Single Mothers in College: The Effect of Selected Variables

Rickey Booker

University of Arkansas, Fayetteville

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SINGLE MOTHERS IN COLLEGE: THE EFFECT OF SELECTED VARIABLES
SINGLE MOTHERS IN COLLEGE: THE EFFECT
OF SELECTED VARIABLES

A dissertation submitted in partial fulfillment
of the requirements of the degree of
Doctor of Education in Workforce Development Education

By

Rickey Lee Booker, Jr.
University of Arkansas at Monticello
Bachelor of Science in Physical Education and Wellness Leadership, 2004
University of Arkansas
Master of Education in Higher Education, 2006

December 2011
University of Arkansas
ABSTRACT

Single parent mothers who are currently in poverty may find it difficult to find routes out of poverty and/or even to enrolling in college. Little empirical research has been conducted on low-income single parent mothers who attempt to enroll, persist and graduate college. The current research has shown that single parents are at a high risk of dropping out of college because of many barriers including poverty related issues. This study examined women who had at least one child or dependent, were in poverty, and were first time beginners in college.

The purpose for conducting this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. The study helped explain why single parent mothers leave higher education before completing their degree, and provided more insight into the issues that the nontraditional student subpopulation of single parent mothers are faced with while in college. The study used a Pearson r correlation to explain if degree completion, institution type, and persistence were influenced by poverty. This was completed by utilizing secondary data from the Beginning Postsecondary Students Longitudinal Study© (BPS:04/06) conducted by the National Center for Education Statistics (NCES) from 2004 to 2006.
This dissertation is approved for recommendation to the Graduate Council

Dissertation Director:

__________________________________________
Dr. Michael T. Miller

Dissertation Committee:

__________________________________________
Dr. Kenda Grover

__________________________________________
Dr. Adam Morris

__________________________________________
Dr. Naccaman Williams (ex officio)
DISSERTATION DUPLICATON RELEASE

I hereby authorize the University of Arkansas Libraries to duplicate this dissertation when needed for research and/or scholarship

Agreed

Rickey Lee Booker, Jr.

Refused

Rickey Lee Booker, Jr.
I would first like to give praise to my Lord and Savior Jesus Christ for allowing me the opportunity, giving me the knowledge, and equipping me with the ability to get to this point in my life. God not only answers prayers, He also continues to bless those who stay the course through faithfulness. This is truly a blessing.

Secondly, I give thanks to my mother, Toni Burton-Walker, for her many years of sacrifice, love, protection, and support as a single parent. If my mother had not made the many sacrifices that she did, I would not be here today. My mother faced and overcame many obstacles for me to get to this point in my life and I am truly grateful to her. She truly represents all single mothers who aspire to and achieve the dream of obtaining a college degree.

Next, to my wife, Brittany Booker, who supported me in the times when I felt like the process would never come to an end. My wife embodies all that I do not have, which keeps me grounded and balanced. I could not have finished this without her by my side, which is one of the many reasons why I love her.

Next, I would like to thank all of my family, friends, and church family (St. James Missionary Baptist Church) for all of your love, support and encouragement throughout this process. Specifically, I would like to thank the late Maureen Hoover who was inspirational in my enrollment in the doctoral program and Dr. Robert Mock who continually encouraged me throughout the process.

To the members of my dissertation committee, Dr. Kenda Grover, Dr. Adam Morris, and Dr. Naccaman Williams, I want to say thank you for all your guidance, support, and willingness to serve on my committee. I greatly appreciate your knowledge and wisdom as it was and still is invaluable to me.
Lastly, I would like to thank my dissertation chair, Dr. Michael T. Miller. Your leadership was invaluable and essential to me completing this process. I am truly thankful to have had an advisor as patient, motivating, caring, and admirable as you.
DEDICATION

This dissertation is dedicated to my mother, Toni Burton-Walker, and all the single parent mothers who struggle to provide for their children while attempting to attain a college degree in order to improve the quality of life for their families. “It’s not where you start, it’s where you finish, see you at the top”.

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CHAPTER 1

INTRODUCTION

Context of the Problem

In 2007, the number of nontraditional students who enrolled in higher education had increased by over 14% since 1998 (Snyder & Dillow, 2010). The increase in college enrolled nontraditional students did not decrease the various barriers that continue to impact the enrollment, persistence, and/or degree completion of this population. Some of the barriers are finances, job responsibilities, lack of time, family responsibilities, student loan debt, role conflict, being a single parent or having children or dependents, role overload, poverty, stressful situations, childcare, housing difficulties, and the effect of college enrollment on children (Austin & McDermott, 2003; Bowl, 2001; Fairchild, 2003; Horn, Peter, and Rooney, 2002; Parsons, 2008; Tones, Fraser, Elder, & White, 2009).

Literature has shown that nontraditional students are different from traditional students in many ways such as the way in which they learn, their responsibilities, their demographic, and their degree pursuit motivations (Demirbilek, 2010; Merriam & Brockett, 2007). Because nontraditional students are different in many ways and consist of a wide demographic, more research should be conducted on how different subgroups within the nontraditional category experience college. According to Haberman (2001) and Lovett (2009), there is a need for more literature on single parents in higher education, perhaps in the form of longitudinal and/or quantitative analysis. Single parents may be classified as adult learners or nontraditional students by definition (Choy, 2002; Kasworm, 2003). They have been scarcely researched in regards to their enrollment, retention, and degree completion rates.
Single parent households in the United States have become an increasing trend (McLanahan & Teitler, 1999). The number of single mother families increased to 3 million in 1970, 10 million in 2003, and 14 million in 2007 (Fields, 2004; Kreider & Elliott, 2009). As these numbers grow, the literature must address the struggles and accomplishments these individuals have encountered and continue to encounter through their life journey. The current literature on single parent mothers does not extensively focus on their enrollment, retention, and degree completion. Rather, literature has focused on the life issues that these mothers’ encounter and the impact these issues have on their children. Most of the current research that does exist on attrition and degree completion has focused on traditional students (Kasabian, 2010).

Many single parents have considered where they will work, how they will provide for their children, where they will attend college, and how they will pay for college. These issues cause higher levels of stress for single parent mothers than other populations. According to the Jordan Institute for Families (2004), parents’ most stressful issue may be dealing with the issue of poverty while rearing a child. Single parent mothers who are currently in poverty may find it difficult to find routes out of poverty and/or even to enrolling in college. Research has shown that single parents are at a high risk of dropping out of college because of many barriers including poverty related issues (Pusser et al., 2007).

The issue of poverty has affected families in the United States for decades. According to Dowd (1997), a larger percentage of children who lived in poverty were in single parent homes. Children of single parent mothers have a greater chance of being poor adults and living on government assistance than children from single father or two parent homes (McLanahan & Bumpass, 1988). Research has shown that the education of a mother might have a strong effect
on family income and child poverty (Duncan, Yeung, Brooks-Gunn, & Smith, 1998; Oliver, Sandefur, Jakubowski, & Yocum, 2005). Conducting research on the issues single parent mothers face as well as the programs designed to help them succeed can provide more effective ways to assist these parents with college completion.

Because poverty is a longstanding problem across the U.S., individuals need avenues that may potentially lead them out of their impoverished environment. Individuals who obtain a college degree have been shown to overcome the barrier of poverty and go on to lead productive lives (Chaudhry, Malik, Hassan, & Faridi, 2010). According to the Bureau of Labor and Statistics (2002), people with a college degree earned about 76% more than individuals who held only a high school diploma. People with college degrees have higher occupational status, are more likely to hold a stable job, are more likely to be engaged in work that provides higher levels of extrinsic and intrinsic rewards, and typically earn more money than those with high school diplomas (Pascarella & Terenzini, 2005). Researchers have also found that individuals with a college degree earned more money, committed fewer crimes, lived more stable lives, found better jobs, enjoyed better health, participated more in civic life, suffered less unemployment, and lived longer than individuals without a college degree (Fischer & Hout, 2006; Hout, 2011; Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2003).

**Statement of the Purpose**

The purpose of this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. The study helped explain why single parent mothers leave higher education before completing their degree, and provided more insight into the issues that the nontraditional student subpopulation of single
parent mothers are faced with while in college. The study used a simple correlation to explain if degree completion, institution type, and persistence were influenced by poverty.

This study utilized secondary data from the Beginning Postsecondary Students Longitudinal Study© (BPS:04/06) conducted by the National Center for Education Statistics (NCES) from 2004 to 2006. Specific to this study, the relationships were examined between poverty and degree attainment, poverty and institution type, and poverty and persistence of single parent mothers in college. The sample for the study was 534 nontraditional single parent mothers who were current students, graduates or dropouts from degree programs across the nation and who participated in the BPS:04/06.

Statement of Research Questions

1. What is the academic and personal profile of single mothers who participated in the BPS:04/06?
2. Based on beginning postsecondary longitudinal data, to what extent is there a relationship between poverty and college degree attainment, poverty and institution type, and poverty and persistence for single mothers in college?
3. Based on the findings to the previous questions, what are the prominent variables?
4. Does this study support or reject life course theory framework for single mothers?

Definitions

Adult Learner: An adult who gains knowledge or expertise based on their personal goals and aspirations in the higher education field, which may include unplanned learning that is part of one’s everyday life (Knowles, Holton, & Swanson, 2005; Merriam & Brockett, 2007). Adult learners prefer to learn through, “activities that are experience-oriented, self-directed,
immediately applicable, internally motivat[ing], and problem-oriented” (Stratman, Vogel, Reck, & Mukesh, 2008, p. 421). Adult learners may also be individuals over the age of 18 who meet the adult learner and/or nontraditional student criterion. The terms adult learner and nontraditional student may be used interchangeably.

**Attrition:** The state in which part-time or full-time students leave college without completing their college degree (Catalano & Eddy, 1993; Tinto, 1993).

**Beginning Postsecondary Longitudinal Study (BPS:04/06):** This study focuses on education financing, continued education and experience, the relationship between experiences during postsecondary education and various societal and personal outcomes, entry into the workforce, and the returns to the individual and to society on the investment in postsecondary education ((Berkner, He, Mason, Wheeless, & Hunt-White, 2007).

**Economic Well-being:** The state in which people earn higher income or consume more, which results in a raised material standard of living (Sumner, 2004). Researchers have identified indicators for economic well-being, which are grouped into three subcategories, (a) income per capita, (b) income poverty lines and, (c) income inequality (Sumner, 2004).

**External Factors:** Factors that contribute to the potential attrition of nontraditional and/or adult students such as (a) academic problems, (b) family responsibilities and, (c) financial support from parents.

**Institution Type:** Classification for institutions that has been established by the Carnegie Foundation for the Advancement of Teaching: 2000 Edition.

**Nontraditional Student:** College student who is age 25 or older and who meets at least two of the seven characteristics of a nontraditional student according to Choy (2002): financially
independent, a single-parent, has either completed high school in a nontraditional way such as with a GED or has not finished high school, has dependents, delays entry to college after high school, works 35 or more hours per week, or takes a part-time class load at least part of the academic year. Single parents are nontraditional by definition; however, they may also be adult learners. The terms nontraditional student and adult learner may be used interchangeably.

_Persistence:_ Continuing in college from one year to the next year.

_Poverty:_ The degree to which an individual goes without resources, which may be financial, emotional, mental, spiritual, physical, support systems, relationships or role models, and knowledge of hidden rules (Payne, 2005). The study will use the 2004 United States Department of Health and Human Services poverty guidelines as the measure for poverty, as that is the year the 2004/06 Beginning Postsecondary Students Longitudinal Study© began (see Table 1).
Table 1

2004 Poverty Guidelines

<table>
<thead>
<tr>
<th>Persons in family</th>
<th>48 Contiguous States and District of Columbia</th>
<th>Alaska (^1)</th>
<th>Hawaii (^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$9,310</td>
<td>$11,630</td>
<td>$10,700</td>
</tr>
<tr>
<td>2</td>
<td>$12,490</td>
<td>$15,610</td>
<td>$14,360</td>
</tr>
<tr>
<td>3</td>
<td>$15,670</td>
<td>$19,590</td>
<td>$18,020</td>
</tr>
<tr>
<td>4</td>
<td>$18,850</td>
<td>$23,570</td>
<td>$21,680</td>
</tr>
<tr>
<td>5</td>
<td>$22,030</td>
<td>$27,550</td>
<td>$25,340</td>
</tr>
<tr>
<td>6</td>
<td>$25,210</td>
<td>$31,530</td>
<td>$29,900</td>
</tr>
<tr>
<td>7</td>
<td>$28,390</td>
<td>$35,510</td>
<td>$32,660</td>
</tr>
<tr>
<td>8</td>
<td>$31,570</td>
<td>$39,490</td>
<td>$36,320</td>
</tr>
</tbody>
</table>

\(^1\)For families with more than 8 persons, add $3,180 for each additional person.

*U.S. Department of Health and Human Services, 2004*

*Retention:* The state in which part-time or full-time students advance from one year to the next until college graduation.

*Traditional Student:* A college student who is between the ages of 18 and 24 and does not meet the nontraditional student criteria which are: financially independent, a single-parent, has either completed high school in a nontraditional way such as with a GED or has not finished high school, has dependents, delays entry to college after high school, works 35 or more hours per week, or takes a part-time class load at least part of the academic year.

*Underrepresented Students:* Nontraditional students, adult students, and single mothers that currently attend college.
Assumptions

The following assumptions were made in this study:

1. Poverty makes a difference in the lives of individuals who live the experience.
2. Individuals who participated in the 2004/06 Beginning Postsecondary Students Longitudinal Study© were honest and truthful.
3. Researchers who administered the questions were honest, the data was self-reported, and the BPS study yielded a valid response rate.
4. Higher education makes a positive difference in the lives of individuals who live in poverty.
5. Being a single mother has many difficulties such as pursuing a higher education, providing financial well-being for children, and obtaining a college degree.
6. Children from single parent homes also experience difficulties with health, academic, and social issues.
7. Attaining a college education may be a way out of poverty.

Delimitations and Limitations

The study accepted the following limitations and delimitations:

1. The study was limited to a particular time frame, 2004-2006, and may not be generalized beyond then.
2. Findings may not be generalized to populations at other institutions of higher education not represented in the sample, including, for example, proprietary institutions.
3. Sample size and nontraditional single mothers with dependents limited this study.
4. Data from only mothers who are single parents and in poverty were analyzed.
Significance of the Study

Single parent adults who seek to complete a college degree face many obstacles when enrolling in higher education. According to the Council for Adult and Experiential Learning (2008), there is not enough known about the barriers that adult learners in the U.S. face when entering higher education. Horn, Peter, and Rooney (2002) identified seven factors as having a negative impact on persistence and degree completion. Two of these factors were students who have children or dependents and students who are single parents. According to Fairchild (2003), financial strain, job and family responsibilities, and role overload are issues faced by adult learners when entering higher education. Higher education administrators, educators, and state officials need clear and specific guidelines from studies such as this to address the issues they face.

Research has shown that there is very little literature on the retention and attrition of single parents in higher education (Andres & Carpenter, 1997; Lovett, 2009). This study will show the patterns and themes of retention and attrition among single parents across hundreds of institutions of higher education. There has not been a study of this magnitude conducted on single parents in higher education, and the study will expand the body of literature on single parents in higher education, as well as provide insight about the challenges faced so that institutions can better serve these students.

Higher education administrators and educators are responsible for identifying and addressing nontraditional student retention and attrition issues (Lucas, 2009; Weidman, 1985). According to Tinto (2009) in order for institutions to move to a more effective student retention plan they must:
Recognize that the roots of student attrition lie not only in their students and the situations they face, but also in the very character of the educational settings in which they ask students to learn, namely the classrooms, laboratories, and studios of the campus. (p. 2)

Administrators and educators must also understand the experiences of single parents before effective polices and programs can be developed (Yakaboski, 2010). As institutions play their role in assisting single parents, state officials must be active in ensuring that institutions, specifically public institutions, are held accountable for assisting and supporting this underrepresented population.

