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Lauren Murray  
*University of Central Florida*



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FOSTERING COLLEGE STUDENT SUCCESS:  
AN ANALYSIS OF THE EDUCATIONAL OUTCOMES OF FLORIDA COLLEGE  
STUDENTS RECEIVING RELATIVE CAREGIVER, ROAD-TO-INDEPENDENCE,  
AND ADOPTION TUITION EXEMPTIONS

by

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A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the College of Education and Human Performance  
at the University of Central Florida  
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## ABSTRACT

This study investigated the educational outcomes of foster care youth utilizing the Road to Independence, Adopted from DCF, and Relative Caregiver tuition exemptions to pursue enrollment in Florida's state college system during the 2012-2013 academic year. An extensive literature review was conducted to examine the history of foster care, examine a contemporary portrait of the American foster care system, and the adult outcomes of former foster care. Federal and state policies impacting the population, campus support initiatives at colleges nationwide and the concept of resilience were also explored.

In conjunction with the Florida Department of Education's Division of Accountability, Research and Measurement, the Florida Department of Children and Families provided access to a dataset compiled by the Community College and Technical Center MIS department. This file contained enrollment information for foster care youth utilizing one of three tuition exemptions to fund their education-related expenses. While all personal identifiers were eliminated prior to sharing the file, information within the document included student age, gender, race/ethnicity, academic discipline, and degree being pursued.

Results of this study yielded some statistically significant differences across tuition exemption type. After examining relationships between gender and race/ethnicity and tuition exemption type, no statistically significant results were found. However, statistical significance was found after examining the relationships between academic degree being pursued and academic major/discipline and tuition exemption type. Many

factors impact the experiences of foster care youth in the college classroom. These should be considered when developing programming, policy, and support services aimed at encouraging their success.

*Keywords:* aging out, campus support services, educational outcomes, foster care youth, policies impacting foster care youth, resilience

This dissertation is dedicated in loving memory of my mother, Judy who passed away while I was in high school. I made a promise to her that I would someday achieve this enormous goal and only hope that I have fulfilled that promise.

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Our family are our earliest teachers. My family taught me about the importance of education, resilience, asking questions, and the importance of believing in myself. Their endless love, constant support, and encouragement has made this moment possible. Thank you for loving me, believing in me, and for never letting me quit!

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## CHAPTER 1 INTRODUCTION

The transition into adulthood for many American youth is often gradual and marked with continued emotional, financial and an abundance of other support from parents and loved ones. For the approximately 24,000 youth who “age out” of the foster care system each year, this transition can be abrupt and filled with many obstacles that must be overcome. As such, those who experience foster care “grow up amid the challenges of severe and ongoing adversity in their families and communities” (Greeson, 2013, p. 40) making them more vulnerable to issues including homelessness (Fowler, Toro & Miles, 2009), unemployment, incarceration (Daining & DePanfilis, 2007; Jonson-Reid & Barth, 2000), early childbearing and non-marital parenting (Dworksy & Courtney, 2010a), low educational attainment (Kirk, Lewis, Nilsen & Colvin, 2011), substance abuse and mental health issues (Shook, Goodkind, Pohling, Schelbe, Herring, & Kim, 2011), poor overall health and feelings of disconnection with society (Courtney, Dworsky, Ruth, Keller & Havilcek, 2005). Much of the evidence suggesting problematic outcomes for this population is based on aggregate data, which suggests that foster care youth experiences a higher probability of future challenges. It is important to note that youth in foster care follow multiple paths and experience a variety of adult outcomes. Some, for example, may be able to experience independence and self-efficacy at an early age and for others, this transition into adulthood is not as easily navigated. As educational attainment continues to serve as one of the most consistent markers predictors of employment and wages, it is imperative that foster care youth be given

every opportunity to seek out, and benefit from, the programming and services available to them (Hook & Courtney, 2011; Surrette, 1997).

In addition to overcoming many personal obstacles, former foster care youth must strive toward social integration and success as well. The ability to graduate from a post-secondary institution, for example, is considered by many to be a positive indicator of future successes, as individuals who do not graduate face “more limited and less promising employment options” (Arnett, 2004, p. 119). The educational inequities experienced by foster care youth can be viewed as a problem for economic and humanitarian reasons. Each year, billions of dollars (\$6.5 billion in 2008) are allocated for foster care services nationwide; as such, the child welfare system should provide youth with an adequate education (Rios & Rocco, 2014). While the economic costs of lost educational opportunities are great, the unrealized potential of foster care youth are an even greater concern (Rios & Rocco, 2014). Of the more than 12 million adults in the United States who experienced foster care, less than 5% have post-secondary degrees; this shocking statistic suggests that much human potential has been lost (Foster Care Alumni of America, 2014). For this population, and all underserved and at-risk populations, post-secondary educational success provides the opportunity to benefit from that capital as it “can be a positive counterweight to the abuse, neglect, separation, and impermanence” experienced in their childhoods (National Working Group on Foster Care and Education, 2011, p. 1).

For the majority of American youth today, the journey to adulthood often extends into their mid-twenties, a period in their development known as “emerging adulthood”

(Arnett, 2000, p.469). During this time, many youth are given the opportunity to explore choices including becoming a student, employee, partner, and even parent. These decisions are often influenced by their families' socioeconomic status, ethnicity, gender, and even parental and/or family support (Arnett, 2001). In contrast, former foster care youth experience the transition into adulthood in a brief and much more hazardous trip (Courtney, et al., 2005; Munson & McMillen, 2009). And yet, some former foster care youth are able to overcome these obstacles to find personal and professional success. To better understand the issues that former foster care youth experience while transitioning out of care and into post-secondary institutions, the following background introduces the population to the reader, briefly discusses some of the obstacles that they may encounter and the resiliency needed in order to achieve success.

### Background

Children are most successful when they find themselves in stable, safe, nurturing environments. Unfortunately, approximately 300,000 children are placed into foster care each year because their home environments are considered unsafe for a plethora of circumstances, including physical abuse, neglect, abandonment, and parental failure to provide support or supervision (Mersky & Janczewski, 2013; Ringeisen, Tueller, Testa, Dolan & Smith, 2013). The foster care system is charged with supporting these children by providing temporary care, supervision, and support (Berrick, 1998; Ringeisen, et al., 2013). However, multiple barriers within the family may cause youth to remain in foster care for extended periods of time, causing many to "age out" or reach their state's legal age of majority (Child Welfare Information Gateway, 2013; Courtney & Heuring, 2005;



Shirk & Strangler, 2004) instead of being reunited with their families. Youth who age out of the foster care system often demonstrate less self-sufficiency than their peers, and often need specific supports in order to be successful (Osgood, Foster, Flanagan & Ruth, 2005).

State organizations or agencies are responsible for providing safe housing, education, healthcare, clothing and other services for foster care youth, however, youth in care tend to live in multiple homes, and attend several, often low-achieving, schools (Smithgall, Gladden, Howard, George & Courtney, 2004; Sullivan, Jones & Mathiesen, 2010). These multiple placements often cause foster care youth to experience attendance gaps and lose credits because of problems associated with academic record transfers and poor collaboration between caseworkers, schools and foster parents. As a result, foster care youth experience greater risk of grade repetition and failure (Smithgall, et al., 2004; Sullivan, et al., 2010). Youth in care also have lower standardized math and reading test scores and are less likely to enroll in college preparatory classes (Harris, Jackson, O'Brien & Pecora, 2009; Rumberger, Larson, Ream & Palardy, 1999) causing foster care youth to miss many opportunities to prepare for post-secondary education and become less likely to successfully transition to independent living (Stone, D'Andrade, & Austin, 2006).

Approximately 70% of the youth in foster care indicate that they aspire to graduate from high school and earn a bachelor's degree, however, some studies suggest that less than 60% complete high school or earn GEDs. Between 25% and 73% of the foster care youth who graduate from high school enroll in some postsecondary education,

but only between 2 and 8% actually earn college degrees (McMillen, Aluslander, Elze, White, & Thompson, 2003; Pecora et al., 2006). While many foster care youth aspire to attend college, few are able to successfully achieve that goal. Instead of focusing on college completion and/or career development, the child welfare system emphasizes safety and permanence. This makes education an afterthought as opposed to a targeted outcome for the population (Hernandez & Naccarato, 2010). A New York City social worker stated, “Agencies do not encourage college but instead encourage kids to get their high school diploma or GED, get a job and get the hell out of care” (Freundlichm & Avery, 2008, p.16). Consequentially, former foster care youth who enroll in colleges and universities often experience many obstacles as they work to earn their degrees.

#### Statement of the Problem

Even though college enrollment statistics for students who have experienced foster care are not reported by national or state higher education associations, previous scholarship on the topic suggests that college attendance and completion rates for the population are significantly less than both the general population, and those of other underrepresented backgrounds (Sim, Emerson, O’Brien, Pecora & Silva, 2008). The Bureau of Labor Statistics (2012) has estimated that twenty of the country’s fastest growing careers will require the completion of post-secondary coursework of some kind. To ensure that former foster care youth are able to be competitive in this ever-changing economy, continued research is needed to ensure that support is available for this population so they are successful in their transition into adulthood.

### Purpose of the Study

Former foster care youth face many obstacles throughout their transition from care to independent living (Arnett, 2004; Blome, 1997; Courtney & Heuring, 2005). These challenges are often exacerbated when youth in this population begin college coursework (Danning & Pecora, et al, 2006; Emerson, 2006; Hernandez & Naccarato, 2010). Thus, it is necessary to examine their unique experiences within the university and what support is necessary to increase the population's persistence to graduation. This research examined the educational persistence of Florida college students receiving foster-care related tuition exemptions at the 28 colleges within the Florida College System. The results of this study add to the literature on the topic and may influence policy and programmatic decisions influencing the educational experiences of foster care alumni pursuing college degrees.

### Significance of the Study

The transition into emerging adulthood can be an extremely complicated one. Experiencing independence for the first time can and does challenge millions of youth each year. For many, the journey is aided by the love, guidance and support of family and other loved ones. This is not the case for many foster care youth aging out of care, the journey includes roadblocks and obstacles that youth must navigate on their own, often for the first time. Lacking many of the tools needed to complete this journey, foster care youth often struggle more than their peers. Transitioning into adulthood from foster care without self-sufficiency skills affects the larger society in many ways, including criminality, homelessness, and premature pregnancy. Additionally, low rates of

educational achievement can cause former foster care youth to become poverty-level wage earners (Wertheimer, 2002).

While youth exiting the foster care system are not the only population to experience difficulty transitioning into adulthood because of the vulnerability that they faced as youth, the U.S. social policy focus on them is understandable (Courtney, 2009; Osgood, Foster & Courtney, 2010). As the goal the child welfare system is to achieve legal permanency for foster care youth whenever possible, foster care youth who reach the age of majority represent a failure of the system. Therefore, some may argue that the development of policies aimed at these “children of the state” may serve as a reflection of policymakers’ acknowledgement of the “moral imperative of not abandoning children who the state has arguably failed” (Hook & Courtney, 2011, p. 1855). Therefore research on this topic is not only a societal responsibility toward a marginalized group, but also ensure that faculty, college administrators and their fellow students benefit from the opportunity to engage with this unique student population while providing former foster care youth with the skills and education needed to find success in a dynamic, and ever-changing global community.

