the attitude scores of the

traditionally educated, home educated, and privately educated students after completing a first-year experience program.

Behavior

In the behavior section the same trend was found. There was no difference in the means of the scores found between the groups when comparing the subscales of the three groups. The mean of student responses in all three of the groups answered between “occasionally” and “frequently”. The students self-identified within the groups recognized themselves as implementing the behaviors identified as indicators of success in the transition to the higher education community. The comparison of means indicated there was not a statistically significant difference between the traditionally educated, home educated, and privately educated students in the behavior subscale.

Assumptions

This study included several assumptions. The first assumption addressed a design limitation. The first-year experience program teaches skills, and the survey was built upon the belief that the skills were improved after completion of a program. The research assumed these skills were indicators of success and resulted in retention for the higher education institutions and organizations (Schrader & Brown 2008). Another assumption also addressed a design limitation of the study. The skills identified in the study were assumed to indicate a proficiency in socialization during the transition into the new community of higher education (Schrader & Brown, 2008). These assumptions were controlled through the use of an established survey which had been used for this purpose in earlier research. Because of the relatively small percentage of students entering higher education with a homeschool background, the population had an unbalanced but acceptable

division between the groups. Additionally a convenience sample was used to increase the total amount of homeschool students participating in the study.

Study Limitations

This study used a self-reported survey resulting in quantitative data. The items in the survey included 9 close-ended questions to gather demographic data and 60 Likert questions to gather the data on knowledge, attitudes, and behaviors. Of the 2963 surveys that were distributed, a total of 235 of the surveys were returned completed, resulting in a 7.9% return rate.

The study population initially was to be collected by students from one Midwestern university. There were enough traditionally educated and privately educated participants but not enough home educated participants. From the one Midwestern university, there were only 10 respondents with a homeschool education. As a result, a convenience sample was taken in a community nearby the Midwestern university. This raised the home educated participants by 14 respondents for a total of 24 home educated students.

The convenience sample resulted in the researcher knowing some of the participants. The participants were identified through the relationships of the researcher with the local homeschool cooperative. Confidentiality, anonymity, and informed consent were followed with these participants like the rest of the population. The participants identified through the convenience sample did not attend the Midwestern university. These participants had a variety of higher educational backgrounds including community, junior and four year colleges, and other universities. All of these students in the convenience sample had completed a first-year experience program.

There was considerable homogeneity within the participant population. The majority of the population was White. The homogeneity makes it problematic to generalize to the overall population of higher education students who had completed a first-year experience program. The results from this study may not be reflective for other schools, regions, or countries. Additionally, an increased sample size, particularly for the home educated and privately educated students, would improve the confidence in the results.

The Knowledge, Attitude, and Behavior Item Survey had a limitation as well. The knowledge and attitude subscales met the threshold as acceptable using the Cronbach's alpha test. This indicates internal reliability for these two subscales. The behavior subscale did not meet the acceptable standard for the Cronbach's alpha test. The behavior scale coefficient value is indicative of the subscale as an outlier, and the subscale may not measure the behavior of the participants. Changing the behavior from a five point scale to a six point scale would likely fix the internal reliability.

Discussion

Homeschooling has been a controversial model of education for students. Students, parents, and administrators should be concerned about the impact of the educational model when entering higher education. The first-year experience programs are a convenient time and location (Schrader & Brown, 2008) to compare the home educated student population with the other major models of education. Even though other research has addressed student academic success (Davis, 2011), in this population understanding the knowledge, attitudes, and behaviors of the home educated student when compared to the rest of the student population provides useful information in developing plans for changing the

introduction of home educated students into the university community (Schrader & Brown, 2008).

There was no significant difference in the responses from the traditionally educated, privately educated, and home educated groups. This indicates all three of the groups self-evaluate as possessing the knowledge, attitudes, and behaviors necessary for success in higher education, after they have completed a first-year experience program. This study attempted to show the differences, but found instead all three groups are similar in their responses.