Tinto and Pusser (2006) argued that state officials have an essential role in identifying and addressing the needs of all students who enter postsecondary education. They argued that in order to effectively expand student success in postsecondary education, state officials must assure that institutions are committed to investing funds and resources in remedial courses for underrepresented students at two-year and four-year institutions. Many colleges tend to solely focus on the recruitment and retention of traditional students (Carnevale, 2010), but research has shown that states “cannot meet the global competitiveness needs of the country by targeting traditional-age students alone” (Engle & Tinto, 2008, p. 29). State officials must invest funds in nontraditional students and establish accountability measures for institutions of higher education. This will hopefully ensure that programs assist nontraditional students in college. The current study would also be significant to state officials who are interested in the impact of poverty on single parent mothers in their state.

Researchers have found that attaining a college education is not only a means of escaping poverty, but is also the key factor in economic well being for people and countries (Hill, Hoffman, & Rex, 2005; Marsh, 2009; Tilak, 2010). According to Day and Newburger (2002)
individuals with a four-year college degree will earn approximately $1.0 million dollars more over a lifetime than a high school graduate. However, researchers have suggested that people who come from disadvantaged backgrounds often do not overcome poverty by achieving a college education because they are more likely to fail (Bynner & Joshi, 2002; Dernie, Butler, & Taplin, 2002; Nemko, 2008; Raffo et al., 2009).

Education also has social returns, in that institutions of higher education, communities, individuals, and the nation as a whole benefit from having an educated public (Abbott, 2002; Topel, 1999). When economic recessions occur, people who have a college degree tend to recover more quickly than those without a college degree (Gangl, 2006). Research has shown that obtaining a college degree has positive financial, health, and civic implications (Fischer & Hout, 2006; Hout, 2011; Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2003). Even with the rising cost of education, “earning a college degree will pay back the cost of obtaining it several times over” (Hout, 2011, p. 15).

**Theoretical Framework of the Study**

Single parent mothers sometimes choose to rear their children alone, while others find themselves rearing their children alone due to various reasons such as divorce, abuse, or unexpected pregnancy. Elder (1998) expressed the view that a person’s past can affect various areas of life such as education, family, and work. This in turn may have a positive or negative effect on the decisions made, which may ultimately influence personal development. The Life Course Developmental Theory was introduced by Elder (1998) to express how the development of individuals continued throughout a life span, which basically indicates that people are supposed to do certain things at certain times within their life. The key principles in this theory
were (a) historical time and place, (b) the timing of lives, (c) linked or interdependent lives and, (d) human agency.

Researchers have not only conducted studies that sought to explain the development of people throughout the life course, but also to understand how people from disadvantaged backgrounds successfully develop (Black, Holditch-Davis, & Miles, 2009; Conger & Elder, 1994; Elder, 1992; Lemert, 1951; Macfarlane, Allen, & Honzik, 1954; Mayer, 2009; Sutherland, 1939). Life course theory was first described in the Oakland Growth Longitudinal Study that was conducted at the University of California, Berkeley. These studies examined the development of children during the Great Depression era. During the 1920’s and 1930’s, families who experienced increased debt, loss of income, and unstable working conditions were at a greater risk having problems, suffering from depression, and having troubled children. Elder (1998) wrote that “the life course of individuals is embedded in and shaped by the historical times and places they experience over their lifetime” (p. 3). This has been affirmed by empirical data as well as the contrasting situations of the Oakland Growth Study children who encountered different experiences. Researchers identified several negative issues that participants within this study encountered which were hardships, raising children, and getting married early in life. The timing at which children moved out of their parents’ home was identified as having some developmental implications on when the transitions or events occurred in life.

Parents who encountered hardships often expressed frustrations in various ways, contributing to their children unknowingly living linked lives with their parents. The home experience of children often mirrored “social and historical influences…expressed through this network of shared relationships” (Elder, 1998, p. 4). Many parents who experienced various
economic difficulties such as finding work to provide for their children, found ways to successfully adapt and make the best of these situations, which supports the human agency principle, where individuals create a new life course by the actions and choices they make within their situations.

Furstenberg, Cook, Eccles, Elder, and Sameroff (2000) conducted a study that focused on the myths about families in inner-city neighborhoods. Their study examined why and how youth from impoverished backgrounds were able to overcome social disadvantages. Parents of these children discussed how they were able to utilize creative ways to manage risks and guide their children toward opportunities and resources that led to positive development and ultimately success. The study not only supported the human agency principle within life course theory, but also offered “important clues to the conditions that alter the life course” (p. 204).

Conger and Elder (1994) conducted a study known as the Iowa Youth and Families Project to determine the impact that farm life had on the life course development of youth. The Iowa youth raised on farms were compared to children raised in nearby urban areas. The authors found that despite facing impoverished environments and a lack of resources, children raised on farms in Iowa were on course for successful development. Their development was largely credited to the social support from family, church, school, civic organizations, and friends.

According to Elder (1998), “the notion that changing lives alters developmental trajectories” (p. 1) may definitely be true for single mothers who live in poverty and aspire to overcome poverty by obtaining a college degree. Like the children in the Oakland Growth Study, the inner-city youth, and the Iowa youth, today many single mothers have faced disadvantages and lack of resources in life. The Life Course Developmental Theory seeks to explain how the
life course of single parent mothers has positively or negatively affected their overall development.

The parents and children in the Oakland Growth study encountered economic hardships such as lack of jobs, homelessness, and poverty, which challenged them to think of ways to overcome their circumstances. Ninety percent of the males in the Oakland Growth study made the decision to serve in the military before they held a career in society. The military became a formative influence in the lives of these participants, which had a major influence on why they did well in their lives. According to Bivens (2010) and Hilsenrath, NG, and Paletta (2008), the world economy has not been as devastating since the Great Depression. Single parent mothers and their children are faced with economic hardships similar to the growth study participants. The Life Course Developmental Theory situates the study. The study sought to understand whether or not this study supported or rejected a life course theory framework for single mothers by extracting data from BPS: 04/06.
CHAPTER II

REVIEW OF RELATED LITERATURE

There has been a substantial amount of literature on nontraditional students over the last two decades (Austin & McDermott, 2003; Bowl, 2001; Choy, 2002; Duquaine-Watson, 2006; Geisler, 2007; Giancola, Grawitch, & Borchert, 2009; Hadfield, 2003; Jinkens, 2009; Kilgore, 2002; Lake & Pushchak, 2006; Parsons, 2008; Quimby & O’Brien, 2006; Rossiter, 2009; Taniguchi & Kaufman, 2005; Teel, 2008; Walker-Griffea, 2004; Zhan & Pandy, 2004;). These studies have addressed, and provided information regarding, nontraditional student issues, ranging from college enrollment and persistence obstacles to support systems and programs needed to increase college completion. However, there still remains a dearth of literature on the single parent nontraditional student subpopulation (Austin & McDermott, 2003; Duquaine-Watson, 2006; Parsons, 2008; Walker-Griffea, 2004; Zhan & Pandy, 2004;). The following review provides information on nontraditional students in higher education as well as literature that has addressed the subpopulation, specifically focusing on three areas (a) nontraditional students in higher education (b) impact of poverty and, (c) higher education and poverty.

To locate literature for the study, the researcher utilized academic search engines at the University of Arkansas library that included ProQuest Direct, ProQuest Direct Dissertations and Theses, ERIC (Education Resources Information Center) in Ebsco Academic Search Premier, and JSTOR (Journal Storage). These academic search engines helped provide relevant information for understanding the background of single parent nontraditional college students. The literature review made use of the keywords and terms presented in Table 2.
Table 2

Results for Keyword Searches in Multiple Databases

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<th>ERIC(^2)</th>
<th>JSTOR(^3)</th>
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</table>

\(^1\) ProQuest Dissertation and Theses  
\(^2\) Education Resources Information Center  
\(^3\) Journal Storage

**Single Parents**

In the 1960’s approximately 90% of all children in the United States lived with and were raised by their biological mother and father (McLanahan & Teitler, 1999). Nearly 50 years later, approximately 61% of children in the U.S. lived with both their biological parents (Kreider, 2008). These statistics show that single parent households have become a typical way of life for many families in the U. S. Although some children in single parent homes typically adjust to the issues they encounter, many others struggle with earning low grades in high school and the
likelihood of not graduating high school, attending college, or attaining a job in early adulthood (Demo, 1996; Zinn, Eitzen, & Wells, 2008).

Over the years, researchers have examined the affect that growing up in a single parent household has on a child (Kesner & McKenry, 2001; Deleire & Kalil, 2002; Page & Stevens, 2005; Ferrell, 2009). For example, Battle (1998) conducted a study to determine whether or not being raised in a Black single parent family versus a Black two-parent family had an effect on the academic achievement of the children raised in those families. The National Education Longitudinal Study of 1988 was used a secondary data source. The sample included 24,599 eighth grade students, which was representative of all U.S. eighth graders who attended approximately 38,000 public schools in the spring of 1988. The author concluded the following:

(a) Academic achievement of students significantly depended upon their socioeconomic status (SES).

(b) At lower levels of SES, students in single parent families score significantly higher on standardized tests than do their counterparts in two parent homes.

(c) At higher levels of SES, students in two-parent families outperform their counterparts in single parent families on standardized tests.

Kesner and McKenry (2001) investigated the relationship between single parent family status and children’s gender and social skills. Sixty-eight preschool aged children and their parents participated in the study. Fifty percent of the children were male, 50% were female, 66% were Black, 20% were Hispanic, 10% were White, and 4% were of other ethnicity. The results of the study noted that the single parent family structure is not exclusively a risk factor for
children’s social development. In terms of social skills and conflict management, there was no difference between children from single parent homes and two parent homes.

Deleire and Kalil (2002) examined the developmental outcomes of teenagers living with single mothers in multigenerational families compared with teenagers living in married families. Secondary data from the 1988 National Education Longitudinal Study was used. Eleven thousand two hundred and thirteen students were included as the sample for the study. The authors found that teenagers who live in unmarried households are more likely to initiate sexual activity, more likely to smoke or drink, and less likely to graduate from high school or attend college. Additionally, teenagers who were living with a single mother and a grandparent were more likely to do as well, if not better than, students who were living in married households.

Page and Stevens (2005) explored whether or not the economic consequences of growing up in a single-parent family were different for Black children versus White children. Secondary data from the 1968-1993 Panel Study of Income Dynamics (PSID) longitudinal study was used. Findings indicated (a) Black children experienced larger income losses than White children in the event of a divorce, (b) Black children who were born to single mothers were likely to see more gains in the event that their mother got married, and (c) family structure was found to be a strong determinant of economic resources for black children.

Ferrell (2009) researched the relationship between students from single parent families versus two parent families on academic success. Seventy-five students from the East St. Louis School District 189 were randomly selected for participation in the study. The author noted that 98% of the students in the school district were Black students. The findings of the study revealed that students from single parent homes were more likely to be absent from and tardy for school.
However, there was no statistically significant difference between the grade point averages of students from single parent and two parent families.

**Nontraditional Students in Higher Education**

Many studies have reported that nontraditional student enrollment in higher education has grown and has continued to grow in large numbers; however, this population continues to have very limited resources as well as assistance in comparison to traditional students (Bowl, 2001; Choy, 2002; Giancola, Grawitch, & Borchert, 2009; Hadfield, 2003; Lake & Pushchak, 2006). In 2008, the total college enrollment of women 25 years of age or older represented 40% of all women enrolled (Chronicle of Higher Education, 2011). Single parents often encounter financial struggles, social isolation, as well as work and family responsibilities when pursuing higher education (Vann-Johnson, 2004). They are also more likely to be impoverished than families with two-parent households (Bauman, 2000).

**Single Mothers**

Austin and McDermott (2003) investigated the barriers to college persistence among low-income single parent mothers. Semi-structured interviews were conducted with 14 single mothers. Some of the college persistence barriers identified were childcare, housing difficulties, effect of college enrollment on children, and Transitional Assistance for Needy Families (TANF). Some reasons why single mothers persisted in higher education were attributed to faculty ties, family and community, financial assistance, social networks with students, and their belief in the importance of a college education. Austin and McDermott (2003) also found that two of the most important services that colleges could offer were assisting single mothers in
making helpful connections in the community and offering services that were unlike traditional student services such as childcare and housing accommodations.

Zhan and Pandy (2004) examined the effects of postsecondary education on the economic well being of single parents. Secondary data from the 1993 Panel Study of Income Dynamics conducted by the Survey Research Center at the University of Michigan was utilized. Among low-income families, 930 single mothers and 168 single fathers were extracted from a sample of 5,000 participants. Single fathers were found to have better economic and financial well being than single mothers. However, among single mothers, significant relationships were identified between a college education, specifically a four-year degree, and (a) labor income (b) asset income (c) house values (d) welfare income (e) support income (f) child support and, (g) percent below poverty. Additionally, single mothers with an education were nine times more likely to live above poverty than those without an education. Zhan and Pandy (2004) also found that a college degree enhanced the economic and financial well being of single mothers and single fathers.

Walker-Griffea (2004) examined what role social, economic, familial, and social factors played in the lives of single mothers who attended a Texas gulf coast community college. Through qualitative research, 25 single mother college students were interviewed and observed in regards to their college experience. Findings indicated that 92% of individuals that received governmental aid felt that college was very difficult to navigate, 90% of participants experienced an uncertain relationship with their children, all participants experienced an unstable support network while attending college and reported that money was a key necessity while attending college. Walker-Griffea (2004) also found that mothers looked for individuals who could provide
encouragement, motivation, and prayer as well as a college campus that could assist in the transformation of their lives while ending their intergenerational poverty.

Duquaine-Watson (2006) researched ways in which single parent mothers in college experienced lack of access to computer technologies. Through qualitative research, semi-structured in-depth interviews were conducted with 22 single parent mothers at the University of Iowa over a two-year period. Additionally, participant observation was utilized to examine the research question. Findings indicated that childcare, time constraints, institutional climate, and economics worked together to obstruct these mothers from accessing computing technologies. From the findings, the University of Iowa created the Computer Access Promoting Retention and Achievement (CAPRA) program, which allowed single mothers to check out computers for long term use giving them access to computing technology at all times. This program has helped promote retention and achievement among single parent mothers at the University of Iowa.

Parsons (2008) studied the role that classed habitus plays in assisting single mothers on welfare to achieve success in higher education. Findings from a multiple case study of eight single mothers were utilized as a secondary data source. Habitus was identified as a set of motivating structures that provide direction and help individuals develop goals. Parsons (2008) used habitus to explore trajectories and dispositions to reflect on the life chances and choices of single African American mothers. The mothers faced barriers such as poverty, stressful situations, and student loan debt with no guarantee of receiving a job after college. Parsons (2008) found that although these women faced many obstacles, they were able to adjust their aspirations and choices while persevering through resilience, commitment, and courage.
Socioeconomic Status

Most research agendas specifically focus on access, retention, attrition, and completion of traditional students, but rarely distinguish students by their socioeconomic status (McDonough, 1997; Paulsen & St. John, 2002; Walpole, 2003). According to Hossler, Schmit, and Vesper (1999) many low SES students are less likely to attend college and persist to graduation. Walpole (2003) examined the relationship between low SES students and high SES students in regards to achievement. Three surveys from a national secondary data source were used to sample 12,376 students from 209 four-year institutions across the U.S. Results indicated that low SES students often have low GPA’s, study less, have lower levels of educational aspirations, and are less involved on campus. Additionally, the author found that, “attending college does not necessarily indicate that a student has risen economically or socially to a level similar to that of his or her peers” (Walpole, 2003, p. 63).