#### Research Questions & Hypotheses

This research sought to develop a clear understanding of Florida’s former foster care youth who were using tuition exemptions to seek enrollment in the state’s state college and university system. This question was answered using the following sub-questions:

1. Is there a relationship between former foster care youths' racial background and gender across tuition exemption types?
  - Hypothesis 1: Women from the foster care system will utilize all three tuition exemptions at a greater rate than their male peers. Additionally, Caucasian and Hispanic/Latino students of both genders will utilize these exemptions more frequently than students from other racial and ethnic groups.
2. Is there a relationship between academic major or type of degree across tuition exemption type?
  - Hypothesis 2: Foster care youth, regardless of the tuition exemption being utilized, will pursue degrees that will prepare them for positions in science, technology, engineering and mathematics (STEM) careers more frequently than other academic disciplines. Vocational and job-ready certifications will also be extremely popular with the group due to the idea that these programs will lead to employment more quickly than other disciplines. Students will be less likely to seek liberal arts or social science-based fields.
  - What differences exist in academic major and type of degree across among foster care youth when student race, gender, and type of tuition exemption are examined?
  - Hypothesis 3: Women and youth receiving the Adopted from DCF exemption will pursue liberal arts or social science- based disciplines at greater rates than their peers in the foster care population. Men, youth of color, and Road-to-

Independence tuition exemption recipients will be more likely pursue STEM and vocational degree programs.

### Definition of Terms

The following terms were presented to define the terminology associated with this research:

Age-out: Foster care youth age-out, or become emancipated from care, at age 18 or when the child reaches the age of majority in their state. Recent legislation has enabled some states to extend eligibility of services to age 21 and beyond if certain conditions are met (Courtney & Barth, 1996; Okpych, 2012).

Emerging adulthood: Arnett (2001) identifies emerging adulthood to occur between the ages of 18 and 29, as evidence suggests that youth in this age range make the transition into adulthood after meeting a number of psychological, sociological and anthropological milestones. Other indicators of adulthood include financial independence, accepting responsibility for one's actions, and making independent decisions.

Former foster care youth: Any individual who experienced foster care in their youth. For the purposes of this dissertation, emphasis has been placed on individuals who aged out of the foster care system.

General population: This term refers to youth who did not experience foster care.

## Theoretical Framework

### *Resilience*

Resilience theory is an expanding body of ideas attempting to give explanations for the source and role of change in adaptive systems, particularly changes that are transformative in nature (Redman & Kinzig, 2003). While multiple definitions of resilience can be found across disciplines, all emphasize positive patterns of adaptation.

Though it has been adapted to reflect the social sciences, resilience theory originates within ecology as a means to explain changes within ecosystems. An ecosystem is considered resilient when it is able to respond to a disturbance by resisting damage and recovering quickly (Holling, 1973). Holling further links resilience to persistence, and allows an ecosystem to “absorb change and disturbance” (p.14).

Four features of ecosystems provide the framework for the theory (Holland & Gunderson, 2002). First, change is not continuous and gradual nor is it consistently chaotic; instead it is episodic and includes periods of equilibrium with sudden shifts. Second, patterns and processes do not exist, as periods of change are unpredictable in nature. Third, ecosystems require both “stabilizing” and “destabilizing forces” (p. 1). “Destabilizing forces” are used to maintain diversity, flexibility while “stabilizing forces” (p.1.) ensure productivity, fixed capital and social memory (Redman & Kinzig, 2003). Finally, fixed laws cause systems to lose resilience and break down; as ecosystems are living organisms, flexibility is considered essential to ensure that the system can exist over time. In fact, for an ecosystem to demonstrate resilience, it must develop ways to learn from its past and accept that uncertainty is inevitable (Redman & Kinzig, 2003).

A second, equally critical, aspect of resilience theory emphasizes the need for renewal, and reorganization (Folke, 2006). In a resilient social or ecological system, change creates opportunities for innovation, new ideas and new processes. In systems lacking resilience, even small changes can create dramatic consequences that may forever impact the structure and activities within them (Adger, 2006; Folke, 2006). As such, resilience theory within ecology, and even the social sciences, encourages the acceptance of change, adaptation to, and even try to shape it. In fact, it is proposed that anticipating change enhances the likelihood of desirable outcomes in environments where the future is considered both surprising and unpredictable (Adger, 2006; Folke, 2006).

The concept of resilience is also found in the social sciences. As an interdisciplinary concept, resilience is found in anthropology, economy, ecology, political science, psychology, public health, and even archaeology (Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum, 2007; Anderies, Walker & Kinzig, 2006). Whereas a measureable concept within the hard sciences, it is viewed as a metaphor within the social sciences as it is used to explore the transformative natures of individuals, families, communities, and even societies (Norris, et al., 2007). Though the concept is found across disciplines, this dissertation will examine community and individual resiliency.

### *Community resilience*

Brown and Kulig (1996) defined community resilience to be the ability to recover from or adjust to adversity or unrelenting life stress. Ganor and Ben-Lavy (2003) expand upon this definition to include the capacity to find unknown inner strengths to effectively cope with life stressors and the ability to adapt and demonstrate flexibility as a result of



these adversities. Though a community can be identified using geographic boundaries, it may also refer to social groups, neighborhoods, formal institutions, and other groups that have a shared fate (Norris, et al., 2007). Though communities may share the same fate, resilient individuals with a shared experience do not necessarily ensure a resilient community (Rose, 2004) because “people in communities are resilient together, not merely in similar ways” (Brown & Kulig, 1996, p.43).

The three psychological dimensions of social capital influence the participation in a resilient society are sense of community, place attachment, and citizen participation. Sense of community represents an attitude of bonding, trust, and belonging that an individual feels towards others within their community and encapsulates a strong sense of concern for community issues, respect for others, and need fulfillment (Norris, et al., 2007). “Place attachment” implies an emotional connection to one’s community separate from the individuals who form that group. These stabilizing attachments are critical for one’s self-awareness. Finally, citizen participation references the engagement of individuals in formal organizations, including religious institutions, school groups, and self-help groups. This participation is essential, as it can influence one’s own feelings of efficacy (Norris, et al., 2007).

Community resilience provides us with an important lens through which to examine foster care youth in America. After examining the concept of sense of community and neighborhood attachment, Riger and Lavrakas (1981) identified two critical factors: social bonding and behavioral rootedness. Social bonding is the ability to identify neighbors and feel a sense of belonging to the group. Behavioral rootedness

refers to the time spent as a resident within a given community (Riger & Lavrakas, 1981). Though foster care youth may not meet the traditional definition of an ethnic group, they are very much members of a non-dominant group within larger society. As such, social identity theory can also be applied; as foster care youth become members of a larger group which influences their own self-concept and may be used to influence their self-esteem based on their sense of belonging to that group (Tajfel & Turner, 1986). Therefore, it is important to consider the impact that membership into the foster care community has on an individual's ability to be resilient in the face of adversity.

#### *Personal resilience*

As previously discussed, foster care youth face a variety of educational, personal, and social obstacles that may influence their adulthood outcomes. Children who experience abuse and neglect have been found to experience neurological and psychological consequences as well. Negative environmental events in childhood can result in the malfunctioning of those areas of the brain responsible for the regulation of affect, empathy, and emotion (Lowenthal, 2005; Nash, 1997; Perry, 1993). Exposure to abuse and neglect during childhood exposes youth to prolonged periods of flight-or-fight responses within the brain as well as higher levels of cortisol, a stress hormone released by the brain (Neuberger, 1997). Studies of adults who experienced prolonged abuse or neglect as children have shrinkage in the areas of the brain associated with memory and learning (Neuberger, 1997), and many also have brains 20-30% smaller than their peers (Perry, 1993). In addition, these experiences cause the brain to develop heightened responses to stress and fear; thus resulting in the brain being organized specifically for

survival. Though this emphasis on survival may help them to avoid further abuse, it may also delay or diminish their development (Lowenthal, 2005). Therefore, abused or neglected youth find themselves at greater risk for emotional, behavioral, learning difficulties with fewer opportunities for comfort, support and nurturing (Lowenthal, 2005, Herman, 1992).

Children who experience abuse and neglect also experience psychological effects. These often include a deregulation of affect, avoidance of intimacy, provocative and inappropriate behaviors, disturbances in the attachment, and a sense of distrust in their environment (Lowenthal, 2005; Nash, 1997). Further, abuse and neglect have been linked to cognitive effects. Children who experience abuse and neglect often score lower on cognitive tests and demonstrate poorer school achievement than their peers (Lowenthal, 2005; Barnett, 1997). Additionally, children with unloving and unsupportive parents or caretakers tend to view themselves as unworthy and incompetent in academic activities and may result in a loss of self-esteem and a loss of motivation to do well in school (Lowenthal, 2005).

The psychopathology literature defines resilience to be an individual's capacity to overcome negative outcomes, and is considered a function of cognitive abilities and exposure to problem solving methods (Hass & Graydon, 2009). Resnick (2010) describes resilience to be the capacity to "spring back from a physical, emotional, financial, or social challenge" (p. 199). Resilient individuals, therefore, are able to adapt after experiencing trauma, tragedy, adversity, and other life stressors (Newman, 2005).

Individuals with high levels of resilience are less likely to become physically ill and manifest adaptive behaviors especially those associated with social functioning, morale and health (O'Connell & Mayo, 1998; Resnick, 2010, Wagnild & Young, 1993). Increasingly, scholars link resilience to motivation and include the ability to recover from traumatic events (Charmey, 2004). Literature on childhood and adolescent resilience has focused on young people who lived in environments predictive of poor social and psychological outcomes. Early theorists postulated that exposure to poverty, family conflict, and parental mental illness elevated a child's risk for a variety of negative outcomes including substance abuse, violence, emotional distress, and/or academic failure (Charmey, 2004; Resnick, 2000; Wagnild & Young, 1993).

Additional empirical research on the topic has focused on development of resilience skills in three areas: the attributes of children themselves, their family relationships, and the characteristics of their larger social environments (Rutter, 1999; Schofield, 2001; Stein, 2005). Others suggest that the youth who demonstrate the greatest levels of resilience have strong social support networks, committed mentors, co-curricular activities that promote learning, developing emotional competencies, and maturity, and the capacity to reframe negative situations in order to recognize positive of the event. Resilience is also demonstrated in an individual's ability to set long-term goals, their sense of their own ability to make a difference (i.e. volunteering, holding a part-time job, or opportunities to be "of service" to others), and exposure to difficult events that enable the youth to develop problem solving and emotional-coping skills (Hass & Graydon, 2009; Newman & Blackburn, 2002; Stein, 2005).

### Organization of the Study

Chapter 1 introduced the reader to emerging adults who have aged out of foster care and the obstacles that they may experience as a result of their participation in the system. The chapter also identified the problem and purpose of this dissertation, the research questions that it sought to answer, and the theoretical framework that was applied to its findings. Finally, research limitations and definitions of key terms were included. Chapter 2 presented literature on former foster care youth prior to and during their post-secondary enrollment. In addition, federal and state policies associated with the educational outcomes of the population were identified. Chapter 3 provided information regarding the research methodology, data collection and analysis. Results of the investigation were shared in Chapter 4. Finally, the dissertation concluded with chapter 5 and illustrated the significance and implications of the findings.