First-year experience programs historically have been focused on traditionally educated and privately educated students (Chambers, Smith, Orvis & Caplinger, 2013). This study confirms students equally self-report possessing the necessary components for transition into higher education. When considering this in regards to socialization it suggests home educated students are able to learn the formal and informal rules of a new community, like higher education (Macionis & Gerber, 2011; Mannan, 2007; Tinto, 1993). In contrast to concerns about socialization, home educated students seem at least as prepared as the traditionally educated students and privately educated students. Concerns for homeschool students include socialization (Romanski, 2006). The study results indicate the concerns are unwarranted, at least when considering home educated students who completed a first-year experience program.

The first-year experience program from the Midwestern university was educating the three groups of students with equal success. This suggest components of first-year experience programs, like developing basic educational skills, fostering relationship between students and faculty, and student study groups, were effective equally for the

different student groups. While continued observation and review of the student groups is appropriate for evaluative purposes, this study suggested they have enough similarity to benefit from the same first-year experience programs.

Implications

This study has significance both theoretically and practically. For home educated students, the study provides insight into how this specific population compares to other student groups. The data from this study show home educated students self-reported the practical knowledge, attitudes, and behaviors for a successful transition into higher education. This may encourage home educated students to engage and enroll in first-year experience programs when entering higher education. This study suggests students finish these programs with those necessary qualities for student success.

Parents of home educated students receive the same insight as their students. Besides this practical consideration, the parents can use the theoretical concept of the knowledge, attitudes, and behaviors to further prepare their student in preparation for higher education. Parents may be able to use these theoretical concepts to modify their homeschool curriculum to specifically address areas like, basic learning skills and relationship training in preparation for the transition to the higher education community. The study also provides insight into the other two major educational models for the parent to evaluate and compare their model.

Administrators and leaders of higher education institutions and organizations understand the different student population groups. The results of this study offer insight into the attributes that lead to not only success in higher education but also the goal of many first-year experience programs, retention in the institution (Schrader & Brown,

2008). Retention remains an ongoing concern for administrators and leaders, adding to the usability of this research (Clark & Cundiff, 2011; Escobedo, 2007). The study suggests first-year experience programs are assisting students from different educational backgrounds similarly. This study also suggests a theory and format for evaluating first-year experience programs (Schrader & Brown, 2008). Administrators and leaders can replicate this research in their own institutions and organizations as quality improvement.

Recommendations for Further Study

The primary conclusion found in this study was there was not a significant difference in survey answers for the three student populations. The first-year experience programs, based on this data, were meeting the students' needs at least in regards to knowledge, attitudes, and behaviors. Additional questions were raised as a result of this research.

Further examination should be performed on other students groups, pertaining to first-year experience programs. This research only separated the results by the model of education used before entering higher education. Additional investigation on the impact of first-year experience programs with minority groups, socio-economic status, gender, and other demographic categories would lead further development of these programs.

Replication of this study to a broader range of universities and higher education institutions would allow for a more diverse population, allowing for improved generalizability. This study was performed on primarily one university in the Midwest. The study could be expanded across several universities to gather more data about first-year experience programs and the impact on the student population.

If the study were replicated there are two changes that would improve the results. The behavior subscale did not have internal reliability. This should be corrected before a replication of this study. Additionally, assessing the participant before and after the first-year experience program would add to the richness and depth of the research.

This study relied on self-report of the students. Further studies utilizing observation and other objective data-gathering methods may lead to specific areas within the first-year experience programs to improve. This may produce specific strategies and interventions higher education institutions could use with the variety of groups in the student population.

Summary

The purpose of this study was to assist educational leaders in developing policy to better understand the home educated students and aspects of their first-year experience. This was achieved using a quantitative approach to gather information from three different student population groups, traditionally educated students, home educated students, and privately educated students. This information was gathered from a Midwestern university using a self-report student survey after the students had completed a first-year experience program.

This study had practical and theoretical impact for home educated students, parents of homeschoolers, and administrators and leaders of higher education institutions and organizations. Understanding the impact, both practically and theoretically, will ultimately improve the first-year programs and the students participating in those programs. Since retention and student success should always be a concern for educators, this study will benefit the variety of stakeholders involved in higher education.