Rowan-Kenyon (2007) explored the relationship between patterns of college enrollment and socioeconomic status for nontraditional students. The findings showed that students from low socioeconomic backgrounds were among students who delayed college enrollment. Students who delayed their college enrollment were, on average, more likely to have fewer resources, were less connected with their home environment, were more likely to be from a low socioeconomic background, and were less likely to gain access to college. Financial aid and family income played a significant role in individuals attending college.

Paulsen and St. John (2002) investigated the college persistence of students in higher education based on their socioeconomic status, specifically financial income. The financial nexus model was used to analyze secondary data from the 1987 National Postsecondary Study Aid
Survey. The outcomes of the analysis found that low-income women were less likely than men to persist in college and they had more family responsibilities due to their single parent status. Married and single parent status were among the many variables used within this study. Overall, low-income students were less likely to live on campus, attend full-time, attend private colleges, or attend four-year colleges. However, poor students who earned letter grades of A were more likely to persist in college.

Student Persistence

Institutions of higher education have established some tools for nontraditional student success such as the nontraditional student’s office, online classes, college counseling, and career service centers. However, when pursuing a college degree, nontraditional students often encounter barriers such as finances, job responsibilities, family responsibilities, role conflict, childcare, and hours when classes are offered (Bowl, 2001; Fairchild, 2003).

Bowl (2001) explored the stories of seventeen mature minority nontraditional students who participated in the REACHOUT federally funded project and who also experienced financial and institutional barriers when pursuing college enrollment. The REACHOUT project was established with the goal of increasing the number of part-time and full-time students who entered higher education from the inner city. Over a period of time, the author was able to monitor the progress of the students’ perception about institutions and how institutions responded to their needs. The following themes emerged from participants:

a. Frustrated with the lack of guidance/support and the sense that higher education was not for them.

b. Financial poverty
c. Lack of time

d. People who battled, often with little support

e. Tutor indifference and institutional marginalization

Bowl (2001) concluded that if institutions adopt a participative methodology while focusing on the student, it would be “possible to examine the ways in which official sources of support and guidance fail people who are committed to improving their own and their families’ prospects through education” (p. 158).

Tones, Fraser, Elder, and White (2009) examined the perceptions of nontraditional students in regards to university support services and barriers. Thirty-one nontraditional students at a large metropolitan institution participated in the study. A qualitative, mixed methods approach was used through focus groups and interviews to address the research questions. Findings showed that nontraditional students faced greater barriers such as adjusting to the university as well as struggling with the ability to learn the classroom material than did traditional students. Additionally, nontraditional students were more likely to report lack of availability, lack of time, and lack of awareness to participating in support services, with the exception of financial assistance. Tones et al., (2009) stated that, “A greater understanding of [nontraditional] students’ academic and social integration strategies leading to academic success is a prerequisite to understanding how their life experiences influence their expression of learning at university, and subsequent retention or attrition” (p. 528).

Research has shown that when institutional and social support systems for nontraditional students exist, they play a major role in the resiliency of these students (Nilsen, 2004; Pinkney, 2007). Brock (2010) stated that if U.S. policy makers want to boost college completion rates,
they must encourage development and implementation of strategies such as learning communities and performance based scholarships, while also placing, “much greater emphasis on evaluation reforms” (p. 126). Researchers have presented literature to show that incorporating strategies and programs increase the retention and success of nontraditional students (Jeffreys, 2003; Gary, King, & Dodd, 2004).

Jeffreys (2003) conducted a study that explained the process of creating, implementing, and assessing a Pre-nursing Enrichment Program (PEP) designed for nontraditional undergraduate nursing students. In an 11-step process, this program offered career advising, orientation, workshops, tutoring, networking, transitional services, and mentoring, which were all free services for students. Current student situations and student evaluations were compared throughout various levels of this program, which were within courses, throughout several semesters, and between the clinical nursing courses. The assessment results of this program concluded the following:

a. Academic outcomes yielded lower failure rates

b. Social integration variables (tutoring and faculty advising) were perceived as highly supportive

c. Satisfaction/Psychological outcomes yielded positive satisfaction outcomes

d. Students perceived that environmental factors (child care arrangement, family responsibilities, financial status, transportation, employment responsibilities, and encouragement by friends) were very influential in influencing retention.

The author concluded this study by stating that, “…educators must thoroughly comprehend the multidimensional factors that influence nontraditional undergraduate student retention, expand
the teaching role into a mentor role, develop and nurture strategic partnerships, and create innovative strategies to enhance nontraditional student success” (Jeffreys, 2003, p. 87).

Gary, King, and Dodd (2004) lead a study in conjunction with a federally funded project at a public university in New Jersey. This study was designed to recruit African American and Latino teacher’s aides in urban school districts to complete a 4-year college degree and receive their special education certification. The federally funded project paid tuition and purchased books and supplies for the adults. The purpose of this study was to, “provide counseling and support services specific to the identified needs of these adult learners to reduce barriers to graduation, enable subsequent professional employment in their local school districts, and reduce the critical shortage of special education teachers” (Gary, et al., 2004, p. 19). The study consisted of 41 adult learners (82% women, 98% minority, 15% first generation, 76% single or head of households) who participated in the project. Six years after the start of the study, an independent evaluator concluded that 61% of the adult learners had graduated as compared to 41% of traditional students at the same institution within the same cohort. The evaluator also found that 10% were funded within other programs on campus and were expected to graduate in 1 year, 22% had withdrawn for personal reasons, and 7% were dismissed for academic reasons. This study demonstrated and confirmed that, “with collaborative, student-centered, specific, visible university support, higher education can become a reality for adult learners” (Gary et al., 2004, p. 23).

Although some literature has shown that there are programs and services in place for nontraditional students, there is still little research on student persistence past the first year in college and that nontraditional students are less likely to attain a college degree or remain in
college after 5 years without adequate students services (Nora, Barlow, & Crisp, 2005; Horn, 1996; Choy, 2002). Given the limited services and support for nontraditional students, many researchers have investigated how these students persist in college (Taniguchi & Kaufman, 2005; Quimby & O’Brien, 2006; Geisler, 2007; Kilgore, 2002).

Taniguchi and Kaufman (2005) examined the factors that affect degree completion among nontraditional students. A secondary data source from the National Longitudinal Study of Youth was utilized. The participants in the study totaled 1,703 (792 men and 911 women). Findings indicated that students with a high-status occupational background, high cognitive ability, and those who were relatively young were less likely to leave college before completing a degree. Those who were enrolled part-time were more likely to leave college before completing a degree.

Quimby and O’Brien (2006) explored the factors that influence the psychological well being of nontraditional mothers in college. Participants included 209 undergraduate female students between the ages of 26 and 53 who were enrolled at a midwestern university for an average of approximately 5 semesters. Authors found that social support, parent and student efficacy, and secure attachment assisted in predicting (a) life satisfaction, (b) psychological distress and, (c) self esteem. The authors suggested that counselors should, “use this information to guide their assessment of interventions with nontraditional female students with children who are experiencing psychological difficulties” (p. 458).

Geisler (2007) conducted a qualitative study at a small, private four-year institution in southeastern Pennsylvania to investigate the phenomenon of attrition and retention through researching the persistence of nontraditional students. The research methodology included 45
individual interviews and one group interview. Nichols found that students who persisted were more likely to have strong personal career goals, successful coping skills strategies, and meaningful interactions with institutional leaders, faculty and personnel.

Kilgore (2002) researched the persistence of female nontraditional undergraduate students. A persistence model was created to accurately mirror predictor variables and explain variance through a new consistent identity variable. The research was conducted at a large research university between two sample groups, which consisted of a group that persisted and a group that dropped out. Findings indicated that head of household designation, level of outside encouragement, women who used interpersonal relationships in a specific way, and those who had a clear pattern of their beliefs were more likely to persist to college graduation.

Student Support

Support has been defined as, “the affective encouragement the learner needs from others”, which includes, but is not limited to the learner’s commitment to learning and confidence about one’s learning ability (Knowles, Holton, Swanson, 2005, p. 195). Many researchers have found that nontraditional students entering or returning to college need financial, academic, mentoring, social, and institutional support (Choy, 2002; Hadfield, 2003; Hart, 2003; Bauman et al., 2004; Compton, Cox, & Laanan, 2006; and Hardin, 2008).

Rangaswami (1999) explored the usage of the perceived level of satisfaction and type of support services needed to facilitate the academic goals of nontraditional students at two universities. The findings indicated that (a) undergraduate nontraditional students had a lower level of satisfaction than nontraditional graduate students, (b) faculty members stated that support services were not suitable for nontraditional students, and (c) among males and females
at one university, significant differences were reported in the academic, registration, and admission category.

Spitzer (2000) investigated the relationship between social support, academic self-efficacy, career decision-making self-efficacy, global self worth, and social acceptance on collegiate goals of grade point average (GPA) and career decidedness for both traditional and nontraditional full-time undergraduates. The participants within the study consisted of 355 (267 traditional and 88 nontraditional) full-time undergraduates at a private liberal arts college. Ninety-two percent of the participants were White and 8% were Hispanic or Black. The results revealed that social support, greater academic self-efficacy, and self-regulation were predictors of higher GPA for all students. Social support was also a positive predictor of decidedness.

Furst-Bowe and Dittman (2001) conducted a study to identify barriers faced, perception about courses, and the things that motivated adult women to enroll in distance learning programs. The sample included 40 women, 20 in face-to-face focus groups and 20 in virtual focus groups. Furst-Bowe and Dittman found that the women in the study needed support services provided by the campus, support of family and employers, communication with instructor, technical assistance, and interactions with other students.

Yates (2001) examined the perceptions of nontraditional student service needs and compared the services to the three phases of Schlossberg, Lynch, and Chickering’s 1989 model for adult learners. Eighteen public institutions of higher education were included in the study fourteen were community colleges and 4 were 4-year colleges. Thirty percent of the surveys that were distributed and returned were usable for analysis. The author found that there was no standard set of student services that higher education institutions can provide that will serve all
nontraditional students. Yates also stated that the major contribution of the study was that the, “students’ perceptions of the importance of many student support service[s] are not just associated with…their classification…but are associated with other demographic characteristics” (p. 129).

Carney-Crompton and Tan (2002) explored the relationship of social support, psychological functioning, and academic performance between two groups of nontraditional and traditional female students. The participants in the study consisted of 63 female students who ranged from age 21 to 55, with the mean age being 31.18. The findings of the study indicated that nontraditional students had more stressors, however, they performed at a higher academic level than their traditional counterparts. The psychological and academic status of female nontraditional students was unrelated to the quantity and quality of their support systems. Additionally, nontraditional students were as satisfied as traditional students with their emotional and instrumental support systems despite having less support.

Hardin (2007) conducted a study to examine the need for nontraditional student support services to determine the students’ satisfaction levels of the services provided by five South Texas institutions of higher education. The sample consisted of 2,937 nontraditional freshmen and senior students. Results indicated that freshmen and seniors ranked the following services in the same order in regards to importance, (a) academic advising, (b) career development, (c) overall student development, and (d) educational planning. Additionally, freshmen and seniors felt that student support services were very important, which indicated that the services continued to be important to them throughout their academic career.
Viar (2007) conducted a phenomenological qualitative study, which described the challenges and achievements of nontraditional students who had informal support networks. Participants consisted of 11 students, 6 men and 5 women ranging from 33 to 67, at 4 east coast colleges. Informal networks were identified as God, peers, friends, spouses, co-workers, children, mentors, and extended families. The findings revealed that participants experienced their informal support network as varying in strength and influence, an evolutionary process throughout the educational journey, having an expandable boundary, having the capacity to magnify the qualities for success they already possessed, and having the ability to expand their capacity to meet the many challenges faced.

Xiong (2009) investigated whether social support, personal characteristics, and student perceived stressors could predict academic performance of nontraditional students in on-campus education, distance education, and a combination of distance and on-campus education. The author found at least a .05 statistical significance, which suggested that students within the following areas were more likely to have better performance:

(a) Age and single parent status in distance education.
(b) Age and employment status in the combination of distance and on-campus education.
(c) Gender, employment status, single parents status, and professional community support in on-campus education.

**Impact of Poverty**

Poverty in the United States has had a long-standing history. According to Payne (2005), poverty has been defined as “the degree to which individuals go without resources, which may
be financial, emotional, mental, spiritual, physical, support systems, relationships or role models, and knowledge of hidden rules” (p. 7). In the early 1960’s, President Lyndon Johnson started his War on Poverty, which included many education, health, and general welfare programs for poor people. As these programs began to expand, government officials and economists were interested in a more explicit assessment of poverty as a way to determine the number of people who were actually impoverished (Weinberg, 2006). An economist named Mollie Orshansky developed the original poverty measure called the poverty threshold, which was adopted by the federal government as the standard for poverty measurement in 1969 (Fisher, 2008). Over the past few decades, the U.S. government has moved to a more absolute measure of poverty, which, “attempts to measure the minimal necessary consumption levels of as many goods as possible” (Weinberg, 2006, p. 6). Today, the U.S. Department of Health and Human Services uses the poverty guidelines released every year by the Federal Register to determine eligibility for federal programs.

Media Portrayal of Poverty

According to Christian (2009) the media’s influence on public opinion has led to federal spending and legislative outcomes in regard to social issues. Research has shown that the United States media, at times, portrays poverty in ways that depict Black people as the poorest people in the country (Gilens, 1996; Clawson & Trice, 2000; Voorhees, Vick, & Perkins, 2007). In reality, there are more White, elderly and working poor people in the U.S. than Black poor people. According to Fitzgerald (1997), public opinion about poverty created a backlash against the poor and against those overly portrayed as poor in the media. Poverty has not exclusively been an
issue for one specific state, district, neighborhood, family, or race. Due to inquiries about the depictions of Blacks in poverty, researchers sought to investigate the accuracy of the portrayals.

Gilens (1996) conducted the first study that examined the relationship between public images of poverty and news media portrayals. The primary data for the study was media related stories on poverty from January 1, 1988 to December 31, 1992 released by major newsmagazines such as *Newsweek*, *Time*, and *U.S. News and World Report*. Findings indicated that African Americans were pictured in poverty related articles 62% of the time, which was more than “twice their true proportion of 29 percent” (p. 521). Gilens suggested that readers of these magazines might conclude that the majority of poor people in the United States are predominately Black, nonelderly and unemployed due to the images portrayed.

Clawson and Trice (2000) investigated whether or not the news media portrayed inaccurate and stereotypical images of people in poverty during the welfare reform era. The primary data utilized in the study were the results from the examination of every news story on welfare, the poor, and poverty from January 1, 1993 to December 31, 1998. The stories were collected from five news magazines, *Business Week*, *Newsweek*, *New York Times Magazine*, *Time*, and *U.S. News & World Report*. Findings suggested that the magazine articles could lead people to believe that 49% of Black people are in poverty rather than the actual 27%. White people were underrepresented in that 33% were presented as poor in magazines rather than the actual 45%. This study showed that public opinion might have a strong impact on public policy, which could positively or negatively affect those that live in poverty. Clawson and Trice noted that, “the photographic images of poor people in these five magazines do not capture the reality of poverty” (p. 63).
Voorhees, Vick, and Perkins (2007) explored the portrayals of minority groups in the news media after Hurricane Katrina. A mixed methods analysis was utilized as the primary data source. The researchers coded and analyzed news broadcast from the first 30 days of the hurricane and conducted in-depth interviews with 23 hurricane survivors six months after the disaster. Their results indicated that while the media portrayed some information about the hurricane disaster accurately, there were inaccurate portrayals of race and class.