## CHAPTER 2 LITERATURE REVIEW

### Introduction

Before exploring issues related to former foster care youth as they transition into higher education, it is essential to introduce this special population to higher education professionals. To do this, a brief history of foster care in the United States and the educational hurdles that youth in care may experience were included. Next, adult outcomes of former foster care youth were addressed. After introducing the population, federal and state policies impacting former foster care youth as they attempt to access and pursue higher education were explored. Additionally, the Florida state college system and policies impacting foster care youth in the state were introduced. Finally, additional information regarding resiliency are presented.

### History of Foster Care in the United States

The earliest documented examples of children in foster care can be found in the Old Testament and Talmud, which describe the society's requirement to care for dependent children as a duty under law. The Book of Deuteronomy places the responsibility to care for the fatherless, the stranger, and the widow on the community (Deuteronomy 26:12 New International Version; McCutcheon, 2010). Early Christian church records also show orphaned children being placed with "worthy widows" who received compensation for this work from monies collected by their congregations (National Foster Parent Association, 2014, para 1).

In the years between the Black Death and the Protestant Reformation, England passed a series of laws known as the Elizabethan Poor Laws. These laws were created to

aid the poor whose lives were impacted by the plague and the fall of feudalism (Giancomo, 2008; McCutcheon, 2010). In 1562, a law was passed enabling the country's citizens to place children into indentured servitude and apprenticeship programs (Crosson-Tower, 2001).

Early Americans also relied on indentured servitude to deal with impoverished children. In fact, America's first foster child, Benjamin Eaton, acted as an indentured servant in the Jamestown Colony in 1636 (National Foster Parent Association, 2014). Though some found the practice to be exploitative and abusive, others found it to be ideal as youth were able to learn a trade while responsible for their well-being was assigned to a person or family within the community (Downs, Moore, McFaddin, Michaud, & Costin, 2004). As a new nation, jobs and occupations were plentiful, providing a variety of employment options for youth.

By the mid to late 1800s, however, the need for a more structured foster care system was evident as more displaced children needed care than ever before (Nelson, 2003). In 1824, the New York legislature passed the County Poorhouse Act requiring counties to provide institutionalized housing for the poor (Sokoloff, 1993; Trattner, 1994). Church-sponsored orphanages were created for needy white youth. During this time, children of color were placed into informal kinship care arrangements and boarding schools were established to indoctrinate Native American children into white society (Crosson-Tower, 2001; Downs, et al., 2004). By 1910, over 100,000 children resided in orphanages nationwide (Sokoloff, 1993).

In 1853, Charles Loring Brace began what was called “the free foster home movement” to prevent New York City’s 30,000 homeless children’s placement into orphanages (Children’s Aid Society, n.d.; Jalongo, 2010; Nelson, 2003; Sokoloff, 1993). After establishing the Children’s Aid Society, Brace began transporting children to the rural Midwest on what would later be called orphan trains for placement with farmers and tradesmen willing to care for them. Organizations in Philadelphia and Boston also adopted the practice (Children’s Aid Society, n.d.; Crosson-Tower, 2001; Jalongo, 2010; Nelson, 2003; Sokoloff, 1993). From 1853 to 1929, approximately 32,000 children were placed in homes across the country using orphan trains (Jalongo, 2010; Sokoloff, 1993).

The Children Aid Society’s success led to the creation of public and private agencies charged with foster care placements. Massachusetts, Pennsylvania, and South Dakota were among the first states to begin establishing formal adoption and foster care policies by paying families to provide homes for children too young to be indentured (Children’s Aid Society, n.d.; Sokoloff, 1993). Through numerous reforms and changes to social policy, the foster care system has evolved into the system that we see today.

#### A Contemporary Picture of America’s Foster Care Youth

Between 2009 and 2014, 404,130 youth experienced foster care (U.S. Department of Health & Human Services, 2014). In 2013, 254,904 children entered the foster care system while 238,208 children care. On September 30, 2013, the mean age of youth in care was 8.9 years of age; the median age was 8.2 (U.S. Department of Health & Human Services, 2014). Adolescents and young adults aged 16-20 represented 19% of the total



population. As significant differences can be found in the population based on gender and race/ethnicity, it is important that this information be examined as well.

Table 1

*Gender & Racial Composition of Youth in Foster Care FY 2012-13*

Race	%	<i>n</i>	Gender	%	<i>n</i>
American Indian/Alaskan Native	2	8,658	Male	52	210,738
Asian	1	2,114	Female	48	191,608
African American/Black	24	98,201			
Caucasian/White	42	168,302			
Hispanic (of any race)	22	86,993			
Multiracial	6	24,935			
Native Hawaiian/Pacific Islander	0	686			
Unknown	3	11,734			

*Note:* Percentages may not total 100%.

(Adapted from U.S. Department of Health & Human Services, 2014)

Gender has been found to influence the educational expectations of foster care youth, with the gaps being more extreme within low-income and minority populations (Kirk, Lewis, Brown, Nilsen & Colvin, 2012). In a study of 550 foster care youth enrolled in the Kansas Kids @ GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) program at Wichita State University, Kirk and colleagues (2012) found women in foster care were two to three times more likely to aspire to obtain a Bachelor's degree than males, indicating that 90% of girls in care aspire to earn a Bachelor's degree compared to 79% of boys. Girls in care are also two and a half times more likely than their male peers to aspire to attend graduate school (35% vs. 17%) (Kirk, et. al., 2012). Sadly, men do not share these aspirations; with approximately twenty one percent indicating plans to achieve a high school diploma or complete their GED. While women in the foster care system report higher academic performance and

aspirations, males demonstrate greater gains in aspirations and expectation of college enrollment after participating in college access programming (Kirk, et. al., 2012). This indicates that, without proper interventions, boys in the foster care system are at a greater risk for academic underachievement and lower educational attainment and the lifetime outcomes associated with it (Courtney, et al., 2010; Kirk, et al., 2012). Finally, all youth in care reported limited knowledge of college admissions requirements or financial aid opportunities. In order to better support this population and encourage college enrollment, interventions should be created that address academic under-preparation and achievement, combat negative self-efficacies, and educate the group about outcomes associated with college attendance (Kirk, et al, 2012).

The 2010 Census indicates that the country is becoming more racially and ethnically diverse. Forty four percent of all children under age 18 are minorities, with 30% of the African American and 34% of the Hispanic population under age 18 (Laughlin, 2014). African Americans represent 55% of youth in foster care. As such, the odds of Black youth being placed into foster care are 44% higher than it is for their white peers (Unrau, Font & Rawls, 2011).

National data from the 2012-2013 fiscal year suggests that the disproportionate number of youth of color in the foster care system continues. The U.S. Department of Health and Human Services (2014)'s Administration for Children and Families annual report indicates that black children represent 14% of the general population and 24% of youth in care. Hispanic youth (of any race), who were 24% of the general population, accounted for 22% of youth in foster care.

Table 2

*Percentage Distribution of Children in Foster Care- 2013*

Race	% in Foster Care	% in General Population
American Indian/Alaskan Native	2	1
Asian	1	5
African American/Black	24	14
Caucasian/White	42	54
Hispanic (of any race)	22	24
Multiracial	6	4
Unknown	3	0

(Adapted from U.S. Department of Health & Human Services, 2014)

This suggests that the child welfare system may treat youth of color, differently than their Caucasian peers (Putnam-Horstein, Needell, King, & Johnson-Motoyama, 2012; Daining & DePanfilis, 2007; Sedlack & Broadhurst, 1996). Hispanic youth in foster care are less likely to complete high school than their white peers. They are also more likely to experience group placements than other racial or ethnic groups (Putnam-Horstein, et. al., 2012; Unrau, et al., 2011). Children of color are also more likely to spend more time in the system with more frequent placement changes and experience while also receiving less adequate services than any other group (Roberts, 2002).

Scholars have pondered these racial and ethnic discrepancies. Strong correlations between child abuse and neglect, including poverty, single parent households and stressful environments are linked to families and communities of color (Putnam-Horstein, et al., 2012; Berger, 2005; Drake, Lee & Jonson-Reid, 2009). A large body of research suggests that youth who experience foster care demonstrate a greater propensity for negative life outcomes. When issues are compounded by potential racial and ethnic bias within the system, the ability to demonstrate resilience becomes much more complicated.

### *Foster Care Placement Settings*

Children who enter the foster care system are placed into one of eight settings: non-relative or “traditional” placements, family foster care, relative or kinship care, institutions, group homes, trial home visits, pre-adoptive homes, and supervised independent living (U.S. Department of Health and Human Services, 2014). Youth in informal kinship care are placed into the supervised physical custody of a relative under while remaining in the legal custody of their parents. While youth in formal kinship placements reside with an approved family member, the state maintains legal custody and is responsible for ensuring the youths’ needs are met (Macomber, Geen & Main, 2003). Though kinship placements enable children to remain with their biological family, almost half are placed into low-income households. Approximately 24% of children in traditional placements are placed into similar environments (Dubowitz, Feigelman, Harrington, Starr, Zuravin, & Sawyer, 1994; Macomber, et al, 2003).

Other types of foster care placement settings exist to serve youth and their unique needs. Trial home visits allow families to attempt reunification while children remain in other placements. These visits are often for unspecified lengths of time; children are considered discharged from care after residing with their biological parent(s) for six continuous months. Independent living programs (called ILPs) help current and former foster care youth gain the self-sufficiency and life skills necessary to transition into adulthood by placing them into apartments, group housing, or college residence halls with limited supervision and supports (Barth, 2002; California Department of Social Services, 2007; Collins, 2004). Institutional foster care is designed for youth who may

benefit from behavioral, mental health or medical and/or therapeutic environments (Barth, 2002; Smith, Stormshak, Chamberlain, & Whaley, 2001). Finally, 6% of foster care youth reside in group homes that can function like dormitories and provide care to a large number of foster care youth who cannot be placed in traditional foster homes (Barth, 2002; Macomber, et al, 2003; Smith, Stormshak, Chamberlain, & Whaley, 2001).

Table 3

*Foster Care Placement Settings in 2013*

Race	%
Foster Family Home (Non -Relative)	47
Foster Family Home (Relative)	28
Institution	8
Group Home	6
Trial Home Visit	5
Pre-Adoptive Home	2
Supervised Independent Living	1
Runaway	1

*Note.* Percentages may not total 100%.

(Adapted from the U.S. Department of Health and Human Services, 2014)

Youth exit the foster care system in several ways. They may be emancipated by aging out, may be reunified with their parents, transition into independent living programs, be adopted, or placed with a relative or guardian, or may “unsuccessfully” exit care (McCoy, McMillen & Spitznagel, 2008; Courtney & Barth, 1996, p.75).

Unsuccessful exits include running away, incarceration, entering psychiatric hospitals, or death while in care while positive outcomes include reunification with family, adoption or placement with a legal guardian (McCoy, et al., 2008; Courtney & Barth, 1996; U.S. Department of Health & Human Services, n.d.).

Table 4

*Reasons for Discharge from Foster Care in 2013*

Race	%
Reunification with Parent(s) or Primary Caretaker(s)	51
Adoption	21
Emancipation	10
Living with Other Relative(s)	8
Guardianship	7
Transfer to Another Agency	2
Runaway	0
Death of Child	0

*Note.* Percentages may not total 100%.

(Adapted from U.S. Department of Health and Human Services, 2014)

Historical trends suggest that approximately 245,000 youth exit the foster care system annually, with as many as 277,606 leaving care in 2009 and as few as 238,280 exiting the system in 2013 (U.S. Department of Health and Human Services, 2014).