References

- Allen, J., Robbins, S. B., Casillas, A., & Oh, I. (2008). Third-year college retention and transfer: Effects of academic performance, motivation, and social connectedness. *Research in Higher Education, 49*(7), 647-664.
- Aud, S., Hannes, G., & National Center for Education Statistics. (2011). *The condition of education 2011 in brief*. (NCES 2011-034). Washington D. C.: National Center for Education Statistics.
- Barnett, T. (2013). Pulling back the curtains: Undetected child abuse and the need for increased regulation of home schools in Missouri. *Brigham Young University Education & Law Journal, 2013*(2), 341-356.
- Barton, A., & Donahue, C. (2009). Multiple assessments of a first-year seminar pilot. *JGE: The Journal of General Education, 58*(4), 259-278.
- Braxton, J. M., McKinney, J. S., & Reynolds, P. J. (2006). Cataloging institutional efforts to understand and reduce college student departure. *New Directions for Institutional Research, 2006*(130), 25-32. doi:10.1002/ir.177
- Brown, J. L. (2012). Developing a freshman orientation survey to improve student retention within a college. *College Student Journal, 46*(4), 834-851.
- Cabrera, N., Miner, D., & Milem, J. (2013). Can a summer bridge program impact first-year persistence and performance?: A case study of the new start summer program. *Research in Higher Education, 54*(5), 481-498. doi:10.1007/s11162-013-9286-7
- Callaway, S. (2004). Unintended admission consequences of federal aid for home educated students. *Journal of College Admission, 2004*(185), 22-28.
- Carlson, D. (2009). Homeschooling and bilingual education: A well-kept secret. *Encounter, 22*(4), 10-13.
- Chambers, W. L., Smith, L. P., Orvis, J. N., & Caplinger, C. (2013). Developing a topic-centered first-year seminar with an emphasis on information literacy at a large regional university. *College & Undergraduate Libraries, 20*(1), 52-71. doi:10.1080/10691316.2013.761077
- Christie, H., Barron, P., & D'Annunzio-Green, N. (2013). Direct entrants in transition: Becoming independent learners. *Studies In Higher Education, 38*(4), 623-637. doi:10.1080/03075079.2011.588326

- Clark, M. M., & Cundiff, N. (2011). Assessing the effectiveness of a college freshman seminar using propensity score adjustments. *Research in Higher Education, 52*(6), 616-639. doi:10.1007/s11162-010-9208-x
- Cogan, M. F. (2010). Exploring academic outcomes of home educated students. *Journal of College Admission, 2010*, 18-25.
- Conroy, J. C. (2010). The state, parenting, and the populist energies of anxiety. *Educational Theory, 60*(3), 325-340. doi:10.1111/j.1741-5446.2010.00361.x
- Cox, P. L., Schmitt, E., Bobrowski, P. E., & Graham, G. (2005). Enhancing the first-year experience for business students: Student retention and academic success. *Journal of Behavioral & Applied Management, 7*(1), 40-68.
- Creswell, J.W. (2009). *Research design: Quantitative, qualitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Davis, A. (2011). Evolution of homeschooling. *Distance Learning, 8*(2), 29.
- Demski, J. (2010). Winning back home educated students. *T H E Journal, 37*(1), 20-21.
- Dumas, T. K., Gates, S., & Schwarzer, D. R. (2010). Evidence for homeschooling: Constitutional analysis in light of social science research. *Widener Law Review, 16*(1), 63-87.
- Escobedo, G. (2007). A retention/persistence intervention model: Improving success across cultures. *Journal of Developmental Education, 31*(1), 12-37.
- Fields, A (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: Sage
- Fields-Smith, C., & Williams, M. (2009). Motivations, sacrifices, and challenges: Black parents' decisions to home school. *Urban Review, 41*(4), 369-389. doi:10.1007/s11256-008-0114-x
- Gaither, M. (2008). Why homeschooling happened. *Educational Horizons, 86*(4), 226-237.
- Garcia, L. D., & Paz, C. C. (2009). Bottom line: Evaluation of summer bridge programs. *About Campus, 14*(4), 30-32. doi:10.1002/abc.299
- Gross, M., & Latham, D. (2009). Undergraduate perceptions of information literacy: Defining, attaining, and self-assessing skills. *College & Research Libraries, 70*(4), 336-350.