Poverty Reduction Programs

There have been a number of programs and agencies created by the U.S. government in the attempt to combat poverty. Two of the largest programs created were Welfare, and most recently, the Earned Income Tax Credit (EITC). The effects of the Great Depression caused the U.S. government to legislatively create Welfare in the 1930s under the Social Security Act. The initial purpose of Welfare was to establish programs to assist individuals who were unemployed or underemployed. Some of the programs that formed under welfare were, Medicaid, Women, Infants, and Children (WIC) program, Unemployment Compensation, Supplemental Nutrition Assistance Program (SNAP) formerly known as food stamps, and Temporary Assistance for Needy Families (TANF) formerly known as Aid to Families with Dependent Children (AFDC). These programs have provided:

(a) Medical insurance,

(b) Nutrition for mothers and their children,

(c) Weekly payments (36% of an individual’s average weekly wage due to unemployment)

(d) Prepackaged food for needy families
Temporary financial assistance for families who are seeking employment

The Earned Income Tax Credit (EITC) was created in 1975 by U.S. legislators with the purpose to provide an incentive for people to work and to offset social security taxes for low to moderate working individuals and families (Internal Revenue Service, 2011). Over the last two decades, the EITC has provided benefits and work incentives for the working poor.

Ajilore (2008) examined the effectiveness of the EITC on poverty transitions for native-born African Americans and immigration. The 1997 to 2004 Current Population Survey (CPS) was used as a secondary data source, which included approximately 60,000 households. The data was then “matched across years to create repeated cross-sections and a prohibit model of transitions in and out of poverty was estimated” (p. 125). Results showed that EITC helped women transition out of poverty and it was useful in assisting African Americans in overcoming poverty.

Noonan, Smith, and Corcoran (2007) investigated the effects of the EITC, labor market conditions, and welfare policies on the probability of employment for black and white single mothers. The annual demographic files of the Current Population Survey (CPS), 1991-2003 were utilized as the secondary data set. The data included roughly 50,000 households of White and Black single mothers between the ages of 18 to 54. Findings indicated EITC accounted for a 25% increase in employment for white and black single mothers.

Baughman (2005) conducted the first study on the impact of the EITC on health insurance coverage for low-income workers. Data from the National Longitudinal Survey of Youth from 1992 to 1998 were used as a secondary data source. The author found that the EITC increased the rate of employer-based health insurance for workers who performed low-skilled
jobs by making insurance premiums more affordable. Additionally, the EITC was responsible for assisting single mothers in their goal of attaining a job.

Many researchers have expressed the view that U.S. poverty reduction programs have been the driving force to reducing poverty (U.S. Department of Health and Human Services, 2009; Kenworthy, 1999; Pardue, 2003). On the contrary, other researchers have stated that although antipoverty programs are in place and are, to some extent, effective, most research has shown that these antipoverty programs are not doing enough to help poor people overcome poverty (Bell, 2001; Cowen, 2002; Hardy, 2007; Unfinished agenda, 2000; Welfare to workfare, 2006). Smeeding (2004, 2006) stated that the U.S. makes the least antipoverty effort and when compared to eight other rich nations, its poverty reduction programs and economic system has the least antipoverty effect. The U.S. was found to reduce “poverty by 28% compared to the average reduction of 62% (Smeeding, 2004, p. 18). Additionally, the author stated that having large numbers of wealthy individuals in a nation does not increase the redistribution because those who live in poverty do not have the voice, access, or political leverage to bring to light such claims. In order to significantly reduce poverty, governments must not only create effective antipoverty programs, but also invest in adult education for impoverished people (Veen & Preece, 2005; Bhola, 2006; Bhola, 2009).

**Higher Education and Poverty**

Two of president Lyndon Johnson’s higher education legislative initiatives in the war on poverty were the *Economic Opportunity Act of 1964* and the *Higher Education Act of 1965* (U.S. Department of Education, 2009). Over the years, seven federally funded programs, also known as TRIO, were enacted under the Higher Education Act. These programs are *Upward Bound*
(UB), Talent Search (TS), Student Support Services (SSS), Educational Opportunity Centers (EOC), Ronald E. McNair Postbaccalaureate Achievement, Upward Bound Math/Science (UBMS), and Veterans Upward Bound (VUB). These programs were designed to assist low-income and/or potential first generation college students in the preparation for, and access to, higher education. Many studies have been conducted to determine the effectiveness of these programs and the results vary widely. Today one of the most popular debates among legislators, in regards to the Higher Education Act, is whether there should be more financial aid given to students on the grounds of need or merit.

During the Higher Education Act Reauthorization of 2008 many opinions about need aid versus merit aid arose. According to Pekow (2007), government officials and educators held many different opinions about this subject. Some held the view that low-income students had the same opportunity to receive the aid as students who were not low-income because merit-based aid was based on student academic ability. Others believed that institutions were in the practice of increasing merit-based aid in order to keep high performing students in state, rather than increasing the aid for students who were impoverished. Pekow (2007) further suggested that the majority believed that states should be more proactive with providing aid to low-income students. According to Walpole (2003) policymakers and institutional leaders may need to rethink the financial aid process for low SES students due to the time they spend working to pay for college. Without more need-based aid impoverished students who enroll in postsecondary education have a greater chance of falling into student loan debt (Dynarski, 2000; Dynarski, 2002).
According to the U.S. General Accounting Office (2003), 86% of students who received federal financial aid also received non-need based loans to meet their family’s expected family contribution (EFC). This statistic has resulted in conversations about limiting non-need based loans and re-adjusting the EFC. Low-income students, in particular, have been faced with the rising cost of tuition, while the federal and state aid they received merely covered a fraction of their higher education cost (Katsinas, Alexander & Opp, 2003). Heller (2002) stated that, “federal aid is particularly critical for meeting the college access needs of minority students in the United States” (p. 17). Heller (1999) expressed the view that financial aid from states also plays a significant role in assisting students in their postsecondary education pursuits. Several annual reports from the National Association of State Student Grant & Aid Programs (2003-2009) showed that need-based financial aid from states has increased at a slower rate than merit-based aid (see Table 3).

Table 3

National Undergraduate Merit & Need-based Aid (Amount in Billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Need Aid Only</th>
<th>Merit Aid</th>
<th>% of NA^1</th>
<th>% of MA^2</th>
<th>% of NA &amp; MA^3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>$3.6</td>
<td>$1.8</td>
<td>57%</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>2003-2004</td>
<td>$3.2</td>
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<td>2007-2008</td>
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<td>33%</td>
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<tr>
<td>2008-2009</td>
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<td>$3.2</td>
<td>48%</td>
<td>19%</td>
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</tr>
</tbody>
</table>

^1 Percentage of all Need-based
^2 Percentage of all Merit-based Aid
^3 Percentage of all combined Need and Merit-based Aid
From 2003 to 2009 need-based aid increased by 900 million dollars, while merit-based aid increased by 1.4 billion dollars. The allocation of need-based aid is also disproportionately uneven. In 2009, 10 out of 50 states accounted for approximately 66% of all need-based aid that was distributed. As states continue to decrease the amount of funds for need-based scholarships, low-income students suffer more than any other student population, which then increases the likelihood that they remain in poverty. Long (1998) found that freshmen students who received need-based financial aid were more likely to be better academically integrated and satisfied with their college experience than students who received merit-based aid. Toutkoushian and Shafiq (2010) examined whether it was in the best interest of states to give appropriations to public colleges or need-based financial aid to students. The results indicated that state officials should allocate need-based aid to students rather than giving direct appropriations to colleges. Some of the advantages of incorporating this practice would be (a) an increase in competition for in-state students, (b) public colleges could increase their level of state funding by attracting more students from their prospective state and, (c) restricting the need-based aid to be used only within the state of residence could reduce loss of revenue and increase the likelihood of students staying in state after they graduate. The debate for more need-based aid in order to assist low-income underrepresented students entering higher education is an issue that TRIO personnel have long dealt with.

TRIO program personnel have worked for more than 45 years to ensure access to higher education for students, who are often homeless, underrepresented, nontraditional, and impoverished. Many studies have generated evidence that educational programs designed to lead
students out of poverty can be successful. Chaney, Muraskin, Cahalan, and Goodwin (1998) studied the impact of Student Support Services (SSS) on student retention. A longitudinal study was used to compare the impact of SSS on college retention. Approximately 5,600 (2,800 SSS and 2,800 non-SSS) students were participants in this study. The authors utilized survey questionnaires and case studies as their data collection methods. Findings indicated students who received a combination of services and peer tutoring in their first year in SSS were 4% more likely to be retained than other students.

McLure and Child (1998) examined the relationship between the American College Testing exam (ACT) admission scores of Upward Bound (UB) and non-Upward Bound (non-UB) students. Only students within the 1998 graduating class who completed the ACT were included in this study (2,538 UB students compared to 997,069 non-UB students). Data were collected from the student profile and the course and grade information sections of the ACT. Once all information was collected, the information was then summarized by race, course taking patterns, gender, and family income. McLure and Child found that non-UB students received a higher ACT composite score than non-UB students. However, Upward Bound students were found to have as high if not higher aspirations than non-UB students, a greater probability to take more years of core high school courses, a higher likelihood to select majors in the Science, Technology, Engineering, and Mathematics (STEM) field, the self-confidence in selecting the most appropriate major, the willingness to seek out help from student personnel once they arrive at their prospective college campuses, and the ability to, “lift their educational aspirations and set their sights on more advanced postsecondary degrees” (p. 361).
Myers and Schirm (1999) studied the impact of Upward Bound (UB) on student outcomes during high school and the first and/or second year of college. Sixty-seven Upward Bound programs were randomly selected for participation in this study. Fifteen hundred students were assigned to the treatment group and 1,300 students were assigned to the control group. Data were collected from UB students, their schools, and their prospective UB program via written survey and two follow-up phone surveys. The authors used subclassification analysis to compute the overall impact of UB on student outcomes, while taking into account student differences in student background characteristics. Their results indicated four major findings.

1. Nearly 40% of UB participants in the study left the program during the first year and authors estimated that only about 40% of students would participate in all four years of the UB program.

2. UB was found to have small impacts on students’ high school course taking and educational aspirations.

3. UB had substantial impacts for boys, White and Hispanic youth, and students at risk for academic failure. Students in UB were more likely to attend college and earn more credits from four-year colleges.

4. Students who remained in UB for more than two years benefited more from the program than those who participated for a lesser period of time.

Meeks (2009) investigated the impact that two federally funded programs, Upward Bound (UB) and Student Support Services (SSS), had on student persistence in obtaining a postsecondary degree. Ten students who participated in UB and SSS were selected as participants. Six individual interviews and a focus group with four other participants were
conducted. Some of the themes that emerged indicated that UB and SSS played major roles in (a) assisting students in taking ownership of their life, decision making, and college career, (b) providing a sense of community which provided students with support, positive relationships, and the encouragement that they could succeed and, (c) the creation of an eagle mentality which helped students prepare, plan, ask questions, study, and prioritize more than other students in college preparation. The findings suggested that UB and SSS programs have found ways to increase cultural and social capital.

Benders (2009) explored the challenges that impact the benefits of Upward Bound (UB) students participating in the program. The researcher utilized quantitative and qualitative methods to collect data on the behaviors, lives, and characteristics of 93 students from two UB programs. Although the study did not offer one clear conclusion, there was a positive correlation between socioeconomic status (SES) and academic achievement. Findings also showed that SES had an impact on the behaviors of people, family income level contributed to the location on rearing, and a social contribution as to “why such a small number of students are still able to be successful in spite of their surroundings” (p. 91).

Constantine, Seftor, Martin, Silva, & Myers (2006) conducted a study to assess the effectiveness of the Talent Search (TS) programs. Data were compiled from federal, state, and program administrative records with the state of Florida, Indiana, and Texas. The outcomes of TS students were then compared to outcomes of similar students in the same school or schools within the selected states. The authors found that students in TS were more likely to apply for financial assistance and enroll in college.
Chaney, Muraskin, Cahalan, and Rak (1997) evaluated the impact Student Support Services (SSS) had on its program participants. A quasi-experimental design and regression analyses was used to analyze the data. The method also included the tracking of 5,800 (2,900 SSS students and 2,900 non-SSS students) participants at 47 institutions of higher education over three years. Results indicated that students in SSS were more likely to remain enrolled in higher education, accrue more college credits, and earn higher grade point averages.

Calahan (2009) conducted a follow-up analysis on data from The Impacts of Regular Upward Bound 2009 study conducted by Mathematica. She found methodological errors in the original study. Some of the issues found were (a) survey non-response bias, (b) extreme unequal weighting, (c) lack of standardization for expected high school graduation, (d) treatment control group non-equivalency, and (e) service submission and dropout issues. After re-analyzing the data, the researcher found that Upward Bound students were more likely to complete a college degree, enroll in college, and apply for student financial aid. Students who live in poverty need federal, state, and institutional assistance to overcome the environment they have been given.

**Summary**

The problems within this study were identified as,

(a) Limited literature on the retention, attrition, and degree completion of single parent mothers in higher education,

(b) Increasing single mother households warrants more literature to address the struggles and accomplishments these individuals encounter through their life journey,

(c) Many single mothers struggle to provide for their children, determine where they will work, where they will attend college, and how they will pay for college,
(d) Poverty has affected single parent mothers to the extent that their children have a greater chance of being poor adults.

While there were a vast number of studies on nontraditional students, poverty, and higher education, there still needs to be more research conducted on single mothers in higher education. The literature review presented information in regards to single mothers, issues faced by nontraditional students, the impact that poverty has on students, and the relationship between higher education and poverty. According to McLanahan and Teitler (1999) the number of single mother households has continued to increase since the 1960’s. With this increase, more single mothers have enrolled in higher education. When enrolling or attending higher education single mothers are often faced with challenging situations such as housing difficulties, finding childcare while enrolled, dealing with time constraints, difficult institutional climates, poverty, stressful situations, and student loan debt. Children of single mothers also faced issues related to graduating high school, the probability of sexual activity, attending college, the likelihood of smoking or drinking, and attaining a job in early adulthood.

Nontraditional single parent students in higher education faced similar issues as single mothers in higher education such as financial struggles, social isolation, and work and family responsibilities. Some of the most important services that helped these parents persist in college were making helpful connections in the community, offering various services specific to nontraditional students, support and encouragement from student personnel, meaningful interactions with institutional faculty and staff, financial support, and academic support.

All literature presented poverty as a negative factor in the lives of not only people in society at large, but also for students who aspire to attain a college degree. The U. S. government
created a number of federal programs to assist individuals who are in poverty or come from disadvantaged backgrounds. The findings concluded that individuals who participated in federally funded higher education programs were more likely to enroll in college, apply for financial aid, remain in college, accrue college credits, earn higher grade point averages, complete a college degree, achieve advanced degrees, and increase social and cultural capital. However, while U.S. poverty based programs have been successful in reducing poverty, there is still much work to be done when compared to similar nations such as establishing a system in which the voices of impoverished people can be heard and investing in adult education for impoverished people.