While the mean age of youth leaving care in 2013 system was 9.1, approximately 15% age out annually (Child Welfare Information Gateway, 2013; Okumu, 2014; U.S.

Department of Health & Human Services, 2014). Since 1998, the number of youth aging out of care has increased by 40% (US Department of Health and Human Services, 2006).

This has been linked to a variety of life outcomes (Sullivan, Jones, Mathiesen, 2010).

Table 5  
*Time Spent in Care 2012-2013 Fiscal Year*

Time Spent in Care	%	<i>n</i>
Less than 1 month	11	26,263
1-5 months	15	35,983
6-11 months	20	46,734
12-17 months	16	37,800
18-23 months	11	27,274
24-29 months	8	18,499
30-35 months	5	12,424
3 to 4 years	9	20,462
5+ years in care	5	12,677

#### Educational Outcomes

Foster care youth represent one of the most academically vulnerable populations in the country (Zetlin & Weinberg, 2004). The abuse and neglect that youth face prior to entering care, and traumas associate with being removed from their loved ones, make them 30-80% more likely to experience a variety of developmental problems, including learning disabilities or behavioral or mental health disorders (Atkinson, 2008; Folman, 1998; Lawrence, Carlson, & Egeland, 2006; Mersky & Janczewski, 2013). Upon exiting the foster care system, 77% of youth are diagnosed with at least one physical, emotional, or mental disability (U.S. Department of Health and Human Services, 2012).

Entry into the foster care system is often accompanied with multiple obstacles that may impact a student's educational outcomes. In fact, over one-third of foster care youth sampled in the Midwest Evaluation of the Adult Functioning of Former Foster Youth, a longitudinal study of youth in Iowa, Wisconsin and Illinois, changed schools at least five times during their time in care (Courtney, Terao & Boost, 2004). Multiple school

placements have been linked to enrollment gaps and grade failure (Stone, 2006; Sullivan, Jones, Mathiesen, 2010; Trout, Hagaman, Casey, Reid, & Epstein, 2008), increased likelihood for participation in delinquent behaviors (Ryan & Testa, 2005), and are more likely to experience behavioral or mental health issues, experiment with drugs or alcohol and struggle with educational obtainment (Courtney, et al., 2006; Smith, Stormshak, Chamberlain & Whaley, 2001). The behavioral and emotional consequences associated with multiple foster care placements have been found to leave “lasting detrimental impacts” on the lives of adults who previously experienced foster care (Unrau, Seita & Putney, 2008, p. 1263). Data collected by the National Working Group on Foster Care and Education (2014) demonstrates that this data is relevant even today.

Table 6

*Educational Outcomes for Youth in Care during the 2012-2013 Fiscal Year*

Total Number of youth in care	399,546
Average number of living arrangements	2.8
Average reading level of 17-18 year olds	7 <sup>th</sup> grade
# of school-age foster youth	249,107
# of youth who change schools upon entering care	56-75%
% of 17-18 year olds who experienced 5+ school changes	34%
Likelihood of serving out-of-school suspension	2x
Likelihood of expulsion	3x
Likelihood of receiving special education	2.5-3.5x

(National Working Group on Foster Care and Education, 2014)

These findings indicate the critical need to understand the obstacles that foster care youth face while in pursuit of educational success.

Educational Obstacles- K-12

No one can definitively determine if foster care youth experience more educational difficulties because of their placement into the foster care system or because



of their experiences in abusive homes prior to it (Finkelstein, Wamsley & Miranda, 2002). National aggregate data suggests that foster care youth often suffer from poor educational outcomes, including receiving poor grades and struggling to reach their fullest academic potential (Blome, 1997; Stone, 2006; Trout, et al., 2008). Foster care youth are more likely to experience attendance gaps that are often associated with academic record transfer and poor collaboration between caseworkers, schools and foster parents (Smithgall, et al., 2004). They are more likely to perform below grade level (Courtney, et al., 2001, Courtney et al., 2004, Pecora, et al., 2005; White, Carrington & Freeman, 1990), face a 15-20 percentile point score deficit on reading and math standardized test scores (Burley & Halpern, 2001; Rumberger, Larson, Ream & Palardy, 1999), repeat a grade, and face disciplinary action or expulsion (Courtney, et al., 2004; Ryan & Testa, 2005; Stormshak, Chamberlain & Whaley, 2001). High concentrations of foster care youth also tend to pursue enrollment at low performing schools (Smithgall, et al., 2004). Foster care youth are also more likely to be enrolled in special education coursework while their peers in the general population are more likely to complete college preparatory coursework (Harris, et al., 2009; Rumberger, et. al., 1999). Surprisingly, similar educational deficits are noted in children who experience short-term and long-term (longer than six months) foster care placements (Burley & Halpern, 2001).

### *High School Completion*

High school completion is viewed as a considerable challenge for America's foster care youth (Blome, 1997; Pecora, Williams, et. al., 2006; Villegas, Rosenthal, O'Brien & Pecora, 2013). Research indicates that as few as one-third (McMilen &

Tucker, 1999) or as much as two-thirds of foster care youth earn a high school diploma (Blome, 1997; Courtney, et al., 2005; Festinger, 1983; Pecora, et al., 2005). Merdinger, Hines, Osterling and Wyatt (2005) found that as many as 83% of foster care youth had completed high school and 22% had begun collegiate studies prior to being discharged from care. The Casey National Foster Care Alumni Study (Pecora, et al., 2003; Pecora, et al., 2006) found that approximately 73% of youth had earned a GED or diploma prior to exiting care, a number that jumped to almost 88% by age 25. Though these rates are nearly identical to those in the general population, a greater proportion of former foster care youth earned GED certificates (28%) compared to just 5% of their peers in the general population (Atkinson, 2008; Eyster, & Oldmixon, 2007; National Center for Educational Statistics, 2003).

In addition to the obstacles presented above, foster care youth are less likely to be encouraged or even exposed to learn about the benefits of college (Blome, 1997; Hernandez & Naccarato, 2010). As the aim of foster care is to successfully transition older youth into independent living, educational success is often not considered to be a priority (Acosta, 2010; Freundlichm & Avery, 2008). In fact, many are encouraged to pursue vocational training because many case workers believe that learning a trade will provide greater immediate financial security, especially as many college students struggle to find employment after graduation (Atkinson, 2008; Blome, 1997; Freundlichm & Avery, 2008).

However, the social, financial and economic benefits of a college degree should not be ignored. Therefore, it is imperative that foster care youth be introduced to higher

education as well as its benefits from an early age. A variety of interventions and educationally purposeful activities that enable foster care youth to learn more about higher education have been found to benefit this population and increase their desire to pursue post-secondary education. Early college access programs, including Talent Search, Upward Bound and Student Support Services, can introduce middle and high school youth to the benefits of higher education and the importance of earning a high school diploma (U.S. Department of Health and Human Services, 2008a). Until recently, however, these programs did not receive incentives to deliver support programs for foster care youth. To encourage the population's participation in these programs, the Higher Education Opportunities Act of 2008 mandates that foster care youth receive priority admission into these and other programs like them (Hernandez & Naccarato, 2010; Legal Center for Foster Care and Education, 2008; U.S. Department of Health and Human Services, 2008b). This and other policies impacting foster care youth will be discussed later in the chapter.

#### Adult Outcomes of Former Foster Care Youth

As of September 2013, approximately 37,000 foster care youth, or 10% of that population nationwide, indicated that their permanency goal was emancipation or long term foster care (U.S. Department of Health & Human Services, 2014). This indicates that these youth anticipate aging out of the foster care system instead of being reunited with family members (Children's Bureau, 2010). Youth who age out of the foster care system, however, are especially vulnerable to negative economic and social outcomes as they transition into adulthood. This often distressing time is marked with periods of

instability, uncertainty, and confusion (Berzin, Singer & Hokanson, 2014). Since foster care youth rarely have the opportunity to return home if their attempts for independence are thwarted, it is important that youth are as prepared as possible for emancipation from services. Unfortunately research suggests that most youth who leave care are unprepared for independent living (Jones, 2008).

### *Preparation for Independent Living*

Former foster care youth often report that the transition to independence and self-sufficiency is very rapid. Jessica Archuleta, a 24-year former foster care youth currently pursuing a bachelor's degree at the University of Texas El Paso shares her experiences while aging out of foster care: "In foster care, when you're 18, it's the attitude you either sink or swim...I was worried (about a) lack of a support system, but I was so motivated and looking forward to getting my freedom" (Acosta, 2010, para 4). Youth, like Jessica, often report feeling "dumped" from the system and cut off from the resources and supports necessary to successfully transition into independence (Nixon & Jones, 2000, p.1). Factors that can potentially disrupt this process include unemployment, incarceration, substance abuse, homelessness, unplanned pregnancy, limited access to healthcare and limited amounts of educational achievement (Sherman, 2004). These policies will be explored in greater detail later in this document.

Foster care youth often struggle more than other young adults across a number of lifespan-developmental milestones including financial literacy, and the ability to find employment and housing, accessing physical and mental health services, developing social relationships and community connections, personal and cultural identity

development and other life skills (Casey Family Programs, 2006). As independent living programs can serve as a catalyst to eliminate some of these obstacles, local, state and federal policies have been enacted to ensure educate youth on the skills needed to successfully transition into adulthood (Casey Family Programs, 2006; Cook, 1994).

One-third of youth leave the system lacking basic resources including a driver's license, cash, and basic household necessities (Courtney, et al., 2006; Pecora, et al, 2006). Few have individuals willing to co-sign a loan or lease which makes it difficult to secure housing. Other barriers include a lack of transportation, the need for employment, and parenting responsibilities (Courtney, et al., 2006; Courtney et al., 2009; Pecora, et al. 2006). Though obtaining Medicaid and other services can force foster care youth to deal with difficult bureaucracies, the Affordable Care Act began mandating states provide free health insurance and be enrolled in Medicare until age 26 on January 1, 2014 (Courtney et al., 2009; Emam & Golden, 2014).

Recognizing that older foster youth may experience obstacles while transitioning out of care, Congress passed legislation in 1986 to fund the Title IV-E Independent Living Initiatives. This legislation, and policies that have been enacted in the 28 years since, have been dedicated to improving the outcomes of this population. Though limited research has been done on independent living programming (ILP) effectiveness, ILPs were established to assist foster care youth prepare for adulthood and teaches them to accept personal responsibility for themselves and their choices (Fernandes, 2008).

ILPs offer a variety of economic, educational, interpersonal, career and personal supports for foster care youth. Educational support can include career counseling, study

skills training and tutoring, SAT and GED preparation courses, college and university admissions and financial aid. Employment and vocational supports can include resume writing workshops, job referral and placement assistance, help securing work permits and enrollment into internship and/or summer employment programs. Budgeting and financial management services include financial literacy skills, opening bank accounts, balancing a checkbook and understanding credit. Health education services include classes on basic hygiene, nutrition, and how to obtain insurance. Finally, youth development services, including mentor services, driving lessons, and leadership development activities are often available (Casey Family Programs, 2006; Courtney, Terao, & Bost, 2004).