- Hausmann, L. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education, 48*(7), 803-839.
- Hodkinson, P., Biesta, G., & James, D. (2008, March). Understanding learning culturally: Overcoming the dualism between social and individual views of learning [Electronic version]. *Vocations and Learning, 1*(1). doi:10.1007/s12186-007-9001-y
- Holt Associates. (1999). *Growing without schooling: A record of a grassroots movement, I*. Cambridge: John Holt.
- Isenberg, E. J. (2007). What have we learned about homeschooling?. *Peabody Journal of Education (0161956X), 82*(2/3), 387-409. doi:10.1080/01619560701312996
- Jamelske, E. (2009). Measuring the impact of a university first-year experience program on student gpa and retention. *Higher Education, 57*(3), 373-391.
- Johnson, I. Y., & Muse, W. B. (2012). Student swirl at a single institution: The role of timing and student characteristics. *Research in Higher Education, 53*(2), 152-181.
- Kelly, J. L., Lavergne, D. D., Boone, J. N., & Boone, D. A. (2012). Perceptions of college students on social factors that influence student matriculation. *College Student Journal, 46*(3), 653-664.
- Klipsch, P. R. (1995). An educated collection for home educated students. *Library Journal, 120*(2), 47.
- Kraftl, P. (2013). Towards geographies of 'alternative' education: a case study of UK home schooling families. *Transactions of The Institute Of British Geographers, 38*(3), 436-450. doi:10.1111/j.1475-5661.2012.00536.x
- Kreager, R. (2010). Homeschooling: The future of education's most basic institution. *University of Toledo Law review, 42*(1), 227-253.
- Lebeda, S. (2007). Homeschooling: Depriving children of social development? *Journal of Contemporary Legal Issues, 16*(1), 99-104.
- Leeper vs. Arlington Independent School District, NO. 17-88761-85 (Tarrant County District Court, 1987).
- Macionis, J. J., & Gerber, L. M. (2011). *Sociology* (7th ed.). Don Mills, Ontario: Pearson Education Canada.

- Mackey, B. W., Reese, K., & Mackey, W. C. (2011). Demographics of home educated students: A regional analysis within the national parameters. *Education, 132*(1), 133-140.
- Mannan, M. (2007). Student attrition and academic and social integration: Application of tinto's model at the university of Papua New Guinea. *Higher Education: The International Journal of Higher Education And Educational Planning, 53*(2), 147-165.
- Marples, R. (2014). Parents' rights and educational provision. *Studies in Philosophy & Education, 33*(1), 23-39. doi:10.1007/s11217-013-9360-9
- Mason, G. (2004). Homeschool recruiting: Lessons learned on the journey. *Journal of College Admission, 2004*(185), 2-3.
- Mayberry M., Knowles I. G., Ray B., and Maclow S. (1995). *Homeschooling: Parents as educators*. Thousand Oaks, CA: Corwin.
- McCulloch, D. S., Savage, A., & Schmal, L. (2013). Admission officers' impressions of home educated applicants in evangelical and nonevangelical colleges and universities. *Christian Higher Education, 12*(3), 215-224. doi:10.1080/15363759.2011.598380
- McIntire, S. A., & Miller, L. A. (2007). *Foundations of psychological testing: A practical approach* (2nd ed.). Thousand Oaks, CA: Sage.
- McIntosh-Burke, H. (2013). Four grades and no GPA. *Journal Of College Admission, 2013*(219), 5.
- Medlin, R. G. (2013). Homeschooling and the question of socialization revisited. *Peabody Journal Of Education, 88*(3), 284-297. doi:10.1080/0161956X.2013.796825
- Merry, M. S., & Karsten, S. (2010). Restricted liberty, parental choice and homeschooling. *Journal Of Philosophy Of Education, 44*(4), 497-514. doi:10.1111/j.1467-9752.2010.00770.x
- Miles, C. (2004). Going back to school. *Paths Of Learning, 2004*(19), 29-33.
- Moore, R., & Moore, D. (1977). *Better late than early*. New York City, NY: McGraw-Hill.
- Morrow, J., & Ackermann, M. E. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal, 46*(3), 483-491.
- Murzluf, P. P. (2009). Writing home-educated students into the academy. *Composition Studies, 37*(1), 49-66.