The literature relates to the problems faced by single mothers in higher education in a number of ways such as,

(a) There are limited services in place at institutions of higher education for single mothers
(b) Single mothers persist in higher education for various reasons
(c) Difficulties faced by single mothers may contribute to their attrition if not effectively and efficiently addressed
(d) Poverty can be a deterrent to pursuing a higher education
(e) Financial, social, and institutional climate play a huge role in the retention of single mothers
(f) Higher education programs designed to combat poverty serve as agents of generational change
(g) Attaining a college degree significantly increases the likelihood of individuals overcoming poverty
CHAPTER III

METHODS

The purpose of this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. The study sought to assist in explaining why single parent mothers leave or persist in higher education. The study also sought to bring more insight to the issues that the nontraditional student subpopulation of single parent mothers faced while in college. The data used was secondary data from the 2004/06 Beginning Postsecondary Students Longitudinal Study© (BPS:04/06) conducted by the National Center for Education Statistics (NCES) from 2004 to 2006. Specific to this study, the relationships were examined between poverty and college degree attainment, poverty and institution type, and poverty and persistence of single parent mothers in college. The sample for the study was 534 nontraditional single parent mothers who were current students, graduates or dropouts from degree programs across the nation and who participated in the BPS. The remainder of this chapter identifies the sample examined, design of the study, instrumentation used to collect the data, data collection process, the data analysis procedures and a chapter summary.

Sample

According to Cominole, Wheeless, Dudley, Franklin, and Wine (2007), students selected for the BPS:04/06 were a subset of students who first participated in the 2004 National Postsecondary Student Aid Study (NPSAS:04). The NPSAS:04 included 1,670 postsecondary institutions of higher education and approximately 90,000 undergraduate, graduate and professional students throughout the United States, the District of Columbia, and Puerto Rico. Of
the 90,000 students, 23,090 were identified as first-time beginners (FTBs). The BPS:04/06 identified approximately 18,640 of the 23,090 FTBs who were identified as eligible for inclusion. Students eligible for inclusion must have been enrolled in eligible institutions and met two specific criterions as defined in the design section.

**Design**

The design of the BPS:04/06 consisted of three key areas, which were, the definition of the BPS:04/06 sample, the definition of the NPSAS:04 institution and student universes, and the NPSAS:04 institution and student level base year sample selections. The BPS:04/06 sample included students who were, “potential FTBs from NPSAS:04, which included confirmed FTBs from the NPSAS:04 student interview, respondents to NPSAS:04 who were initially determined to be non-FTBs but were potentially FTBs based on data from other sources, and NPSAS:04 nonrespondents” (Berkner, et al., 2007, p. 31). The data elements used to determine a student’s FTBs status were:

(a) FTBs status from the institution enrollment lists used for NPSAS:04 student sampling;
(b) FTBs status from the Central Processing System (CPS);
(c) FTBs status from student-level data obtained from institutional records via computer assisted data entry (CADE);
(d) student reports (obtained during the NPSAS:04 interview) indicating that they were FTBs during the 2003–04 academic year;
(e) year of high school graduation;
(f) receipt of Stafford loan (date loan was first received and number of years loan was received);
(g) receipt of Pell grant (date grant was first received and number of years grant was received); and

(h) undergraduate class level (Berkner, et al., 2007, p. 36).

Institutions that participated in the NPSAS:04 study were required to meet five criteria during the 2003-2004 academic year. The definition of the NPSAS:04 institution universes identified that institutions must have:

(a) Offered an educational program designed for persons who have completed high school education;
(b) Offered at least one academic, occupational, or vocational program of study lasting at least 3 months or 300 clock hours;
(c) Offered courses that were open to persons other than the employees or members of the company or group that administers the institution; and
(d) Been located in the 50 states, the District of Columbia, or Puerto Rico (Berkner, et al., p. 31).

The NPSAS:04 student universe stated that eligible students were students who were enrolled in eligible institutions and who met both of the following requirements:

(a) They were enrolled in either an academic program, at least one course for credit that could be applied toward fulfilling the requirements for an academic degree, or an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award; and
(b) They were not concurrently or solely enrolled in high school, or in a General Educational Development (GED) or other high school completion program. (Berkner et al., 2010, p. 32)

The NPSAS:04 institution sample was assembled from the 2000-2001 and 2001-2002 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) file, header files, and the 2000 and 2001 fall enrollment files. These files were cleaned to remove any cases with missing enrollment data. Of the 1,630 eligible institutions, 1,360 (84%) provided student enrollment lists. According to Radford et al. (2010), “the NPSAS student sampling design was based on fixed type sampling rates rather than fixed type sample sizes” (p. B6). The student sample design used:

(a) Two classifications for undergraduates (one for FTBs and one for all other undergraduates);

(b) One classification for first-professional students; and

(c) Three classifications for graduate students (master’s, doctoral, and other).

The NPSAS:04 utilized a total of 109,210 sample students, of which 49,410 were potential FTBs; 47,680 were other undergraduates; and 12,210 were graduate and first-professional students.

**Instrumentation**

The BPS:04/06 utilized various sources to collect data for the study. The following data sources were utilized (see Table 4).
### Collection of Data

The FTBs were interviewed in 2004, at the end of their first year in college and again in 2006, three years after they started college. In 2004, participants were interviewed in regards to various topics such as, demographic characteristics, job status while in college, academic and social experiences during their first year in college, family responsibilities and background, and education plans and long-term goals. In 2006, participants were interviewed over a period of seven months. Interviews consisted of questions pertaining to student enrollment patterns such as attendance intensity, stopout periods, transfers, and completion of certificates or degrees. The BPS:04/06 data collection consisted of three phases, (a) the early response phase, (b) the interviewing phase and, (c) the nonresponse conversation phase. The early response phase consisted of a $30 incentive awarded to sample members who completed a self-administered
web interview or telephone interview within the first 4 weeks of data collection. About 47% of interviews were completed during this phase. The interviewing phase consisted of interviewers calling sampler members to participate in a computer assisted telephone interview. A $20 incentive was awarded to participants. Approximately 23% of interviews were completed during this phase. The nonresponse conversation phase consisted of interviewers contacting sample members who had refused to participate, who could not be located, or who were difficult to reach. Twenty-nine percent of interviews were completed during the nonresponse conversation phase.

Data Analysis

The procedures that were used for analysis of each research question are described below.

1. What is the academic and personal profile of single mothers who participated in the BPS:04/06?

Descriptive statistics from BPS:04/06 were reviewed to determine the academic and personal profile of single mothers. The academic profile consisted of the student’s grade point average and number of years in college. The personal profile consisted of the number of children, income level, race, age, major, and geographical location.

2. Based on beginning postsecondary longitudinal data, to what extent is there a relationship between poverty and college degree attainment, poverty and institution type, and poverty and persistence for single mothers in college?

The data was analyzed using a simple correlation to explain if degree completion, institution type, and persistence were influenced by poverty.

3. Based on the findings to the previous questions, what are the prominent variables?
The data was reviewed to determine what it implies about single mothers and the characteristics of these mothers.

4. Does this study support or reject life course theory framework for single mothers?

This question was answered by reviewing the literature and the data findings to determine whether or not life course theory was supported or rejected for the single mothers within this study.

**Chapter Summary**

The current chapter provided a summary of the research methods, and data analysis used in the research study. Data from BPS: 04/06 was utilized to identify the sample which consisted of 534 impoverished single parent mothers who were enrolled in postsecondary education. The data were analyzed using descriptive statistics and the Pearson product moment correlation (Pearson r).
CHAPTER IV

RESULTS

Literature has shown that nontraditional students are different from traditional students in many ways, such as the way in which they learn, their responsibilities, their demographic, and their degree pursuit motivations (Demirbilek, 2010; Merriam & Brockett, 2007). There is a dearth amount of literature on subgroups such as single parents, within the nontraditional student category. According to Haberman (2001) and Lovett (2009), there is a need for more literature on single parents in higher education, perhaps in the form of longitudinal and/or quantitative analysis. The purpose of this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. The 2004/06 Beginning Postsecondary Students Longitudinal Study© (BPS:04/06) was conducted by the National Center for Education Statistics (NCES) from 2004 to 2006. Specific to this study, the relationships were examined between poverty and college degree attainment, poverty and institution type, and poverty and persistence of single parent mothers in college. The sample for the study was nontraditional single parent mothers who were current students, graduates or dropouts from degree programs across the nation and who participated in the BPS.

This chapter contains a summary of the BPS:04/06 and the research questions addressed in this study. The procedures that were used to collect data are identified. Results of the data analysis in regards to the stated research questions are presented and discussed. Finally, a summary of the chapter is presented to provide an overview of the results.
Summary of the Study

The study examined the relationship between poverty and college degree attainment, poverty and institution type, and poverty and year-to-year progression of single parent mothers in college. Responses from NPSAS: 2004, BPS: 2004/06, and institutional records provided the data for analysis. Through the use of this data, the study sought to further explain the relationship between poverty and single parent mothers’ persistence or non-persistence in college, which was not available in the standard reports of these studies.

The significance of examining the relationship between poverty and college degree attainment, poverty and institution type, and poverty and year-to-year progression is that it provides a framework for administrators and educators who seek to establish more inclusive and effective policies and programs for the single parent population. Identifying the relationship between the factors that play a role in the persistence or non-persistence of single parent mothers in college may assist not only administrators and educators at institutions of higher education, but also single mothers who are currently enrolled or thinking about enrolling. By reviewing research that identifies factors that affect single parent mothers, administrators and educators can create an environment that provides more knowledge base and insight about how to assist single mothers in their degree pursuits. The findings from this study can provide a framework to establish policies and programs that specifically assist low-income single parent mothers who seek to obtain a college degree.

The literature base of the study included quantitative and qualitative research about nontraditional versus traditional aged students. The research specifically focused on single parent mothers, issues faced by nontraditional students, the impact that poverty has on students, and the
relationship between higher education and poverty. The literature review set the foundation for this study.

The design of the study was established from the BPS:04/06. There were various methods used, which contributed to the establishment of the design. Some of these methods, which were thoroughly covered in chapter three, consisted of:

1. The participants and institutions that participated in the NPSAS:04.
2. The definition of the NPSAS:04 institution and student universes.
3. The NPSAS:04 institution and student level base year sample selections.
4. The definition of the BPS:04/06 sample.
5. Institutions that participated in the NPSAS:04 were required to meet five criteria during the 2003-04 academic year.
6. The NPSAS:04 institution and student level base year sample selections.
7. High school year graduation, undergraduate class level, and loan receipt dates were used to construct the definition of the BPS:04/06 First Time Beginners (FTBs) sample.

**Data Collection**

A stratified sample was surveyed for the BPS:04/06. The total population of 18,644 students consisted of FTBs and potential FTBs in college. The total population represented 1,670 postsecondary institutions throughout the United States and Puerto Rico. These 1,670 colleges and universities were classified by the Carnegie Foundation for the Advancement of Teaching as being Not Degree Granting Institutions (does not award associate degrees or higher); Doctoral/Research Universities-Extensive; Doctoral /Research Universities-Intensive; Master’s
Colleges and Universities (larger programs); Master’s Colleges and Universities (smaller programs); Baccalaureate Colleges-Liberal Arts; Baccalaureate Colleges-General; Baccalaureate/Associate’s Colleges; Associate’s Colleges; Theological seminaries; Medical schools and centers; other separate health professions; Engineering and technology; Business and management; Art, music, and design; Schools of Law; Teachers Colleges; Other specialized; Tribal colleges and universities; and Other Private for-profit degree granting. The 2000 Higher Education Publications directory was used for the retrieval of institutions used in the survey.

The total population of 18,644 students who participated in the BPS:04/06 study was imported into Statistical Package for the Social Sciences (SPSS). The dataset was then filtered in the following order:

1. Gender (All male participants were removed)
2. Single Parent Independent Student status
3. Age (25 years of age or older)
4. Poverty (Measured by the 2004 U.S. Department of Health and Human Services poverty guidelines)

After removing all cases that did not meet the aforementioned criteria, a total of 534 purposively selected female students were utilized as the data for analysis.

Data analysis

This section presents the research questions, data analysis, and findings for the study. A Pearson product moment correlation (Pearson r) was the statistical analysis used to analyze question 2. The four research questions guided the study. Research Question number 1 dealt with the profile of single parent mothers. Research Question number 2 examined the relationship
between poverty and college degree attainment, institution type, and persistence. Research Question 3 dealt with the findings to questions 1 and 2 to determine the prominent variables. Research Question 4 examined whether the study supported or rejected life course theory for single mothers.

1. What is the academic and personal profile of single mothers who participated in in BPS: 04/06?

According to Radford, Berkner, Wheeless, Shepherd, and Hunt-White (2010), many sources were used to identify the academic and personal profile of single mothers who participated in the BPS: 04/06 (see Table 5). The academic and personal criteria identified were institution type, grade point average (GPA), major, annual gross income, gender, race, age, and residency region. Tables 6 and 7 show frequency and percentage of the study participants.

The academic profile results indicated that the bulk of respondents (n=248, 46%) were enrolled at an Associate’s Degree College during the beginning of the study. Respondents from Not Degree Granting institutions (n=221, 41%) were a close second in enrollment. All other respondents (n=65, 12%) represented the remaining 12 institution types.

The majority of respondents (n=319, 59%) had a GPA that was between 3.0 and 4.0 by the end of their first year of college. The lowest category for GPA (n=24, 4%) was between 0.0 and 1.0. The largest portion of students (n=172, 32.2%) majored in the health field. Students who were undeclared or not in a degree-awarding program (n=143, 26.8%) ranked second amongst the major category.
Table 5.

Data Sources used to Determine Academic and Personal Profile

<table>
<thead>
<tr>
<th>Data Source</th>
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<tr>
<td>Student interview</td>
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<tr>
<td>Student records</td>
<td>CO</td>
</tr>
<tr>
<td>Integrated Postsecondary Education Data System (IPEDS)</td>
<td>CO</td>
</tr>
<tr>
<td>Central Processing System (CPS)</td>
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<td>National Student Loan Data System (NSLDS)</td>
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<td>SAT</td>
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<td>ACT</td>
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</tr>
<tr>
<td>National Student Clearinghouse (NSC)</td>
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</table>

*N = New data source

*CO = Data carried over from previous round (NPSAS:04) and not refreshed

*R = Data carried over from previous round (NPSAS:04) and refreshed

*Radford, Berkner, Wheeless, Shepherd, and Hunt-White, 2010*
Table 6.

Academic Profile Characteristics

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<tr>
<th>Institution Type</th>
<th>Frequency</th>
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<td>.7</td>
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<tr>
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GPA (After 1st Year)

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<td>1.01 - 2.0</td>
<td>33</td>
<td>6.0</td>
</tr>
<tr>
<td>2.01 - 3.0</td>
<td>158</td>
<td>30.0</td>
</tr>
<tr>
<td>3.01 - 4.0</td>
<td>319</td>
<td>60.0</td>
</tr>
</tbody>
</table>

(table continues),
Table 7.