### *Employment*

Though the foster care system strives to prepare youth for financial independence and gainful employment in adulthood, national data does not indicate that the goal is being met. When compared to their peers in the general population, the population earns 50% less and face are approximately 80% more likely to struggle with unemployment than their peers (Okpych & Courtney, 2014). Youth who age out of foster care often experience challenges finding and maintaining employment that enable them to earn a living wage (Naccarato, Brophy & Courtney, 2010). The population is more likely to be underemployed, progress more slowly in the labor market, and have mean earnings below the poverty line (George, Bilaver, Lee, Needell, Brookhart, & Jackman, 2002). Youth discharged from care report “sporadic” employment with 90% of the group earning less than \$10,000 in the previous year. Discharged youth are more than twice as likely as

those in care to be unemployed and three times more likely than a national sample (Casey Family Programs, 2006). Other factors, including housing instability, issues securing transportation, childcare assistance and the lack of satisfactory education may also influence an individual's ability to find gainful employment (Courtney, et al., 2005b).

### *Homelessness*

Once youth age out of the foster care system, they no longer have access to services provided by the state. As such, up to 50 percent of foster care alumni end up being homeless within the first 18 months of emancipation and between 13 and 40% will experience homelessness for at least one night in the lifetime (Acosta, 2010; Naccarato, et al., 2012; U.S. Department of Housing and Urban Development, 2014). In fact, previous experience in foster care has been identified as one of the greatest predictors of homelessness over the course of an individual's life (MSPCC, 2005). In Massachusetts, for example, approximately 25% of homeless youth between the ages of 18 and 24 previously experienced foster care (MSPCC, 2005). In a study of 265 former foster youth in Michigan, approximately 31% indicated having unstable access to safe housing after leaving care with an additional 20% reported being chronically homeless during the two-year period after leaving foster care (Fowler, et al., 2009).

### *Premature pregnancy*

Historical trends suggest that more than 60% of women leaving the foster care system will become mothers within four years of discharge (Reilly, 2003; Scannapieco, Connell-Carrick & Painter, 2007). In fact, one third of women in foster care became pregnant at least once before turning age 19 (Dworsky & Courtney, 2010). Women who

experience foster care are almost three times more likely to become prematurely pregnant than their peers in the general population (92.7 births per 1,000 girls compared to 32.7 births per 1,000 girls overall) (Shaw, Barth, Svoboda, & Shaikh, 2010). Foster care youth often demonstrate higher rates of risky sexual behavior, including more sexual partners and have a greater risk of exposure to the HIV virus than their peers from the general population (Carpenter, Clyman, Davidson & Steiner, 2001; Thompson & Auslander, 2011). These risky and potentially dangerous behaviors have serious consequences that can greatly impact a former foster care youth's adult outcomes.

#### *Behavioral and Mental Health Concerns*

The often traumatic experiences that led to a child being placed into care can result in the increased risk for emotional or behavioral disorders (Pecora, et al., 2009b). In fact, foster care youth are much more likely to be diagnosed with at least one lifetime mental health diagnosis than their peers in the general population (Pecora, et. al., 2009b).

Tragically, foster care youth are approximately four times more likely to attempt suicide than their peers (Pilowsky & Wu, 2006). Studies suggest that as many as 80% of youth in care exhibit a serious behavioral or mental health problem that requires some sort of intervention (Auslander, McMillen., Elze, Thompson, Jonson-Reid & Stiffman, 2002). Clausen, Landsverk, Ganger, Chadwick & Litrownik, 1998; Stahmer, Leslie, Hurlburt, Barth, Webb, Landsverk & Zhang, 2005). A 2005 study of 373 17-year-olds in foster care in Missouri found that 37% had met diagnostic criteria for a behavioral or mental illness in the previous year and 61% met criteria for a lifetime mental health diagnosis, including major depression, and Attention-Deficit/Hyperactivity Disorder



(McMillen, et al., 2005). Foster care youth also often receive lifetime mental health diagnoses of oppositional defiant disorder, conduct disorder, drug dependence, panic attacks, and post-traumatic stress disorder (Pecora, White, Jackson, & Wiggins, 2009; Pecora, Jensen, Romanelli, Jackson & Ortiz, 2009). This is particularly troubling as many former foster care youth often lack access to mental health services (Pecora, et al., 2009b).

### *Alcohol and Substance Usage*

Other potential outcomes of former foster care youth have been investigated. Limited research has attempted to connect foster care and their lifetime usage of substance abuse disorders (Pilowsky & Wu, 2005). A study of 406 17-year-olds in foster care, determined that 45% of youth reported using alcohol or illicit drugs in the previous six-month period and 49% had tried drugs at some point in their lifetimes. Approximately 35% of the group self-reported possible substance abuse problems (Vaughn, Ollie, McMillen, Scott & Munson, 2007). Other studies have yielded similar findings and indicate that 20% to 50% of adolescents in care reported use of alcohol, inhalants, or other substances (Pilowsky & Wu, 2006; Taussig, Clyman & Landsverk, 2001). While Not all research, however, yields such tragic results. In fact, some studies indicate that youth in the foster care system report lifetime alcohol and substance abuse usage levels comparable to their peers in the general population (Vaughn, et al., 2007).

### *Incarceration*

Approximately 41% of youth are arrested within six months of leaving the foster care system (Naccarato, et al., 2010). In fact, 25% will be incarcerated within two years

of leaving care (Courtney, Dworsky, Terao, Bost, Cusick, Keller, & Havlicek, 2005c). The rates of incarceration for this population have not declined in the past 30 years, leading some to believe that the rate is a reflection on the lack of secure and stable housing for youth transitioning out of foster care (Courtney & Dworsky, 2005).

#### *Additional Outcomes*

Though a large segment of the research on foster care youth indicates a negative relationship between placement and life outcomes, not all research supports this notion.

In fact, experiencing multiple instances of neglect and/or abuse without state intervention may be a stronger predictor of poor social and educational functioning (Day & Pennefather, 2014; Forsman & Vinnerljung, 2012; Taussig, 2002). A study of 104 college students at a Midwestern university found that youth who experienced multiple substantiated instances of abuse or neglect in the home without state intervention were more likely to drop out than their peers in foster care (51% vs. 30%) (Day & Pennefather, 2014). In a study of 141 children, Robinson and colleagues also determined that maltreated children who remained with their biological families. These youth demonstrated lower cognitive scores and greater behavioral issues than those placed into foster care (Robinson, et al., 2013).

The adult outcomes of former foster care youth are as numerous as the youth themselves. While some may experience negative outcomes like the ones outlined above, others are able to excel academically, interpersonally and socially. For these youth, postsecondary enrollment and graduation are reasonable goals and one of many steps toward successful lives.

### Educational Obstacles Accessing and Completing Higher Education

Former foster care youth are amongst the most disadvantaged groups to pursue postsecondary enrollment (Davis, 2006). Unlike other student groups, including low-income, racial and ethnic minorities, women and students with disabilities, foster care youth have not yet been successful in making their needs known to higher education administrators to ensure that a “concentrated and effective effort” is made to ensure their access to and success in higher education” (Wolanin, 2005, p. v). National or state higher education associations do not report college enrollment statistics for students who have experienced foster care. However previous scholarship on the topic suggests that college attendance and completion rates for the population are significantly less than both the general population, and those of other underrepresented backgrounds (Sim, Emerson, O’Brien, Pecora & Silva, 2008).

As previously discussed, foster care youth face an inordinate amount of obstacles while navigating the education system. Davis (2006) cites academic and personal under-preparedness, financial concerns, and concerns about living independently for the first time as just several examples of causes for attrition. Estimates show that as few as 10% of former foster youth enroll in college (Wolanin, 2005) and as little as four percent of that group earning a Bachelor's degree (Nixon & Jones, 2007). The resilient minority of former foster youth who enter college becomes least likely to be retained from their first to second year and or to dropout after their second year than any other are other low-income, first-generation students (Day, Dworsky, Fogarty, & Damashek, 2011).

As college attendance is often considered a positive indicator of a youth's transition out of foster care, it serves as an important variable to consider when examining the population. Unfortunately research on the topic yields disappointing results. In an examination of the adult functioning of former foster care youth Courtney and Dworsky (2005) determined that among 19 year olds who exited care, 7% of youth pursued enrollment at four-year institutions, 16% in community colleges, and 9% were completing vocational training. In fact, fewer than 10% of former foster care youth had attended college by age 20 (Courtney & Heuring, 2005). It is important to note, however, 30% of 521 21-year-old former foster youth had completed at least one year of college, though 53% of their peers in the general population had achieved the same goal (Courtney, Dworsky, Cusick, Havlick, Perez & Keller, 2007).

Though the low percentage of foster care youth who attend college is shocking, perhaps even more troubling is the even lower rates of students within the population who finish it. In a study investigating the educational outcomes of 106 foster care youth in the first three years after exiting care; Jones (2010) determined that 33% were pursuing degrees in four-year institutions. Longitudinal data collected for up to 10 years after 1,087 youth left care yielded similar statistics: though 44% had attended college, only 10% had earned bachelor's degrees, 8% had completed associate's degrees, and 20% had finished vocational training (Pecora, et al., 2003). These findings are significant when compared to national trends. According to the U.S. Census (2012), more than 30% of the adult population has a bachelor's degree and approximately 19,450,000 are pursuing postsecondary education (U.S. Census, 2013).

Former foster care youth who are successfully able to navigate the enrollment process face continue face obstacles when beginning their collegiate journey. After doing an exhaustive review of the literature, Dworsky and Perez (2009) identified six barriers that may make it difficult for foster care youth to achieve their educational goals. First, the child welfare system does not adequately encourage the population to pursue postsecondary education (Merdinger, et al., 2005). Second, foster care youth are often unprepared for college-level coursework and either struggle academically or must complete remedial coursework (Emerson, 2006; Harris et al., 2009). Additionally, foster care youth often lack parental support to assist with the financial and emotional costs of college enrollment and may become overwhelmed when these issues are coupled with their lack of independent living skills (Wolanin, 2005; Courtney, et. al., 2001; Emerson, 2006; Merdinger, et al., 2005). Fourth, as financially independent students, the group is often unaware of their eligibility for financial aid (Emerson, 2006). Fifth, the group may be more likely to exhibit behavioral and mental health problems that impact their educational careers (McMillen, et al, 2005; Mersky & Janczewski, 2013). Finally, college and university student support programs are often unfamiliar with the unique needs of foster care youth transitioning out of foster care (Courtney, et al., 2005; Dworsky & Perez, 2006). Several of these obstacles will be discussed below.

#### *Academic Preparation*

As previously discussed, academic preparation is a serious concern for many alumni of care. To investigate the educational outcomes of first-year students who had previously experienced foster care, Villegas and colleagues examined 81 foster care

alumni enrolled in the Seita Scholars program at Western Michigan University (2014). Housed in the university's Center for Fostering Success, the Sieta Scholars program offers financial, academic and personal supports for youth who have aged out of the foster care system (Western Michigan University, n.d.). First year students participating in the study appeared to be more academically motivated than their peers who had not experienced foster care, reported having better study skills, and higher levels of interest in academic activities. The group also demonstrated higher levels of social motivation, including personal decision-making and perceived leadership experiences, more likely to utilize personal and academic assistance while on campus, and more likely to perceive their coping skills to be higher than their peers. However, they perceive themselves to have less family support and are less likely to seek out career advice. After analysis of academic performance however, the team determined that Sieta Scholars completed fewer credits (10 vs. 14) and had lower GPAs (2.34 vs. 2.85) than other students. This may suggest while they perceive themselves to be more college-ready and resilient than their peers, their academic performance does not match this expectation (Villegas, Rosenthal, O'Brien & Pecora, 2014).