- Olsen, C. (2009). Constitutionality of home educated: How the supreme court and American history endorse parental choice. *Brigham Young University Education & Law Journal*, 2009(2), 399-423.
- Peter, K., & Cataldi, E. F., & National Center for Education Statistics. (2005). *The road less traveled? Students who enroll in multiple institutions: Postsecondary education descriptive analysis report*. (NCES 2005-157). Washington D. C.: National Center For Education Statistics.
- Phillips, L. (2010). Homeschooling is an art, not a science: The impact of homeschooling on choice of college major. *Sociological Viewpoints*, 26(2), 19-25.
- Philips, S. F., & Case, E. (2013). Contextualizing information literacy enrichment through a common reader in a first-year experience seminar. *College & Undergraduate Libraries*, 20(1), 1-24. doi:10.1080/10691316.2013.761046
- Princiotta, D., & Bielick, S. (2006). Homeschooling in the United States: 2003, (NCES 2006-042) *U.S. Department of Education*. Washington, DC: National Center for Education Statistics.
- Ray, B. D. (2004). Homeschooling students on to college: What research shows us. *Journal of College Admission*, 2004(185), 5-11.
- Ray, B. D. (2010). Academic achievement and demographic traits of homeschool students: A nationwide study. *Academic Leadership*, 8(1) 1-27.
- Reich, R. (2002). The civic perils of homeschooling. *Educational Leadership*, 59(7), 56
- Romanski, M. H. (2006). Revisiting the common myths of homeschooling. *Clearing House*, 79(3).
- Schaub, D. (2002). Can liberal education survive liberal democracy? *Public Interest*, 2002(147), 45.
- Schrader, P. G., & Brown, S. W. (2008). Evaluating the first-year experience: Students' knowledge, attitudes, and behaviors. *Journal of Advanced Academics*, 19(2), 310-343.
- Schuetz, P. (2008). Developing a theory-driven model of community college student engagement. *New Directions for Community Colleges*, 2008(144), 17-28.
- Schuh, J. H. (1999). Examining the effects of scholarships on retention in a fine arts college. *Journal of College Student Retention*, 1(3), 193-202.
- Sparkman, L. A., Maulding, W. S., & Roberts, J. G. (2012). Non-cognitive predictors of student success in college. *College Student Journal*, 46(3), 642-652.

- Strayhorn, T. L. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55(2), 142-159. doi:10.1177/0002764210381871
- Thomas, A., & Pattison, H. (2013). Informal home educated: Philosophical aspirations put into practice. *Studies In Philosophy & Education*, 32(2), 141-154. doi:10.1007/s11217-012-9299-2
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: The University of Chicago Press.
- Tinto, V., & Pusser, B. (2006). Moving from theory to action: Building a model of institutional action for student success. *National Postsecondary Education Cooperative*. Retrieved from http://web.ewu.edu/groups/academicaffairs/IR/NPEC_5_Tinto_Pusser_Report.pdf
- Tuckness, A. (2010). Locke on education and the rights of parents. *Oxford Review Of Education*, 36(5), 627-638. doi:10.1080/03054985.2010.514439
- US Department of Health and Human Services. (1979). The belmont report. Retrieved from <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>
- U.S. Department of Education, National Center for Education Statistics. (2013). *Parent and family involvement in education*. (NCES 2013-028). Washington D. C: U.S. Department of Education, National Center for Education Statistics.
- Waddell, T. (2010). Bringing it all back home: Establishing a coherent constitutional framework for the re-regulation of homeschooling. *Vanderbilt Law Review*, 63(2), 541-597.
- Wells, R. (2008). The effects of social and cultural capital on student persistence: Are community colleges more meritocratic? *Community College Review*, 36(1), 25-46.
- Wichers, M. (2001). Homeschooling: Adventitious or detrimental for proficiency in higher education. *Education*, 122(1), 145.
- Wilhelm, G. M., & Firmin, M. W. (2009). Historical and Contemporary Developments in Home School Education. *Journal of Research on Christian Education*, 18(3), 303-315. doi:10.1080/10656210903333442
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning In Higher Education*, 11(3), 167-177. doi:10.1177/1469787410379680

Appendix A

Knowledge, Attitudes and Behaviors Item Survey

You have been selected to complete this survey because you have completed your freshman year in a university. The data collected in this survey is for a research project that will partially fulfill the requirements of a doctorate degree from the University of Missouri Columbia. This research project will be comparing the knowledge, attitudes and behaviors of students who have completed a First-Year Experience program. Please choose the best answer to the following questions.