Personal Profile Characteristics

<table>
<thead>
<tr>
<th>Single Parent Mother Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Gross Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0</td>
<td>120</td>
<td>22.0%</td>
</tr>
<tr>
<td>100 - 5,000</td>
<td>153</td>
<td>29.0%</td>
</tr>
<tr>
<td>5,001 - 10,000</td>
<td>174</td>
<td>33.0%</td>
</tr>
<tr>
<td>10,001 - 20,000</td>
<td>16</td>
<td>3.0%</td>
</tr>
<tr>
<td>20,001 - 30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaska Native Tribe</td>
<td>8</td>
<td>1.5%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>25</td>
<td>4.7%</td>
</tr>
<tr>
<td>Asian</td>
<td>14</td>
<td>2.6%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>176</td>
<td>33.0%</td>
</tr>
<tr>
<td>Native Hawaiian/other Pacific Islander</td>
<td>5</td>
<td>.9%</td>
</tr>
<tr>
<td>White</td>
<td>284</td>
<td>53.2%</td>
</tr>
<tr>
<td>Other</td>
<td>53</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-35</td>
<td>370</td>
<td>69%</td>
</tr>
<tr>
<td>36-45</td>
<td>135</td>
<td>25.0%</td>
</tr>
<tr>
<td>46-55</td>
<td>27</td>
<td>5.0%</td>
</tr>
<tr>
<td>56-65</td>
<td>2</td>
<td>.3%</td>
</tr>
</tbody>
</table>

(table continues),
Residency Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England (CT, ME, MA, NH, RI, VT)</td>
<td>21</td>
<td>3.9%</td>
</tr>
<tr>
<td>Mid East (DE, DC, MD, NJ, NY, PA)</td>
<td>65</td>
<td>12.2%</td>
</tr>
<tr>
<td>Great Lakes (IL, IN, MI, OH, WI)</td>
<td>85</td>
<td>15.9%</td>
</tr>
<tr>
<td>Plains (IA, KS, MN, MO, NE, ND, SD)</td>
<td>26</td>
<td>4.9%</td>
</tr>
<tr>
<td>SE (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)</td>
<td>163</td>
<td>30.5%</td>
</tr>
<tr>
<td>Southwest (AZ, NM, OK, TX)</td>
<td>70</td>
<td>13.1%</td>
</tr>
<tr>
<td>Rocky Mountains (CO, ID, MT, UT, WY)</td>
<td>27</td>
<td>5.1%</td>
</tr>
<tr>
<td>Far West (AK, CA, HI, NV, OR, WA)</td>
<td>66</td>
<td>12.4%</td>
</tr>
<tr>
<td>Other jurisdictions (PR)</td>
<td>11</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

The personal profile was represented by annual gross income, race, age, and residency region. The bulk of the study participants (n=174, 33%) had an annual gross income that was in the range of $10,000 to $20,000. Fifty-three percent (n=284) of the study participants were white. The majority of the single mothers who were in poverty (n=370, 69%) were between the ages of 25 to 35. Thirty-one percent (n=163) of participants resided in the southeast region of the U.S.

Therefore, the personal profile for single parent mothers living in poverty was 33% with an annual gross income between $10,000 and $20,000, 53% who were white, 69% who were between the ages of 25 to 35, and 30.5% who resided in the southeast region of the U.S. The academic profile for these mothers was 46% who were enrolled in Associate’s Degree Colleges, 41% enrolled in Not Degree Granting Institutions, 12% enrolled in all other institutions, 59% with a GPA between 3.0 and 4.0 and 24% between 0.0 and 1.0 by the end of their first year, 32% who majored in a health related field, and 27% of undeclared students or not in a degree awarding program.
2. Based on beginning postsecondary longitudinal data, to what extent is there a relationship between poverty and college degree attainment, poverty and institution type, and poverty and persistence for single mothers in college?

A Pearson product moment correlation (Pearson r) was the statistical analysis used to analyze this question. Three separate analyses of this question were conducted to determine if there was a relationship between the variables. Each analysis was measured against the r > .01 significance level. Table 8 shows the results for each analysis. The analysis for poverty and college degree attainment was analyzed for degree attainment in 2005 and 2006. There was no significant correlation between poverty and college degree attainment in either year. The findings were r = -.048 for 2005 and r = .016 for 2006. However, there was a slight positive correlation from year to year.

The analysis for poverty and institution type showed that there was no significant correlation between the two. The finding was r = .076. The analysis for poverty and persistence was analyzed for college persistence in 2005 and 2006. There was no significant correlation found between poverty and college persistence. The findings were r = -.031 for 2005 and r = -.018 for 2006.

Therefore, the relationship for poverty and college degree attainment for single parent mothers in college in 2005 was r = -.048 and in 2006 it was r = .016. This indicates that there was a slight increase towards a positive correlation from year to year between poverty and college degree attainment for single mothers in college. However, the increase was too weak to make any definite conclusions. The relationship for poverty and institution type was r = .076,
which indicates that there was no relationship for poverty and institution type. The relationship for poverty and persistence in 2005 was $r = -0.031$ and in 2006 it was $r = -0.018$, which shows that there was no relationship between poverty and persistence in either year.

Table 8.
Pearson Correlation Results

<table>
<thead>
<tr>
<th>Factors</th>
<th>Pearson Correlation</th>
<th>Significant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty and College Degree Attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Year 2004-2005</td>
<td>-.048</td>
<td>.01</td>
</tr>
<tr>
<td>Academic Year 2005-2006</td>
<td>.016</td>
<td>.01</td>
</tr>
<tr>
<td>Poverty and Institution Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Year 2003-2004</td>
<td>.076</td>
<td>.01</td>
</tr>
<tr>
<td>Poverty and College Persistence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Year 2004-2005</td>
<td>-.031</td>
<td>.01</td>
</tr>
<tr>
<td>Academic Year 2005-2006</td>
<td>-.018</td>
<td>.01</td>
</tr>
</tbody>
</table>

3. Based on the findings to the previous questions, what are the prominent variables?

From the variables identified for this study, there were some that seemed to be more prominent among single mothers who were living in poverty. The variables that were identified as prominent were:

1. Institution Type (Associate’s Degree Colleges, n=248, 46%; Not Degree Granting (n=221, 41%))
2. Annual Gross Income (Mothers who made between $100 - $20,000 per year n=447, 84%)
3. Major (Health related field, n=172, 32.2%; Undeclared or not in a degree granting program, n=143, 26.8%)

4. Age (Mothers between the age of 25 - 35, n=370, 69%)

5. Race (White, n=284, 53.2%, Black or African American, n=176, 33%)

6. Residency Region (Mothers who lived in the Southeast (SE) region of the U.S., n=163, 30.5%)

7. Poverty and Degree Attainment (Slight positive correlation from year to year, 2004-05 (r = -.048), 2005-06 (r = .016)

Therefore, the prominent variables for single parent mothers living in poverty were 46% who were enrolled in Associate’s Degree Colleges, 41% enrolled in Not Degree Granting institutions, 87% of mothers who earned an annual income of $100 - $20,000, 32% who majored in a health related field, 27% who were undeclared or not in a degree granting program, 69% who were between the ages of 25-35, 53% of mothers who were white, 33% of mothers who were Black or African American, 31% who were raised in the southeast region of the U.S., and the slight positive correlation for poverty and degree attainment in 2005 (r = -.048) and 2006 (r = .016).

4. Does this study support or reject life course theory framework for single mothers?

Life course theory has been defined as the way(s) in which one’s past affects various areas of life such as education, family, and work. This, in turn, may have a positive or negative effect on the decisions made, which may then influence personal development. For life course theory to be fully supported, all principles of the theory must have been exhibited within the
study. The key principles in this theory were (a) historical time and place, (b) the timing of lives, (c) linked or interdependent lives and, (d) human agency.

The principle of historical time and place is when an individual’s developmental path is grounded and transformed by their environment and situations that occur during a certain time and place in the person’s life. The literature stated that there are more women, specifically single mothers, that are in college then ever before. The percentage of the total population of women who are enrolled in college is 52.4%. There is no indication as to how the increase in enrollment specifically affects single mothers who are in poverty; however, only 3% of the population within this study fit this category. Therefore, historical time and place does not seem to match.

The principle of timing of lives involves incidents, duration, and sequence of roles to relevant expectations produced based on age. Based on timing of lives, single mothers should do certain things such as enroll in college, start their career and achieve other goals at certain times. However, this has been interrupted or misaligned due to other obligations such as having a child. Therefore, timing of lives played a dual role with these mothers because the majority of them met the expectation of having a child, but at the wrong time and did not meet the expectation of attending college based on expected age.

The principle of interdependent lives refers to the interaction between individual social worlds over a lifespan. When looking at the 3% of impoverished single mothers within the population of study participants, one could assume that the expectation for these mothers may not have been to attend college, due to the fact that the vast majority of mothers attended access institutions rather than research universities. However, the message might have also been for these mothers to attend college just to get a better job. Therefore, for these mothers,
interdependent lives could be supported by the fact that their parents or culture influenced them to attend college in order to get a better job. However, it could also be rejected because the 5% of mothers who attended research universities were not necessarily influenced by their culture or parents to attend that institution type.

The human agency principle refers to the choices that individuals make. Many of the mothers within this study may have become single parents because of martial decisions or decisions that were made in regards to sexual activity at a young age. The literature stated that human agency is more than a function of individual behavior, but rather a collective dynamic stemming back to one’s past. One could assume that the impoverished environment in which these mothers were raised could have had an impact on their lack of knowledge about the explicit consequences of participating in sexual activity at a young age. Many single mothers also come from one-parent homes, which could allude to why the background of these women played a role in their single parenthood. Various factors may have motivated these mothers to attend college, such as the historical dynamic of having a child within an impoverished setting, the unprecedented access to higher education, and/or the expectation that they should go to college to improve their way of life.

Many mothers, specifically 86%, entered college as undeclared/not degree seeking or in a job training field of study. The results indicated that these single mothers may not have had the knowledge or academic preparation to explore other fields of study. If so, this could be attributed to their low-income environment. The vast majority of low-income communities have low-income school systems, which typically underprepare students for college as compared to schools that have more resources. Therefore, human agency principle does seem to match with
this set of mothers because it showed how the background of these mothers affected the decisions they made in favorable and not so favorable ways.

The study results indicated that there were various components of life course theory that were supported; however, there was not sufficient evidence to definitively support life course theory.

**Chapter Summary**

This chapter included the following sections: Summary of the Study, Data Collection Results, Data Analysis and Chapter Summary. The purpose for conducting this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. This study is important to administrators and educators who work within any of the colleges listed in Table 6.

A stratified sample was surveyed for the BPS:04/06. The total population of 18,644 students consisted of FTBs and potential FTBs in college. The total population represented 1,670 postsecondary institutions throughout the United States and Puerto Rico. The total population of 18,644 students who participated in the BPS:04/06 study was imported into Statistical Package for the Social Sciences (SPSS). The dataset was then filtered in the following order:

1. Gender (All male participants were removed)
2. Single Parent Independent Student status
3. Age (25 years of age or older)
4. Poverty (Measured by the 2004 U.S. Department of Health and Human Services poverty guidelines)
After removing all cases that did not meet the aforementioned criteria, a total of 534 purposively selected female students were utilized as the data for analysis.

The study was guided by four research questions. The first research question dealt with the profile of single parent mothers. Research Question number 2 examined the relationship between poverty and college degree attainment, institution type, and persistence. Research Question 3 dealt with the findings to questions 1 and 2 to determine the prominent variables. Research Question 4 examined whether the study supported or rejected life course theory for single mothers. Data for Question 1 was analyzed by using descriptive statistics. A Pearson product moment correlation (Pearson r) was the statistical analysis used to analyze Question 2. Question 3 was analyzed by using the results of the descriptive statistics and the Pearson product moment correlation from Questions 1 and 2.

The results for Research Question 1 indicated that the academic and personal profile characteristics for single mothers in poverty were institution type, GPA, major, annual gross income, age, race, and residency region.

Analysis of Research Question 2 indicated that there was a slight increase towards a positive correlation from year to year between poverty and college degree attainment for single mothers in college. However, the increase was too weak to make any definite conclusions. There was no correlation between poverty and institution type or poverty and persistence for single mothers in college.

The results of Research Question 3 indicated that the prominent variables for study participants were Associate’s Degree Colleges, Not Degree Granting institutions, Annual Gross Income of $20,000 or less, Health related field major, Undeclared or not in a degree granting
program, mothers between the Age of 25 – 35, White, Black or African American, Southeast region of the U.S., and Poverty and Degree Attainment.

The results of Research Question 4 indicated that there were various components of life course theory that were supported; however, there was not sufficient evidence to definitively support life course theory.
CHAPTER V
CONCLUSIONS

The current study provided pertinent information about single parent mothers who were living in poverty and made the decision to enroll in college. The Beginning Postsecondary Students Longitudinal Study © (BPS: 04/06) was utilized as a secondary dataset to identify the study participants and explore research questions. The current chapter has been divided into the following sections: Summary of the Study, Conclusions, Recommendations, Discussion, and Chapter Summary.

Summary of the Study

The purpose for conducting this study was to identify the relationship between poverty and degree completion, institution type, and persistence of single parent mothers in college. Specifically, the study identified the academic and personal profile of single mothers were identified. Analyzing the relationship between poverty and college degree attainment, institution type, and persistence further stratified the study.

The outcomes of this study may prove to be of specific benefit to college administrators and educators who seek to establish more inclusive and effective policies and programs for the single parent population. Identifying the relationship between the factors that play a role in the persistence or non-persistence of single parent mothers in college may assist not only administrators and educators at institutions of higher education, but also single mothers who are currently enrolled or thinking about enrolling. By reviewing research that identifies factors that affect single parent mothers, administrators and educators can create an environment that provides more knowledge base and insight about how to assist single mothers in their degree
pursuits. The findings from this study provided a framework for future research on single parent mothers. It also, explained why it is important for administrators to develop policies and programs that specifically assist low-income single parent mothers who seek to attain a college degree.

A stratified sample was surveyed for the BPS:04/06. The total population of 18,644 students consisted of FTBs and potential FTBs in college. The total population represented 1,670 postsecondary institutions throughout the United States and Puerto Rico. The total population of 18,644 students who participated in the BPS:04/06 study was imported into the Statistical Package for the Social Sciences (SPSS). The dataset was then filtered in the following order:

1. Gender (All male participants were removed)
2. Single Parent Independent Student status
3. Age (25 years of age or older)
4. Poverty (Measured by the 2004 U.S. Department of Health and Human Services poverty guidelines)

After removing all cases that did not meet the aforementioned criteria, a total sample size of 534 purposively selected female students was utilized as the data for analysis. There was a 100% response rate for all sample size participants.

The research design and instrument selected for the study consisted of various sources used to collect data, such as: Student Interviews, Student Records, Integrated Postsecondary Education Data System (IPEDS), Central Processing System (CPS), National Student Loan Data System (NSLDS), SAT, ACT, and the National Student Clearinghouse (NSC).

Research Question 1
What is the academic and personal profile of single mothers who participated in the BPS:04/06?

Results indicated that the personal profile for single parent mothers living in poverty was 33% with an annual gross income between $10,000 and $20,000, 53% who were white, 69% who were between the ages of 25 to 35, and 30.5% who resided in the southeast region of the U.S. The academic profile for these mothers was 46% who were enrolled in Associate’s Degree Colleges, 41% enrolled in Not Degree Granting Institutions, 12% enrolled in all other institutions, 59% with a GPA between 3.0 and 4.0 and 24% between 0.0 and 1.0 by the end of their first year, 32% who majored in a health related field, and 27% of undeclared students or not in a Degree Awarding Program.

Research Question 2

Based on beginning postsecondary longitudinal data, to what extent is there a relationship between poverty and college degree attainment, poverty and institution type, and poverty and persistence for single mothers in college?

The results of the study indicated that the relationship for poverty and college degree attainment for single parent mothers in college in 2005 was \( r = -.048 \) and in 2006 it was \( r = .016 \). This indicates that there was a slight increase towards a positive correlation from year to year. However, the increase was too weak to make any definite conclusions. The relationship for poverty and institution type was \( r = .076 \), which indicates that there was no relationship for poverty and institution type. The relationship for poverty and persistence in 2005 was \( r = -.031 \) and in 2006 it was \( r = -.018 \), which shows that there was no relationship between poverty and persistence in either year.
Research Question 3

Based on the findings to the previous questions, what are the prominent variables?

Results indicated that the prominent variables for single parent mothers living in poverty were 46% who were enrolled in Associate’s Degree Colleges, 41% enrolled in Not Degree Granting institutions, 87% of mothers who earned an annual income of $100 - $20,000, 32% who majored in a health related field, 27% who were undeclared or not in a degree granting program, 69% who were between the ages of 25-35, 53% of mothers who were white, 33% of mothers who were Black or African American, 31% who were raised in the southeast region of the U.S., and the slight positive correlation for poverty and degree attainment in 2005 (r = -.048) and 2006 (r = .016).