#### *Lack of Support*

The ever-rising cost of postsecondary education is a concern for many students, but the stresses associated with paying for college can be greater for former foster care youth. Little is known, however, regarding the impact of federal and state-based aid on the retention of former foster care youth (Dworsky & Perez, 2009). Therefore it is critical that youth who aspire to complete postsecondary coursework be educated on the

financial aid process, as well as other programs available to them. Unfortunately only one in five participants a recent study were familiar with Pell grants and only 37.2% reported an understanding of student loans (Kirk, et al., 2012). A study of 74 former foster care youth enrolled in California's community college system revealed that the group relied heavily on financial aid, Chafee grants and utilized programs for low-income and educationally-disadvantaged students and independent living programs. To further support themselves, 74% of participants reported working at least 20 hours (74%) each week (Rassen, Cooper & Mery, 2010). In an investigation of 329 foster care youth who received Casey Family Scholarships between 2001 and 2009, Salazar (2012) determined that the need to seek employment was linked to an increased likelihood that a student would not complete their degree.

In addition to the need for financial resources, former foster care youth indicate the need for emotional and life-skills support as well. Of the 106 former foster care youth participating in Jones's research (2010), youth currently completing college coursework indicated that academic preparation was not a factor influencing their decisions to possibly drop out. Instead, the group cited lack of transportation (47%), time (31%), lacking access to support services (9.7%), money (9.7%), and motivation (9.7%). Students who report access to engagement with concerned adults and mentors, however, demonstrate greater resiliency, self-sufficiency, and willingness to persist through obstacles to graduation (Hass, & Graydon, 2009).

### *Need for Institutional Support Services*

Even programs designed for first-generation and/or low-income students may not adequately support foster care alumni (Emerson, 2006; Dworsky & Perez, 2010). In fact, a recent study that found that foster care alumni enrolled in four-year institutions are more likely to drop out than other low-income first-generation students (Day, Riebschleger, Dworsky, Damashek, & Fogarty, 2012). Merdinger and colleagues (2005) found that nearly half of former foster care youth completing coursework in California had transferred from another college or university (most frequently from the community college system). Approximately 20% of student participants had previously withdrawn from college and an additional 16% were considering withdrawing at the time of the investigation. Therefore, understanding what services and/or service providers best benefit this population once enrolled in college or vocational training can be used to better inform administrators about how to support them once enrolled.

A growing number of colleges and universities across the country have begun to develop programs specifically targeted at supporting former foster care youth. These programs provide an array of services including: academic support, housing assistance, and financial aid and scholarships (Dworsky & Perez, 2009). Administrators of these programs identify best practices to include accessibility, educational/emotional support, financial aid assistance, and student advocacy. In their work with the population, campus administrators report obstacles in working with and for this population to include academic under-preparation, difficulty identifying foster care alumni once enrolled in the



university, housing, mental health issues, program assessment/data collection, and program sustainability (Watt, Norton, & Jones, 2013).

### Institutional Programming Efforts

#### *The Guardian Scholars Program*

The Guardian Scholars programs is one of the best known programs dedicated to supporting foster care youth in their postsecondary pursuits. Guardian scholars benefit from having all of their financial need met, as they are awarded scholarship packages that cover both tuition and living expenses. To eliminate threats associated with unstable housing, scholars receive priority access to campus and year-round housing options. The group is also provided additional academic and career counseling support, and personal guidance, counseling and training by an administrator trained specifically to work with this population. Finally, scholars are eligible for additional support services, including child care, book and supplies scholarship and transportation help (Dwosky & Perez, 2009; The Independent Living Program, n.d.).

The New Yorkers for Children's Guardian's Scholars Program is one of 33 across the country. New York's program, for example, works in collaboration with several City University of New York (CUNY) colleges. In addition to community building programs for its participants and a monthly stipend for educational and cost of living expenses, the program boasts mandatory monthly meetings with a specially trained advisor to ensure that participants' needs are being met. The program, founded in 2006, has served 27 youth; 5 graduates have earned Bachelor's degrees, 3 have earned Master's degrees and 78% of students currently completing coursework are on track to graduate on time. In

fact, Guardian Scholars in the program have higher retention rates than their peers from the general population in the CUNY system and nationwide (New Yorkers for Children, 2008).

*Texas State University*

In 2008, Texas State University created a mentoring program for foster care alumni in order to increase their persistence to degree completion. In the initial phases of the program, foster care alumni were assigned to a faculty/staff mentor who offered personal, academic and professional mentoring while the student pursued their degree. Data collected during this three year window found that foster care alumni benefit from strengths-based interactions with campus administrators, especially in the following areas: redefining personal identities, respecting the youth's autonomy, and encouraging the utilization of campus assets. Since negative self-concepts could limit foster care youth from utilizing programs, it is important to encourage the youth to take advantage of program opportunities in a positive manner. Prior to the full FACES launch, quantitative data suggested that foster care alumni had lower GPAs than the general population (between 2.35-2.65) and less likely to graduate from the institution. After the FACES program was developed, first-to-second year retention rates went from 64%-84.2%), which was higher than the general population (76%) (Watt, Norton, & Jones, 2013). This suggests that campus support programs can positively influence foster care youth while pursuing their degree.

*Western Michigan University*

As previously indicated, the Sieta Scholars program has plays an important role in the academic success of former foster care youth at the University of Western Michigan (Villegas, Rosenthal, O'Brien & Pecora, 2014). Since its inception in 2008, the program has graduated 40 former foster care youth and has enrolled a total of 296 students and has awarded the program's participants \$1.6 million in scholarships (Sieta Scholars Program, 2014). The program boasts seven full-time coaches who are available for students around the clock, financial literacy, career planning and mentorship, campus engagement and involvement activities, life skills training and other programs. To further support the unique needs of this population, the Sieta Scholars staff offers support services to student parents, men, women, and LGBTQ+ former foster care youth (Western Michigan University, n.d.). Though program assessment data indicates that Sieta Scholars are less academically prepared for college and an observable achievement gap can be noted, the program does have a 70% retention rate. The program's second-year retention rate is almost identical to students in the general population (Sieta Scholars Program, 2014).

Colleges and universities around the country have begun to establish support services for foster care youth. These programs offer a variety of services, including academic advising, assistance securing year-round housing, financial literacy training, mentorship, priority course registration and scholarship opportunities. Other services can include referrals to mental health services, on-campus employment, technology, transportation assistance and career counseling services. Table 7 provides a detailed list of campus programs targeting foster care youth.

Table 7

*Examples of Institutional Support Services for Foster Care Youth*

Institution	Name of Program	Services Available
California State Univ.- East Bay	Renaissance Scholars	Advising, Financial Literacy, Laptops, Mentorship, Priority Registration, Population-specific Programming
California State University-Fullerton	Guardian Scholars	Advising, Housing, Life Skills Education, Summer Bridge Programs, Scholarships
Cleveland State University	Sullivan/Deckard Opportunity Scholarship	Advising, Housing, Career Mentorship, Laptops, On-Campus Employment, Scholarships
Colorado State University	Fostering Success Program	Admissions Outreach, Career Advising, Involvement and Engagement Opportunities, Scholarships
Florida International University	Fostering Panther Success	Advising, Mentorship, Scholarships
Kennebec Valley Community College (ME)	College Step-Up	Advising, Housing, Mentorship, Transportation
Miami Dade College (FL)	Changemaker Core	Peer Advising by former foster care youth enrolled at the college
University of Central Florida	Knight Alliance Network	Advising, Laptops, Population-specific Programming, Scholarships

Lovitt and Emerson (2006) argue that all young people can be academically successful if given adequate support and preparation and advocacy from educators and administrators. After interviewing eight former foster care youth who recently graduated from college, the colleagues identified a handful of themes that have previously identified within the literature. The students cited multiple foster care placements influencing their educational stability and preparation, and the lack of helpful high school counselors while preparing for college. Access to mental health counseling and health insurance were also cited as integral to the students' success. The students also cited campus support services

and the availability of financial aid as influencing their success and critical to their persistence to graduation. Their references to sources of resiliency, believing “I will do it!” is also supported by the literature and indicative of the desire of those foster care youth who overcome great obstacles in order to earn college degrees (Lovitt & Emerson, 2008, p. 2).

### Federal Policies Impacting Foster Care Youth

Beginning in the 1980s, the federal government began to create policies aimed at increasing college access and success for foster care youth. The Children’s Bureau, an Administration for Children and Families agency within U.S. Department of Health and Human Services, is currently charged with this task (Children’s Bureau, 2012a). The Bureau funds foster care in each of the 50 states, Washington D.C., first American tribes, and Puerto Rico via utilization of title IV-E funding. Title IV-E funding is authorized by the Social Security Act, as amended, and implemented under the Code of Federal Regulations (CFR) at 45 CFR parts 1355, 1356, and 1357 (Children’s Bureau, 2012b). In addition to title IV-E program, the Children’s Bureau implements the John H. Chafee Foster Care Independence Program (CFCIP) (Children’s Bureau, 2012b).

#### *Title IV-E Independent Living Initiative*

Congress established the Title IV-E Independent Living Initiative in 1986 to provide states with funding to support foster care youth (age 16 and over) as they prepare to age out of care (Children’s Bureau, 2012a). The legislation allows each state to develop educational, employment, and life skills training as well as counseling and housing assistance services. Funding may also be allocated for “supervised practice

living” and services for youth after leaving care (ACF, 1987; Children’s Bureau, 2012a). To ensure that foster care youth receive support at the state and local levels, Congress challenged states to further develop their relationships with service providers and other organizations to provide effective independent living programs for all youth leaving care (ACF, 1987).

### *Foster Care Independence Act of 1999*

The Foster Care Independence Act of 1999 was established to succeed previous Title IV-E requirements (Children’s Bureau, 2012b; Stoltzfus & Spar, 2002). In addition to doubling state funding and increased flexibility to states as they support youth aging out of care, the Act established the John H. Chafee Independence Program. Current and former foster care youth are eligible for Chafee services, including educational and career training, until age 21 (Children’s Bureau, 2012b; George, Bilaver, Lee, Needell, Brookhart & Jackman, 2002). The ETV program provides current and former foster care youth with \$5,000 annually for higher education-related expenses. These expenses can include tuition, housing costs, transportation and educational equipment. Unlike other programs, youth may receive funding until age 23 (if they began participating at age 21) (Center for the Study of Social Policy, 2009). Estimates suggest that approximately 150,000 youth who are eligible to receive the exemption each year (Wells & Zunz, 2009).

To determine the Chafee ETV program’s effectiveness, Wells and Zunz (2009) distributed a survey to 271 service providers in Maine, New Hampshire, and Vermont. The researchers sought to understand providers’ knowledge of the program and its usage, frequency with which they interact with voucher recipients and if they had experienced

any barriers utilizing the program. Wells and Zunz determined that approximately half had worked with students who had utilized vouchers to pay for educational expenses. Providers reported that obstacles to ETV usage included youth wishing to forego eligibility by emancipating themselves from the foster care system, issues securing housing, and the need for additional funding for mental health counseling and support during the transition to higher education. Finally, the practitioners believed that \$5,000 was insufficient to cover educational or funding other educational-related expenses. They also suggest training to higher education professionals on how to best support this population, a step that they believe may increase retention and persistence (Wells & Zunz, 2009).