Knowledge Scale

Directions: Indicate your responses to the following statements in reference to your knowledge using the following key. Circle the appropriate response.	Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Slightly Agree 4	Agree 5	Strongly Agree 6
1. I know how to best focus my attention on schoolwork.	1	2	3	4	5	6
2. I know how to motivate myself for coursework.	1	2	3	4	5	6
3. I know how to consider ethical factors when I make decisions.	1	2	3	4	5	6
4. I know about university resources available to me, like counseling, supportive services and student accommodations.	1	2	3	4	5	6
5. I know how to manage my time effectively.	1	2	3	4	5	6
6. I know how to take notes in my courses.	1	2	3	4	5	6
7. I know how to	1	2	3	4	5	6

resolve conflicts responsibly.

8. I know how to use the university's online library services. 1 2 3 4 5 6

9. I know how to access the services of my academic advisor. 1 2 3 4 5 6

10. I know how to use computers to complete my coursework. 1 2 3 4 5 6

Attitude Scale

Directions: Indicate your responses to the following statements in reference to your knowledge using the following key. Circle the appropriate response.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
	1	2	3	4	5	6

1. I believe it is important to focus on my schoolwork. 1 2 3 4 5 6

2. I believe it is important to motivate myself in my coursework. 1 2 3 4 5 6

3. I believe it is important to consider ethical factors when I make decisions. 1 2 3 4 5 6

4. I am comfortable using the university resources available to me, like counseling, supportive services and student accommodations. 1 2 3 4 5 6

5. I believe it is important to manage my time effectively.	1	2	3	4	5	6
6. I believe it is important to take notes in my coursework.	1	2	3	4	5	6
7. I believe it is important to resolve conflicts maturely.	1	2	3	4	5	6
8. I believe it is important to use the university online library resources when completing coursework.	1	2	3	4	5	6
9. I believe it is important to have the assistance of my academic advisor when deciding the courses I am going to take.	1	2	3	4	5	6
10. It is important that I know how to use computers for my coursework.	1	2	3	4	5	6

Behavior Scale

Directions: Mark the frequency that you perform each of the behaviors listed below by circling the appropriate responses using the following key.	Never	Rarely	Seldom	Occasionall y	Frequentl y
	1	2	3	4	5
1. I focus my attention upon my schoolwork.	1	2	3	4	5
2. I motivate myself in my coursework.	1	2	3	4	5

3. I consider ethical factors when I make decisions	1	2	3	4	5
4. I use the university resources available to me, like counseling, supportive services and student accommodations.	1	2	3	4	5
5. I resolve conflicts in a mature fashion.	1	2	3	4	5
6. I take notes in my coursework.	1	2	3	4	5
7. I manage my time effectively.	1	2	3	4	5
8. I use the university's online library services.	1	2	3	4	5
9. I use the assistance of my academic advisor in deciding the courses I am going to take.	1	2	3	4	5
10. I use computers to complete my coursework.	1	2	3	4	5

1. How old are you? _____ years

2. What is your gender?

Female

Male

Other

3. What is your race?

American Indian or Alaska Native

Asian

Black or African American

Native Hawaiian or Other Pacific Islander

White

4. Which of the following best

Public School

Private School

Homeschool

describes your elementary and high school experience?

5. Please identify which of the following best described you when you began the first-year experience program.

No College Credit	Advanced Placement	Dual Enrollment	Transfer Student	Completion of an Associate's Degree
-------------------	--------------------	-----------------	------------------	-------------------------------------

6. If you started the first-year experience program with credits which of the following best describes the number of credits?