Research Question 4

Does this study support or reject life course theory framework for single mothers?

The results of the study indicated that there were various components of life course theory that were supported and some that did not seem to fit. Life course theory consisted of four principles that needed to match with this group of mothers in order to confirm life course theory. The principle of historical time and place did not seem to fit with this group of mothers. The principle of timing of lives was found to play a dual role with this group of single mothers. The principle of interdependent lives was found to play a dual role in the lives of these single mothers. Interdependent lives could be supported or rejected in regards to this group of single mothers. The human agency principle was found to fit with this group of single mothers. Results indicated that there was not sufficient evidence to definitively support life course theory.
Conclusions

1. The findings from the study indicated that a combined 87% of single mothers were enrolled in an Associate’s Degree or Not Degree Granting institution. The vast majority of single parent mothers are pursuing some form of postsecondary education that is not a bachelor’s degree.

2. Findings also indicated that 97% of single mothers had an income of $0 - $20,000. This indicates that the vast majority of these mothers are dealing with a very high level of poverty.

3. Results indicated that there was a slight increase towards a positive correlation from year to year between poverty and college degree attainment for single mothers in college. However, the increase was too weak to make any definite conclusions.

4. The findings indicated that 69% of single mothers who were enrolled in college were between the ages of 25-35, 25% were 35-45 years of age, and just above 5% were 46-65 years of age. This indicates that single mothers may view their chances of improving their lives as possible at an early age. However, by the time they reach middle age, their chances have decreased, and when they reach the latter stage of their life they don’t necessarily try anymore.

5. The results indicated two of the three major non-white races were included within the study with 2.6% being Asian and 33% being African American. Research has shown that Asians nationally dominate society in regards to academic achievement and success. One might expect that Asians who are single mothers in America would be more inclined to have the work ethic to improve their lives and somewhat align with their counterparts in academic achievement and
success. However, the 2.6% of Asian participants within this study does not necessarily show that and this may also be counterintuitive to what one might expect.

6. Findings indicated that less than 22% of single mothers were majoring in the Science, Technology, Engineering, and Math (STEM) field, while approximately 86% of mothers were in business/management, Technical/Professional, and health related majors, or were undeclared/not degree seeking. This indicated that single mothers were not highly represented in the STEM field. This also showed the type of careers that single mothers were pursuing, which were either job training related or mothers who were unsure of their career area. The results raise questions about whether or not single mothers who enroll in college to improve their life are receiving the knowledge about potential careers as well as resources to aid them in attaining their degree. Because one-third of these mothers in low-income settings are entering college undecided, there needs to resources and career counseling aimed at assisting them with major and career choices.

**Recommendations**

Recommendations for Research

1. A qualitative study based on the stories and the experiences of single parent mothers who enroll in college while in poverty. An in depth phenomenological qualitative study may produce themes that would assist in supporting or rejecting life course theory. Also, it could give a more holistic view of the struggles and successes of single parent mothers in college. Also, it could assist in identifying common and/or new emerging trends that affect single mothers in college, such as the possible fear, or perceived fear, of attending college.
2. A study examining single parent mothers who enroll at 2-year colleges while in poverty. This study could provide more insight into why impoverished single mothers enroll at 2-year colleges versus enrolling at 4-year institutions.

3. A study examining single parent mothers who enroll at Not Degree Granting Institutions while in poverty. This study could provide more insight into why impoverished single mothers enroll at Not Degree Granting Institutions versus enrolling at 4-year institutions.

4. A study examining impoverished single parent mothers’ perception of the college enrollment and assistance resources offered by colleges as well as state and federal agencies.

5. A study examining the resilience of impoverished single mothers who not only persist from year-to-year in college, but also attain a Bachelor’s and/or Master’s degree.

6. Single mothers who were Undeclared/Not in a Degree Program represented 143/534 (26.8%) of the total population. Because one-third of these mothers in low-income settings are entering college undecided, there needs to be resources and career counseling aimed at assisting them with major and career choices.

7. Ninety percent of single mothers within this study had a GPA of 2.0 or above after their first year. Further research could examine the GPA and Major to determine if those students who were undeclared or not in a degree program were the low performing students.

Recommendations for Practice

1. Study results suggest that a large number of impoverished single parent mothers enrolled in 2-year colleges and Not Degree Granting Institutions. Financial or guidance resources could be a major factor as to why these mothers chose not to enter a 4-year institution.
Administrators, educators, and legislators will need to invest more resources in order to assist this population.

2. Study results show that the majority of single parent mothers who participated within the BPS: 04/06 were impoverished. There are many factors causing this disparity between this population and which affects the resources they are aware of and ultimately receive. It is important for administrators and educators to know and understand the poverty related issues that impact nontraditional student attrition or persistence. Once administrators and educators become aware of these issues, they should be more inclined to provide services and resources to assist this population.

3. A vast majority of single mothers entered college with job training majors or were undeclared/not degree seeking. Higher education administrators need to provide enrollment advising as well as career counseling for single parent mothers who are entering postsecondary education. The advising and career counseling could provide these mothers with more knowledge about majors as well as their career path, which could assist them in making an informed decision.

Discussion

Findings to Literature

Single mothers who chose to enroll in higher education despite living in poverty face many barriers such as job responsibilities, lack of time, family responsibilities, student loan debt, role conflict, being a single parent or having children or dependents, role overload, poverty, stressful situations, childcare, student loan debt, housing difficulties, and the effect of college enrollment on children. Many of these barriers may be attributed to the decisions made by these
mothers at a young age. However, there are other college enrollment and persistence factors that play a role in the lives of single mothers such as the lack of knowledge about their career path, lack of knowledge about research institutions as opposed to access institutions, lack of resources to enroll in postsecondary education, and lack of an environment that encourages them to attend college.

The literature showed that most single mothers who enroll in postsecondary education, by definition, fit within the nontraditional student category. This study indicated that the vast majority of single mothers enrolled in access institutions and were either in a major that was job training related or they were undeclared/not degree seeking. Although the nontraditional student postsecondary enrollment has increased, enrollment advising as well as career counseling resources for nontraditional students has not seemed to reach the impoverished single mother population. The ability for institutions to counsel, support, and retain single parent mothers may play a vital role in breaking the cycle of poverty for these mothers and their children.

Personal Reflection

As a child, my single mother raised my three sisters and me in a rural town in southern Arkansas. Although my mother worked very hard to provide for us, poverty was a part of our very existence as we relied on federal assistance, better known as welfare. Being poor in the south was a way of life for my family as well as many others. Very few people in my community had much at all. Although we did not have much, one thing we did have was a mother who loved us so much that she often went without eating so that my sisters and I could. She worked long hours to provide for us, and she enrolled in postsecondary education so that we could one day overcome poverty and improve our way of life.
Findings from this study indicated that single mothers faced many obstacles such as a lack of knowledge about a career path as well as a lack of knowledge about the various institutions of higher education. My mother, too, encountered these obstacles when entering postsecondary education. In regards to major, my mother would have been categorized with the vast majority of single mothers within this study because she focused on attaining her Licensed Practical Nurse degree (LPN). She eventually went on to attain her Registered Nurse (RN) degree as well as her Master’s in Health Administration. It would be interesting to not only conduct future research on single mothers within this study to determine who attained a Bachelor’s and/or Master’s degree, but also what factors contributed to their persistence.

My mother’s life does not support life course theory because she took the unconventional route through higher education like many of the single mothers within this study. Despite the many poverty attributed issues that my mother faced, she provided emotional deposits in our life which taught us the value of hard work, integrity, Christian values, treating others with respect and dignity, and working by the sweat of our brow to achieve our goals and dreams. Payne (2005) expressed the view that relationships built upon emotional deposits such as principles of time investment, understanding, kindness, keeping promises, loyalty, and setting expectations might lead to achievement for students living in poverty. As my mother provided emotional deposits into my life, my Godparents as well as others within our community were depositing into her life. My mother was determined to overcome poverty by using her impoverished situation, the emotional deposits from others, and the desire to provide a better life for our family as her motivation to purse a college degree.
Chapter summary

Chapter V concluded the research study by summarizing the results of the four research questions. Six conclusions were given that related to the characteristics and challenges faced by single mothers in postsecondary education and the impact these factors may have on the college persistence of single mothers. Recommendations for further research and recommendations for practice were presented. The recommendations were drawn off data and study findings.
REFERENCES


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<th>Title</th>
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APPENDICES
MEMORANDUM

TO: Rickey Booker  
    Michael Miller

FROM: Ro Windwalker  
       IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 11-03-560

Protocol Title: Single Mothers in College: The Effect of Selected Variables

Review Type: □ EXEMPT  □ EXPEDITED  □ FULL IRB

Approved Project Period: Start Date: 03/29/2011  Expiration Date: 03/28/2012

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form Continuing Review for IRB Approved Projects, prior to the expiration date. This form is available from the IRB Coordinator or on the Compliance website (http://www.uark.edu/admin/rsspinfo/compliance/index.html). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

If you wish to make any modifications in the approved protocol, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 120 Ozark Hall, 5-2208, or irb@uark.edu.
APPENDIX B: INSTITUTE OF EDUCATION SCIENCES (IES) LICENSE FOR USE OF INDIVIDUALLY IDENTIFIABLE INFORMATION
LICENSE FOR THE USE OF
INDIVIDUALLY IDENTIFIABLE INFORMATION
PROTECTED UNDER
THE EDUCATION SCIENCES REFORM ACT OF 2002
THE E-GOVERNMENT ACT OF 2002, TITLE V
THE CONFIDENTIAL INFORMATION PROTECTION AND STATISTICAL
EFFICIENCY ACT OF 2002
AND THE PRIVACY ACT OF 1974

WHEREAS, the Institute of Education Sciences (IES) of the United States Department of Education has collected individually identifiable information, the confidentiality of which is protected by the Privacy Act of 1974 (5 U.S.C. 552a); Title V, subtitle A of the E-Government Act of 2002 (PL 107-347); and section 183 of the Education Sciences Reform Act of 2002 (PL 107-279), and

WHEREAS, IES wishes to make the data available for statistical purposes to requestors qualified and capable of research and analysis consistent with the statistical purposes for which the data were provided, but only if the data are used and protected in accordance with the terms and conditions stated in this license, upon receipt of such assurance of qualification and capability, it is hereby agreed between

University of Arkansas

(inset the name of the agency or organization to be licensed)

hereinafter referred to as the "Licensee", and IES that:

I. INFORMATION SUBJECT TO THIS AGREEMENT

A. All data containing individually identifiable information about students, their families, and their schools collected by or on the behalf of IES under section 183 of the Education Sciences Reform Act of 2002, that are provided to the Licensee and all information derived from those data, and all data resulting from merges, matches, or other uses of the data provided by IES with other data are subject to this license and are referred to in this license as subject data.

B. Subject data under this license may be in the form of diskettes, CD-ROMs, hard copy, etc. The Licensee may only use the subject data in a manner and to a purpose consistent with:

1. the statistical purpose for which the data were supplied, (Licensee's description of the research and analysis which is planned as described in your request for data is attached and made a part of this license - Attachment No. 1.)

2. the limitations imposed under the provisions of this license and,

3. section 183 of the Education Sciences Reform Act of 2002; Title V, subtitle A of the E-Government Act of 2002; and the Privacy Act of 1974 (5 U.S.C. 552a), which are attached to and made a part of this license (Attachment No. 2.)
II. INDIVIDUALS WHO MAY HAVE ACCESS TO SUBJECT DATA

A. There are four categories of individuals that the Licensee may authorize to have access to subject data. The four categories of individuals are as follows:
   1. The Principal Project Officer (PPO) is the most senior officer in charge of the day-to-day operations involving the use of subject data and is responsible for liaison with IES.
   2. Professional/Technical Staff (P/TS) conduct the research for which this license was issued.
   3. Support staff includes secretaries, typists, computer technicians, messengers, etc. Licensee may disclose subject data to support staff who come in contact with the subject data in course of their duties only to the extent necessary to support the research under this license.
   4. An independent researcher is an individual who has satisfied the requirements specified in paragraph II.C. of this license.

B. Licensee may disclose subject data to only seven (7) P/TS unless IES provides written authorization for a larger number of P/TS.

C. Licensee may disclose subject data to individuals who desire to do independent research, under the following conditions:
   1. The independent researcher submits an application for access to subject data to IES directly, or through the Licensee.
   2. IES provides written approval for the Licensee to disclose subject data to the independent researcher.
   3. The Licensee completes the affidavit procedures in paragraph IV.B. of the license.

III. LIMITATIONS ON DISCLOSURE

A. Licensee shall not use or disclose subject data for any administrative purposes nor may they be applied in any manner to change the status, condition, or public perception of any individual regarding whom subject data is maintained. (Note: Federal Law pre-empts any State law that might require the reporting or dissemination of these data for any purpose other than the statistical purposes for which they were collected.)

B. Licensee shall not disclose subject data or other information containing, or derived from, subject data at fine levels of geography, such as school district, institution, or school, to anyone other than IES employees working in the course of their employment or individuals for whom access is authorized under this license agreement. Licensee may make disclosures of subject data to individuals other than those specified in this paragraph only if those individuals have executed an affidavit of nondisclosure and the Licensee has obtained advance written approval from IES.
C. Licensee shall not make any publication or other release of subject data listing information regarding individual respondents even if the individual respondent identifiers have been removed.

D. Licensee may publish the results, analysis, or other information developed as a result of any research based on subject data made available under this license only in summary or statistical form so that the identity of individual respondents contained in the subject data is not revealed.

IV. ADMINISTRATIVE REQUIREMENTS

A. The research conducted under this license and the disclosure of subject data needed for that research must be consistent with the statistical purpose for which the data were supplied. The subject data may not be used to identify individual respondents for recontacting unless Licensee has obtained advance written approval from IES.

B. Execution of affidavits of nondisclosure.
   1. Licensee shall provide a copy of this agreement, together with the Security Plan Form (Attachment No. 3) to each PT/S of the licensee who will have access to subject data and shall require each of those PT/Ss to execute an affidavit of nondisclosure. Licensee shall also provide a copy of the attached Security Plan Form and the abstracted statement of the statistical purpose for which the data were supplied, to each independent researcher approved by IES who the licensee intends to have access to subject data and shall require each of those researchers to execute an affidavit of nondisclosure.
   2. The Licensee must ensure that each individual who executes an affidavit of nondisclosure reads and understands the materials provided to her or him before executing the affidavit.
   3. Licensee shall ensure that each affidavit of nondisclosure is notarized upon execution.
   4. Licensee may not permit any individual specified in paragraph II.A. to have access to subject data until the procedures in paragraphs IV.B.1. through 3. of this license are fulfilled for that individual.
   5. Licensee shall promptly, after the execution of each affidavit, send the original affidavit to IES and shall maintain a copy of each affidavit at the licensee's secured facility protected under this license.

C. Notification regarding authorized individuals to IES.
   1. Licensee shall promptly notify IES when any PT/S who has been authorized to have access to subject data no longer has access to those data.
   2. If the terms of an independent researcher's application specify when the researcher's access to subject data terminates and access does terminate on that date, the Licensee need not notify IES of that fact.
However, if the researcher’s access terminates on another date, the Licensee shall promptly notify IES of the date that such access terminates.