*Fostering Connections to Success and Increasing Adoptions Act*

The most recent federal legislation aimed at supporting foster care youth, the Fostering Connections to Success and Increasing Adoptions Act, was passed in 2008 and enacted in 2010. While all states are eligible for the funding, there are various levels of commitment to the initiative. As of January 2012, only 11 have been approved to utilize Title IV-E funding to extend foster care services to age 21 (Okpych, 2012). The law requires that Medicaid be available and housing be provided to all youth electing to remain in care beyond age 18 (Okpych, 2012). It also gives states the option to extend foster care services to youth up to 21 years of age (Center for the Study of Public Policy, 2009). This extension to age 21 is critical, as research indicates that youth who remain in care past age 18 are more likely to complete at least one year of college (Dworsky & Courtney, 2009).

This legislation included three laws, the Fostering Connections to Success and Increasing Adoptions Act, the College Cost Reduction Act and the reauthorization of the Higher Education Opportunity Act (H.R. 4137)(HEOA). The Higher Education Opportunities Act reauthorized the Higher Education Act and includes multiple amendments dedicated to increasing homeless and foster care students' access to higher education. The Act makes all foster care youth (including those in care and those who left care after reaching age 13) automatically eligible for all applicable programs (Nowak, 2013). The law also now requires that funding to TRIO programs be allocated only after program officials are able to identify programming aimed at increasing the success of these two targeted populations (Legal Center for Foster Care and Education, 2008). The law also requires colleges and universities to recruit and serve former foster care youth (Okpych, 2012).

Of the 64 enactments included in the Higher Education Opportunity Act of 2008, at least 39 were directly linked to the Fostering Connections Act (Nowak, 2013). The act includes many provisions for foster care youth, including language stipulating that youth in care remain in the original school or be immediately placed in a new school to reduce attendance gaps and eliminate multiple transfers (Legal Center for Foster Care and Education, 2008). The law also empowers states to offer increased funding eligibility and access to Independent Living Services (including educational and college preparation services) for youth in care pursuing post-secondary education. The Fostering Connections Act also enables selects to receive Title IV-E reimbursement for foster care youth attending school, working, or participating in independent living programming until age



19, 20, or 21 (previously states could receive funding until youth turned 18, or 19 if still in high school. Finally, the Act requires that a youth's case be reviewed at least 90 days before a youth is discharged from care to ensure that the child develops a transition plan that is personalized to ensure that she is made aware of housing, educational, employment and health opportunities available to her (Legal Center for Foster Care and Education, 2008).

The College Cost Reduction and Access Act (CCRAA)(H.R. 2669) was enacted in 2007. This expands the definition of "independent student" for financial aid purposes. The new language includes any student who is an orphan, in foster care, or a ward of the court at any time after she was 13 years of age (Nowak, 2013). This change ensures that foster care youth are no longer required to submit parental income information to have their federal financial aid eligibility calculated (Nowak, 2013). The Higher Education Improvements Act also makes a technical change to include also include youth who met the above criteria prior to the law's enactment (NAEHCY, n.d.). This new language associated with this change first took effect in the 2009-2010 Free Application for Federal Student Aid (FAFSA) (NAEHCY, n.d.). The question, number 53 on the FAFSA, reads "At any time since you turned age 13, were both of your parents deceased, were you in foster care or were you a dependent or ward of the court?" (NASFAA, 2014. p.2).

### *Barriers within Current Federal Policies*

While these laws have granted additional access to higher education for former foster care youth, many barriers still remain. First, this population is more likely to need remedial college courses that often do not count toward graduation. Since these courses are not required, many students are forced to pay for them themselves. Additionally, as many youth lack saves or access to co-signers willing to sign for loans, the need to pay for school and living expenses can cause many to drop-out once enrolled (Dworsky & Courtney, 2010). Finally, as mental health and behavioral issues are more likely for youth in foster care, these may act as roadblocks prior to or during college enrollment (Unrau, et al., 2012).

### Extending Foster Care Eligibility Beyond Age 18

The Fostering Connections to Success and Increasing Adoptions Act is considered groundbreaking in its abilities to provide access to former foster care youth. For the first time, federal policies provide financial and educational supports for youth after their 18<sup>th</sup> birthdays. This is power for a variety of reasons. First, many foster care alumni take longer to complete high school or GED requirements than their peers from the general population (Dworsky & Courtney, 2010b). National data also suggests that approximately 57% of all individuals who enter college will graduate in six years (Okpynch, 2012). Using this information as a guide, Okpynch determined that since most foster youth enter higher education at age 19, current support expires before they are half-way through their undergraduate degrees. By extending eligibility, youth who gain

flexibility to change majors, transfer to other institutions and complete coursework at a pace comparable to their peers (Okypch, 2012).

Each state is responsible for establishing policies associated with the termination of support services for this population as they transition out of the foster care system. In California and Wisconsin for example, youth must leave care at age 18. Missouri, however, allows youth to remain in care until age 21 (Courtney & Barth, 1996; McCoy, McMillen & Spitznagel, 2008). In addition to increased access to postsecondary education, an extension of care beyond age 18 is correlated to positive life outcomes, including a smoother transition into adulthood. In fact, extending the time spent in care to age 21 (or beyond) increases the likelihood of including obtaining a high school diploma (Fowler, Toro & Miles, 2009), completing at least one year of college (Peters, et al., 2009), and securing gainful employment (Atkinson, 2008; Cook, 1990; Krinsky & Liebmann, 2011). Additionally, youth who remain in care beyond age 18 are far less likely to experience homelessness (Dworsky & Courtney, 2010b) become the victim or perpetrator of a crime (Krinsky & Liebmann, 2011), and experience 38% reduction in the incidence of pregnancy before age 20 (Courtney, 2005). As youth in the general population benefit from a much delayed entry into adulthood, it is critical that foster care youth be awarded the same opportunity.

States that allow foster care youth to remain in care until age 21 also see economic benefits. As the number of former foster care youth with bachelor's degree in those states double from 10.2% to 20.4%, so do the economic awards. In fact, a former foster care youth with a bachelor's degree can expect \$481,000 more in their lifetime

than their peers who earn high school diplomas (Courtney, Dworsky, Lee, & Raap, 2010; Dworsky, 2010; Stein, 2012). Californians, for example, can anticipate a \$2.40 return for every dollar spent for services associated with extending foster care beyond age 18 (Courtney, et al., 2010).

### State Policies Impacting Foster Care Youth

Child welfare advocates and professionals have placed great emphasis on helping youth prepare to leave the foster care system. Each state is responsible for establishing policies associated with the termination of support services for this population as they transition out of the foster care system. Many states, including Alaska, Colorado, Florida, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Oklahoma, Texas, Utah and West Virginia have tuition exemption programs that allow foster care youth to attend public postsecondary institutions for either no, or greatly reduced, cost. Other states, including Alabama, California, Connecticut, Delaware, Georgia, Hawaii, Idaho, Illinois, Iowa, Louisiana, Missouri, Nevada, New Jersey, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, Virginia, Washington and Wisconsin have scholarships and grants targeted specifically to the population (Okpych, 2012; Dworsky & Perez, 2009).

#### *California*

California supports more foster care youth than any other state, with approximately 59,000 students in care in 2013 (Lucille Packard Foundation for Children's Health, 2015). As such, the state has worked hard to support youth as they transition into adulthood. Campus support programs, including the Guardian Scholars and Renaissance Scholars programs, are found on 80 college campuses across the state

(California Department of Education, 2013). These programs provide former foster care youth with academic advising, housing assistance, financial aid, tutoring and other supports. In addition to these programs, each of the state's 112 community colleges has a liaison dedicated to working specifically with the population (California Department of Education, 2013).

Students who participate in the state's College Pathways Program are more likely to be enrolled full time and receive financial aid (California College Pathways, 2015). Since 1998, 2,500 students have utilized the California College Pathways campus support programs. In fact, the program has seen a 200% increase in participation since 2008. Nearly 72% of foster care youth in the state persist to graduation; this represents a number three times the national average of foster care youth in higher education nationally. Interestingly, California foster care youth who participate persist at rates higher than their peers in the general population nationwide (72% vs. 56%)(California College Pathways, 2015).

### *North Carolina*

In 2007, the North Carolina legislature established a scholarship program for former foster youth to attend public colleges and universities in the state. The scholarship can provide funding to offset the cost of tuition and fees, on-campus housing and meal plans, books and supplies, transportation (but cannot be applied toward the cost of a car) and childcare. Additional program benefits include academic and personal coaching, career mentorship, care packages and participation in the Foster Care to Success Intern America program (NC REACH, 2015). Funding is applied to any outside

costs after any other federal, state and institutional aid has been applied (NC Reach, 2015). To qualify, youth must have previously earned a high school diploma or GED, aged out of the foster care or were adopted after their 12<sup>th</sup> birthday (NC Reach, 2015). Youth who were placed into the Division of Social Services (DSS)'s care but were placed out of state and/or adopted out of state are also eligible for these services (NC Reach, 2015).

The North Carolina REACH program requires provides funding for youth to complete post-secondary degrees until age 26. Additional requirements include satisfactory academic progress, completion of at least six credit hours each semester, and maintaining at least a 2.0 each semester. Students failing to earn less than 2.0, withdraw from a course or receive an "F" grade must complete an Academic Success Program. If the student does not raise their term GPA to above a 2.0 the following term, scholarship funding is suspended for one full year (NC Reach, 2015). To ensure program completion, students also complete their degree with no more than 150% of the credit hours needed to earn that certification (NC Reach, 2015).

### *Washington*

The Passport to College Promise Scholarship program was created established in 2007 as a means of encouraging the state's foster care youth population to pursue postsecondary education (Washington Higher Education Coordinating Board, 2008; Washington Student Achievement Council, 2014). Though initially created as a six-year pilot in 2008, the program was adopted in 2012 and extended through 2022 (Washington State Institute for Public Policy, 2012). When creating the program, the state legislature

had two purposes. First, the Passport program is designed to encourage current and former foster care youth to plan for, attend, and graduate from higher education. To ensure foster care youth's access to higher education, students are eligible to participate in the program until age 28; four years longer than the Chafee ETV program (Gonzalves, 2013; Okpych, 2012). The second purpose was to provide those students with the educational planning, information, and institutional supports necessary to achieve this goal (Washington Higher Education Coordinating Board, 2008).

To support foster care youth once they matriculate in the state's colleges and universities, the Passport program's primary purpose is to ensure that their financial needs are met. To ensure that students' financial needs are met, participants are awarded scholarships of up to \$4,500 annually. Additionally, the program provides incentives for colleges and universities for each foster care youth they enroll (Washington Higher Education Coordinating Board, 2008; Washington Student Achievement Council, 2014). Finally, the program includes a partnership with the College Success Foundation, a group dedicated with supporting foster care youth on college campuses (Gonzalves, 2013). Since the program's founding in 2008, approximately 325 students have participated annually (Washington Student Achievement Council, 2014). Program retention is positive with 41% of students returning in year one, 37% retained for year two, and 23% participating in the program since its inception (Gonzalves, 2013).

### *Florida*

An examination of foster care youth in Florida yields similar statistics. Data collected by the Cby25 Initiative via the National Youth in Transition Database (2013)

reports that 1,852 youth between the ages of 18-22 aged out of foster care in 2012; 1,113 of these youth were female and 739 were male. Twenty-three percent of foster care youth reported having three or more placements in the last 12 months of care. Fifty-one percent of youth surveyed reported living independently, 22% reported living with their birth or adoptive parents or families or their previous foster families. Four percent were living in group homes, independent living programs, or college residence halls. Unfortunately, two percent of the population or approximately 383 individuals reported being homeless or couch-surfing at least one night since leaving care because they lack access to permanent, safe housing (Cby25 Initiative, 2013).