1 to 15 Credits	16 to 30 Credits	31 to 45 Credits	46 or More Credits
-----------------	------------------	------------------	--------------------

7. What is the highest degree or level of education your parent's have completed?

Less than a High School Diploma	High School Graduate Includes Equivalency	Some College or Associate's Degree	Bachelors Degree	Graduate or Professional Degree
---------------------------------	---	------------------------------------	------------------	---------------------------------

8. What category best describes your annual household income?

Less than \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 or more
--------------------	----------------------	----------------------	-------------------

9. What is your cumulative GPA for college? _____

Adapted from "The University Experience Battery Items" Schrader, P. G., & Brown, S. W. (2008). Evaluating the first-year experience: Students' knowledge, attitudes, and behaviors. *Journal of Advanced Academics*, 19(2), 310-343.

Appendix B

Informed Consent Form

Dear Research Participant:

Thank you for considering participation in the study “A Comparative Study of Home educated Students and Traditionally Educated Students after Completion of a Midwestern University First-year Experience Program.” This study is being conducted in partial fulfillment of the requirements for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri-Columbia.

The purpose of this study is to better understand the impact of first-year experience programs on home educated students in their first-year undergraduate education in a higher education setting as compared to traditionally educated students. This information will help to inform students, parents, instructors and administrators.

- ☐ Please read the following about how your input will be used and how your rights as a participant will be protected:
- ☐ Participation in the study is completely voluntary. You may stop participating at any point without penalty.
- ☐ You need not answer all of the questions.
- ☐ Your answers will be kept confidential. Results will be presented to others in summary form only, without names or other identifying information.
- ☐ Your participation will take approximately 10-20 minutes. During this time you will complete the Knowledge, Attitudes and Behaviors Item Survey. The data collected will be held in a locked file cabinet in the researcher’s office and disposed of at the conclusion of the study.

This project has been reviewed and approved by the University of Missouri-Columbia Campus Institutional Review Board (IRB). The IRB believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights, and may be contacted at 573.882.9585. The project is being supervised by Dr. Robert Watson, Professor, CLSE, Missouri State University (417.836.5177).

You can contact me at 620.235.4313 if you have any questions or concerns about your participation. Thank you very much for your time and consideration.

Sincerely,
Jeremey Wolfe
Pittsburg State University

Appendix C

Recruitment Letter

Dear student,

My name is Jeremey Wolfe and I am an Instructor from the Social Work Program here at Pittsburg State University. I am writing to invite you to participate in my research study about First-Year Experience Programs. You are eligible to be in this study because you completed the Freshman Experience Program at Pittsburg State University and are still a student. I obtained your contact information from the Student Success Center.

If you decide to participate in this study, you will complete an anonymous online survey. I would like to encourage those students who define themselves as home educated to participate. Since there are so few home educated students on campus it would be beneficial to the study if you would consider completing the survey.

Remember, this is completely voluntary and your answers are confidential. You can choose to be in the study or not. If you have any questions about the study, please email or contact me.

Thank you very much.

Sincerely,

Jeremey Wolfe
Social Work Instructor
Pittsburg State University
jdwolfe@pittstate.edu
620-3-235-4313

VITA

Jeremy Wolfe was born in 1972 in Reading, Pennsylvania, to David and Janet Wolfe. He has two brothers that reside in East Tennessee. Jeremy grew up primarily in Central Indiana, where he graduated from high school. He attended Johnson University, in Knoxville, Tennessee, after high school and earned a Bachelor of Arts degree in Bible and Counseling. While at Johnson, he married his wife Ann Wolfe. After graduating, he moved to Missouri and began working as a case manager and addiction counselor. While in Missouri he had three children, Lydia, Elijah, and Jude, with his wife.

In 2007, he graduated from Missouri State University, in Springfield, Missouri, with a Master of Social Work. His employment changed when he moved to Mercy Hospital to fill the position of Psychosocial Coordinator in the Oncology Department. It was at Mercy where he pursued and achieved Clinical Licensure in Social Work in 2009. He also began pursuing his Doctorate education from the University of Missouri. In 2015, he earned his Doctorate in Educational Leadership and Policy Analysis from the University of Missouri, in Columbia, Missouri. While in his doctorate program he took a full-time instructor position with Pittsburg State University, in Pittsburg, Kansas. He then moved to Missouri Southern State University, in Joplin, Missouri, where he continues to instruct as an Assistant Professor and Field Experience Coordinator of the Social Work Department.