D. Publications made available to IES.
   1. Licensee shall provide IES a copy of each publication containing information based on subject data or other data product based on subject data before they are made available to individuals who have not executed an affidavit of nondisclosure.
   2. When publication or other release of research results could raise reasonable questions regarding disclosure of individually identifiable information contained in subject data, copies of the proposed publication or release must be provided to IES before that disclosure is made so that IES may advise whether the disclosure is authorized under this license and the provisions of section 183 of the Education Sciences Reform Act of 2002; Title V, subtitle A of the E-Government Act of 2002; and the Privacy Act of 1974 (5 U.S.C. 552a). Licensee agrees not to publish or otherwise release research results provided to IES if IES advises that such disclosure is not authorized.

E. Licensee shall notify IES immediately upon receipt of any legal, investigatory, or other demand for disclosure of subject data.

F. Licensee shall notify IES immediately upon discovering any breach or suspected breach of security or any disclosure of subject data to unauthorized parties or agencies.

G. Licensee agrees that representatives of IES have the right to make unannounced and unscheduled inspections of the Licensee’s facilities, including any associated computer center, to evaluate compliance with the terms of this license and the requirements of section 183 of the Education Sciences Reform Act of 2002; Title V, subtitle A of the E-Government Act of 2002; and the Privacy Act of 1974 (5 U.S.C. 552a).

V. SECURITY REQUIREMENTS

A. Maintenance of, and access to, subject data.
   1. Licensee shall retain the original version of the subject data at a single location and may make no copy or extract of the subject data available to anyone except a P/TS or independent researcher as necessary for the purpose of the statistical research for which the subject data were made available to the Licensee.
   2. Licensee shall maintain subject data (whether maintained on a personal computer or on printed or other material) in a space that is limited to access by authorized PT/S.
3. Licensee shall ensure that access to subject data maintained in computer memory is controlled by password protection. Licensee shall maintain all print-outs, diskettes, personal computers with subject data on hard disks, or other physical products containing individually identifiable information derived from subject data in locked cabinets, file drawers, or other secure locations when not in use.

4. Licensee shall ensure that all printouts, tabulations, and reports are edited for any possible disclosures of subject data.

5. Licensee shall establish security procedures to ensure that subject data cannot be used or taken by unauthorized individuals.

6. Licensee shall not permit removal of any subject data from the limited access space protected under the provisions of this license as required in the attached Security Plan Form, without first notifying, and obtaining written approval from IES.

B. Retention of subject data.

Licensee shall return to IES all subject data, or destroy those data under IES supervision or by approved IES procedures when the research that is the subject of this agreement has been completed or this license terminates, whichever occurs first.

C. Compliance with established security procedures.

Licensee shall comply with the security procedures described in the Security Plan Form attached to this license.

VI. PENALTIES

A. Any violation of the terms and conditions of this license may subject the Licensee to immediate revocation of the license by IES.

1. The IES official responsible for liaison with the Licensee shall initiate revocation of this License by written notice to Licensee indicating the factual basis and grounds for revocation.

2. Upon receipt of the notice specified in paragraph VI.A.1 of this license, the Licensee has thirty (30) days to submit written argument and evidence to the Director of IES indicating why the License should not be revoked.

3. The Director shall decide whether to revoke the license based solely on the information contained in the notice to the Licensee and the
Licensee's response and shall provide written notice of the decision to the Licensee within forty-five (45) days after receipt of Licensee's response. The Director may extend this time period for good cause.

B. Any violation of this license may also be a violation of Federal criminal law under the Privacy Act of 1974 (5 U.S.C. 552a); section 183 of the Education Sciences Reform Act of 2002; and/or Title V, subtitle A of the E-Government Act of 2002. Alleged violations under section 183 of the Education Sciences Reform Act of 2002 and Title V, subtitle A of the E-Government Act of 2002 are subject to prosecution by the United States Attorney. The penalty for violation of section 183 of the Education Sciences Reform Act of 2002 and Title V, subtitle A of the E-Government Act of 2002, is a fine of not more than $250,000 and imprisonment for a period of not more than five years.

VII. PROCESSING OF THIS LICENSE

A. The term of this license shall be for five years. If, before the expiration of this license, the Director establishes regulatory standards for the issuance and content of licenses, the Licensee agrees to comply with the regulatory standards.

B. This license may be amended, extended or terminated by mutual written agreement between the Licensee and the Director of IES. Any amendment must be signed by a Senior Official specified in paragraph VII.C. of this license, PPO, and the Director and is effective on the date that all required parties have signed the amendment.
C. The Senior Official (SO) having the legal authority to bind the organization to the terms of the license shall sign this license below. The SO certifies, by his/her signature, that -

1. The organization has the authority to undertake the commitments in this license;
2. The SO has the legal authority to bind the organization to the provisions of this license; and
3. The PPO is the most senior statistical officer for the licensee who has the authority to manage the day-to-day statistical operations of the Licensee.

Signature of the Senior Official          Date

Rosemary Ruff
Type/Print Name of Senior Official

Title: Director of Research and Sponsored Programs
Telephone: (474) 575-3845

D. The individual described in paragraph II.A1. as the PPO shall sign this license below. If the SO also acts as the chief statistical officer for the Licensee; viz. as the PPO, the SO shall likewise sign under this paragraph as well as having signed under paragraph VII.C.

Signature of the Principal Project Officer Date

Michael Miller
Type/Print Name of Principal Project Officer

Title: Associate Dean/Professor
Telephone: (479) 575-4023
E. The Director of the Institute of Education Sciences or Designee issues this license to

________________________________________. The license is
effective as of the date of the Director or designee's signature below, or such
other period specified in the Licensee's request for the license.

______________________________
Signature of IES Director

______________________________
Type/Print Name of Director or Designee

______________________________
Title

______________________________
Date

IES License Control Number: 11020027
APPENDIX C: INSTITUTE OF EDUCATION SCIENCES (IES) RESTRICTED DATA USE
SECURITY PLAN FORM
Security Plan Form

Institute of Education Sciences (IES)
Restricted-use Data

Name of Institution / Organization: University of Arkansas

PPO Name: Michael Miller

PPO Address:
(Provide street address, city, state, zip code, department and building name, and office/room number.)

College of Education and Health Professions
320 Graduate Education Building
Fayetteville, AR 72701

PPO Phone Number: 479-575-9203

Type of Security Plan: New □ Renewal □ Modification □

License Number: 11020027

Physical Location of Data

Project Office Address:
(Provide street address, city, state, zip code, department and building name, and office/room number.)

University of Arkansas Union
Fayetteville, AR 72701
Career Development Center
Room 614

Project Office Phone Number: 479-575-9323

Note: The restricted-use data and computer must be secured and used only at this location. When the data are not being used, the data must be stored under lock and key at this location. Only authorized users of the data, as listed on the License, may have access to this secure project office/room.

Physical Security of Data

Describe Building Security:
(Describe building security arrangements where project office is located.)

The building is secured by lock and key. In addition, the entire floor of the department is secured by lock and key.
Describe Project Office Security:
(Describe project office security arrangements for the room where the computer and data will be located.)
The office is an individual staff office for the restricted data user. The office is secured by lock and key. The restricted data user has the key to the office.

Computer Security Requirements

Describe Computer System:
(Please read the Note below. Computer security must follow the requirements listed below.)
Computer is a Dell computer (standalone) and is not attached to a modem or network.

Computer Operating System: Windows XP Professional

Anti-Virus Software Installed on Computer: Symantec Endpoint Security 11.x

Note: The restricted-use data must be copied to and run on a standalone, desktop computer. Use of a laptop computer, external hard drive, or USB memory stick is strictly prohibited. Absolutely no restricted-use data may be copied onto a server or computer that is attached to a modem or network (LAN) connection. Prior to attaching the computer to a modem or LAN connection, the restricted-use data must be purged and overwritten on the computer.

The following physical location and computer security procedures must be implemented when in possession of restricted-use data. By checking the box next to each security procedure, you signify that these security procedures will be implemented for the duration of the project and License period:

- Only authorized users listed on the License will have access to the secure room. Access will be limited to the secure room/project office by locking the office when away from the office.
- Data will only be secured, accessed and used within the secure project office/room (as specified on page 1 of this plan).
- A password will be required as part of the computer login process.
- The password for computer access will be unique and contain 6 to 8 characters with at least one non-alphanumeric character.
- The computer password will change at least every 3 months or when project staff leave.
• Read-only access will be initiated for the original data.

• An automatic password protected screensaver will enable after 5 minutes of inactivity.

• No routine backups of the restricted-use data will be made.

• Project office room keys will be returned and computer login will be disable within 24 hours after any user leaves the project. The PPO will notify IES of staff changes.

• Restricted-use data will not be placed on a server (network), laptop computer, USB memory stick, or external hard drive.

• The data will be removed from the project computer and overwritten, whether at the end of the project or when reattaching a modem or LAN connection.

• Post Warning notification: During the computer log-in process, a warning statement (shown below) will appear on the computer screen before access is granted. If it is not possible to have the warning appear on the screen, it must be typed and attached to the computer monitor in a prominent location.

---

**WARNING**

U.S. Government Restricted-use Data

Unauthorized Access to Data (Individually Identifiable Information) on this Computer is a Violation of Federal Law and will Result in Prosecution.

Do You Wish to Continue? (Y)es or (N)o

---

**NOTICE**

Proposed Publications Using Restricted-use Data

Licensees are required to round all unweighted sample size numbers to the nearest ten (nearest 50 for ECLS-B) in all information products (i.e.: proposals, presentations, papers or other documents that are based on or use restricted-use data). Licensees are required to provide a draft copy of each information product that is based on or uses restricted-use data to the IES Data Security Office for a disclosure review. The Licensee must not release the information product to any person not authorized to access the data you are using until formally notified by IES that no potential disclosures were found. This review process usually takes 3 to 5 business days.

The PPO shall also forward a final, approved copy of each publication containing information based on restricted-use data to the IES Data Security Office.
Signature Page – Management Review and Approval

I have reviewed the requirements of the License agreement and the security procedures in this plan that describe the required protection procedures for securing, accessing and using the restricted-use data.

I hereby certify that the computer system, physical location security procedures, and access procedures meet all of the License requirements and will be implemented for the duration of the project and License period.

Senior Official Signature: 

Rosemary H. Ruff
Director
Office of Research Compliance

Senior Official Name & Title: 

Date: 04/28/2011
Phone Number: 419-575-4572

Principal Project Officer Signature: 

Michael T. Miller, Associate Dean
Principal Project Officer Name & Title (print)
College of Education and Health Professions

Date: 3/1/11
Phone Number: 419-575-3582

System Security Officer Signature: 

Sam
System Security Officer Name & Title (print)

Date: Same
Phone Number: Same

Note: The National Center for Education Statistics (NCES) processes licenses and disseminates restricted-use data for all centers in the Institute of Education Sciences (IES) including the National Center for Education Research (NCER), the National Center for Education Statistics (NCES), the National Center for Education Evaluation (NCEE), and the National Center for Special Education Research (NCSER).
Affidavit of Nondisclosure

Graduate Student

University of Arkansas

College of Ed. and Health Professions

320 Graduate Ed. Building, Fayetteville, AR 72701

(Date Assigned to Work with NCES Data)

BPS

(NCES Database or File Containing Individually Identifiable Information*)

1. Rickey Booker, do solemnly swear (or affirm) that when given access to the subject NCES database or file, I will not -

(i) use or reveal any individually identifiable information furnished, acquired, retrieved or assembled by me or others, under the provisions of Section 183 of the Education Sciences Reform Act of 2002 (P.L. 107-279) and Title V, subtitle A of the E-Government Act of 2002 (P.L. 107-347) for any purpose other than statistical purposes specified in the NCES survey, project or contract;

(ii) make any disclosure or publication whereby a sample unit or survey respondent (including students and schools) could be identified or the data furnished by or related to any particular person or school under these sections could be identified; or

(iii) permit anyone other than the individuals authorized by the Commissioner of the National Center for Education Statistics to examine the individual reports.

(Signature)

[The penalty for unlawful disclosure is a fine of not more than $250,000 (under 18 U.S.C. 3571) or imprisonment for not more than five years (under 18 U.S.C. 3559), or both. The word "swear" should be stricken out when a person elects to affirm the affidavit rather than to swear to it.]

City/County of Richmond, Commonwealth of Virginia

Sworn to and subscribed before me the day of

Witness my hand and official Seal.

(My commission expires 9-1-2011)

* Request all subsequent follow-up data that may be needed. This form cannot be amended by NCES, so access to databases not listed will require submitting additional notarized Affidavits.
Affidavit of Nondisclosure

ASSOCIATE DEAN
(Job Title)

COLLEGE OF ED AND HEALTH PROFESSIONS
(Organization, State or Local Agency Name)

UNIV. OF ARKANSAS
(Organization or Agency Address)

BPS
(NCES Database or File Containing Individually Identifiable Information*)

MICHAEL T. MILLER, do solemnly swear (or affirm) that when given access to the subject NCES database or file, I will not:

(i) use or reveal any individually identifiable information furnished, acquired, retrieved or assembled by me or others, under the provisions of Section 183 of the Education Sciences Reform Act of 2002 (P.L. 107-279) and Title V, subtitle A of the E-Government Act of 2002 (P.L. 107-347) for any purpose other than statistical purposes specified in the NCES survey, project or contract;

(ii) make any disclosure or publication whereby a sample unit or survey respondent (including students and schools) could be identified or the data furnished by or related to any particular person or school under these sections could be identified; or

(iii) permit anyone other than the individuals authorized by the Commissioner of the National Center for Education Statistics to examine the individual reports.

(Signature)

[The penalty for unlawful disclosure is a fine of not more than $250,000 (under 18 U.S.C. 3571) or imprisonment for not more than five years (under 18 U.S.C. 3559), or both. The word "swear" should be stricken out when a person elects to affirm the affidavit rather than to swear to it.]

City/County of Washington, Commonwealth/State of Arkansas
Sworn to and subscribed before me this __________ day of
March 2011, Witness my hand and official Seal.

(Notary Public/Seal)

My commission expires 9-1-2011

* Request all subsequent follow-up data that may be needed. This form cannot be amended by NCES, so access to databases not listed will require submitting additional notarized Affidavits.

Form last revised 02/06/07

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Affidavit of Nondisclosure

Systems Analyst

(Job Title)

University of Arkansas

(Organization, State or Local Agency Name)

155 S Razorback Rd., Fayetteville, AR 72701

(Organization or Agency Address)

 spas

(NCES Database or File Containing Individually Identifiable Information*)

I, Ling Ting, do solemnly swear (or affirm) that when given access to the subject NCES database or file, I will not -

(i) use or reveal any individually identifiable information furnished, acquired, retrieved or assembled by me or others, under the provisions of Section 183 of the Education Sciences Reform Act of 2002 (P.L. 107-279) and Title V, subtitle A of the E-Government Act of 2002 (P.L. 107-347) for any purpose other than statistical purposes specified in the NCES survey, project or contract;

(ii) make any disclosure or publication whereby a sample unit or survey respondent (including students and schools) could be identified or the data furnished by or related to any particular person or school under these sections could be identified; or

(iii) permit anyone other than the individuals authorized by the Commissioner of the National Center for Education Statistics to examine the individual reports.

(Signature)

[The penalty for unlawful disclosure is a fine of not more than $250,000 (under 18 U.S.C. 3571) or imprisonment for not more than five years (under 18 U.S.C. 3559), or both. The word "swear" should be stricken out when a person elects to affirm the affidavit rather than to swear to it.]

City/County of Washington, Commonwealth/State of Arkansas.

Sworn to and subscribed before me this 5th day of May, 2004. Witness my hand and official Seal.

(Notary Public/Seal) Diane R. Didier

My commission expires April 17, 2009

* Request all subsequent follow-up data that may be needed. This form cannot be amended by NCES, so access to databases not listed will require submitting additional notarized Affidavits.

Form last revised 02/06/07