Of the youth who aged out of care in Florida, 81% were enrolled in high school, GED classes, college or post-secondary vocational training; 36% of were pursuing degrees at community colleges or four-year institutions. Promisingly, 378 youth, representing 42% of this population, had completed at least one year of college (Cby25 Initiative, 2013).

Florida's foster care youth have experienced a variety of barriers while pursuing their education. These barriers include the need to pay for school (6%), need to work full-time (12%), parenting responsibilities (21%), lack of transportation (16%), academic difficulties (25%), and being discouraged by others (15%)(Cby25 Initiative, 2013). To pay for their degree, 49% of foster care alumni relied on scholarships, fellowships or grants. Other means of payment included student loans (13%), earnings from employment (2%), savings (2%), Chafee Education and Training Voucher (10%), and assistance from family or friends, including spouses or partners, and birth, foster, or



adoptive families (2%). Impressively, 48% reported receiving assistance from a child welfare agency or independent living program (Cby25 Initiative, 2013).

### *Florida Tuition and Fee Exemptions*

Fee exemptions provide financial assistance to students, enabling them to attend college at reduced or no cost. Eligibility requirements for exemption of tuition and fees are identified in Florida Statute § 1009.25. Students receiving exemptions include those enrolled in dual enrollment and apprenticeship programs, homeless youth, children and spouses of deceased law enforcement officers and firefighters, and foster care youth. Exemptions enable institutions to waive or forgive educational expenses for certain students. These include state employees, college employees and their dependents, Purple Heart recipients, certain classroom teachers, and wrongfully incarcerated persons (Florida Department of Education, 2012). As tuition costs with the Florida College System are approximately \$2,500 a year, exemptions and exemptions have saved more than 56,000 post-secondary students approximately \$81 million; \$75.2 million in tuition exemptions and more than \$5 million in exemptions annually (Florida College System, 2012).

Three fee exemptions were created to specifically target Florida's foster care youth and provide tuition exemption eligibility to youth in good standing until age 28. The Relative Caregiver Program (F.S. 1009.25(2)(c)) was established for youth at high risk of placement into the foster care system to be placed with into the care of a relative or specified nonrelative under the limited supervision of the court. Pursuant to Florida Statute § 39.5085, youth eligible for tuition exemptions in this program must be in care on their 18<sup>th</sup> birthday. Florida statute F.S. 1009.25(d) also provides tuition exemptions

for youth adopted from the Department of Children and Families after May 5, 1997. The Road-to-Independence exemption [F.S. 1009.25(2)(c)] provides exemptions for youth who spent at least six months in the foster care system after turning 16 or turned 18 while in the foster care system (Florida Department of Education, 2015). In the 2010-2011 academic year, 2,011 students enrolled in Florida's state college system utilized these fee exemptions, representing just 3.55% of all those issued during the academic year.

Effective January 1, 2014, Florida's foster care youth have also been provided with a variety of resources and programs designed to ease the transition into adulthood by extending foster care services to age 23. Youth electing to participate in the "My Future, My Choice" program must be placed in the foster care system at age 18 and be attending high school, working toward GED completion, or be enrolled in college or vocational training programs. Program participants not seeking post-secondary education must be employed at least 80 hours each month or be engaged in a workforce development program. The final eligible group of program participants must have a documented disability that prevents them from seeking employment or educational opportunities (Florida Department of Children and Families, 2014a). "My Future, My Choice" participants must meet with their caseworker each month, continue in the activities described above and attend court reviews every six months. Benefits of the program include continued access to housing with licensed foster parents or a group home or in a supervised living setting including a college residence hall, rented home or apartment (Florida Department of Children and Families, 2014a).

Additional opportunities are available for foster care youth in the state. The Postsecondary Education Services and Support (PESS) program provides financial assistance to youth in care who turn 18 while in care and have spent six months or more in licensed out-of-home care before turning 18 or youth who were adopted from foster care after age 16 after spending at least six months in care. PESS also requires that participants have earned a standard high school diploma or its equivalent. Finally, to receive PESS stipends, foster care youth must be enrolled in a college or vocational program that is Bright Futures eligible (Florida Department of Children and Families, 2014b).

The Road-to-Independence Scholarship provides monthly living stipends in the amount of \$1,256 to foster youth between the ages of 18 and 23. While youth receiving the scholarship are not required to be employed, they must be enrolled in at least 9 credit hours a semester in a college or vocational school (Florida Department of Children and Families, 2014b). The scholarship does not mandate housing options for recipients nor does it require interactions with DCF caseworkers (OPPAGA, 2005). Youth electing to take advantage of these opportunities may withdraw at any time. Participants may also be withdrawn for failing to comply with program policies. However, to ensure that youth are given access to the tools needed to be successful, they can reapply prior to their 23<sup>rd</sup> birthdays (Florida Department of Children and Families, 2014a).

Florida's foster care youth are not required to participate in either of these programs. If they choose not to extend their participation in the foster care system on their 18<sup>th</sup> birthday, they may also be eligible for additional resources, including financial

support. Emergency-Only Aftercare Services provides limited support for youth seeking assistance making rent payments, employment assistance, car repairs, and mental health or substance abuse counseling (Florida Department of Children and Families, 2014a). They may also re-enter the My Future, My Choice program if they meet the program's admissions criteria (Florida Department of Children and Families, 2014b).

### Resilience

Resilience is a complex phenomenon that has been used to describe the process of “positive adaption in the face of significant adversity” (Edmond, Auslander, Elze & Bowland, 2005, p. 3). To understand the importance of this construct in an individual's ability to overcome obstacles, its components must also be clearly defined. Adversities are the stressors that can disrupt normal functioning and development (Masten, 1994). The causes of a youth to be placed into the foster care system, as well as their experiences during and after care are certainly sources of adversity. Positive adaption is an individual's ability to demonstrate competence in specific domains of interest including mental functioning, behavior, and achieving appropriate developmental tasks (Masten, 1994). The absence of psychopathology and maladaptive behavior in youth exposed to high-risk circumstances reflects positive adaption. It is important to note that resilient children are not invulnerable to adversity and may face extreme distress when experiencing adversity (Masten & Coatsworth, 1998). Positive adaption is often considered to be an indicator of resilience (Edmond, et al., 2005). As resilience is often hard to measure, it is inferred from this process of examining positive adaptive skills in the face of adversity (Edmond, et al., 2005).

Research has yielded many possible indicators of resilience, or “those factors that distinguished high-functioning children at risk from those who developed serious problems” (Luther, Cicchetti, & Becker, 2000, p. 546). These factors are found within the individual, family and community. Individual factors associated with resilience include intelligence, social skills, self-esteem, locus of control, empathy, faith and hope (Drapeau, Saint-Jacques, Lépine, Bégin, & Bernard, 2007; Hines, et al, 2005). Family factors correlated with resilience include supportive affective ties with family members, positive expectations of the child, a democratic parenting style, parents’ mental health, and connections with the extended family (Masten & Coatsworth, 1998). Community or environmental factors correlated with high rates of resilience include ties with prosocial adults including mentors, religious belief, and attending an institution known for supporting student growth (Edmond, et al., 2005; Drapeau, Saint-Jacques, Lépine, Bégin, & Bernard, 2007; Lowenthal, 2005).

It is important to note that these resilience indicators may not be prevalent for all individuals (Drapeau, Saint-Jacques, Lépine, Bégin, & Bernard, 2007; Hines, et al., 2007). In fact, Hines and colleagues (2005) present a very different explanation of contributors to resilience among foster care youth. They propose that as the population often reports feeling differently than, or out-of-sync with their peers and a lack of connection with their families of origin and/or foster families, the concept of resilience within the group may be require its own unique qualifiers. As such, resilient foster care youth must demonstrate an ability to overcome anxieties associated with housing and employment instability, pressures associated with goal achievements associated with

positive adult outcomes, and depression and sadness associated with the loss of childhood, missed events, and a guilt about their past (Hines, et al., 2005).

Hines and colleagues have developed a unique list of individual, family and community related attributes associated with resilient foster care youth. First, they suggest that resilient foster care youth demonstrate greater assertiveness, independency, goal-orientation and tenacity. Individuals are also determined to be different than the negative adults in their lives, express a willingness to accept help, encouragement, and seek feedback. Finally, resilient youth in foster care demonstrate a conscious decision to change, including a willful decision-making process, flexibility and an adaptable self-image (Hines, et al., 2007).

Other identifiable attributes among resilient foster care youth have also been identified Hines and colleagues (2007) also posited that resilient foster care youth all acknowledge that education can be a source of support, an escape or refuge from troubled lives at home, and creates opportunities for a positive future. Hines and colleagues also argue that for resilient foster youth, entering the system may represent an opportunity to receive a better education, make new friends, form positive relationships with adults, and escape the challenges that they would have experienced if they remained with their biological parent(s). Therefore, resilient foster care youth put their hopes and plans for the future at a premium, and set high expectations for career and educational success, feel a strong sense of social responsibility, and desire to form a family and household (Hines, et al., 2005).

### *Resilience Research on Foster Care Youth*

Few studies have focused on the processes contributing to resilience within the foster care population; the work that has been done, however, emphasizes indicators at the individual- and community- levels. Henry (1999) examined the resiliency of seven teenagers labeled resilient by caseworkers and other individuals. The study yielded five main themes: the youths' ability not to blame themselves for their previous experiences, considering their situations to be normal as opposed to abnormal, distancing themselves from their situations, seeing themselves as valuable and believing in their futures. In an investigation of British youth in foster care, Jackson and Martin (1998) determined that having an internal locus of control, having a hobby or interest, and making friends who do well in school as critical to an individual's ability to become resilient. In an examination of German foster care youth, Lösel and Bliesener (1994) determined that resilient youth themselves and their social workers believed them to be more intelligent, flexible, possessing greater self-esteem and self-efficacy, and having greater control over their own lives.

Other findings have yielded similar results. In a study of 44 emerging adults who had experienced foster care, (Hass, & Graydon, 2009) determined that 84% of participants reported having people in their lives who offered them formal and informal social supports. Resilient youth reported enjoying school, receiving support while at school, and stronger commitment to and involvement in their schools and communities than their peers. Participants listed other indicators of resilience, including having goals

such as finishing school, being able to solve their own problems, understanding why they do the things that they do, and reported feeling connected to something greater than them.

When provided the opportunity to analyze their own ability to development resilience, foster care youth link their experiences in care with their ability to overcome obstacles. In a study of forty-four foster care alumni selected from the Midwest Evaluation of Adult Outcomes of Former Foster Care Youth, Samuels and Pryce (2008) determined that former foster care youth tied their survivalist mentalities to being forced to grow quickly while continuing to struggle with the foster care system, growing up without parents, learning to become self-sufficient, and developing personal strength and autonomy. They also spoke of a need for independence and self-reliance, using the phrase “what doesn’t kill you makes you stronger” to indicate that they developed the skills needed to be resilient and overcome obstacles (Samuels & Pryce, 2008, p.1207). Participants in the study indicated that while they were not proud of their identity as foster youth, they were proud to ‘overcome’ what they perceived to be the negative label and the implications associated with it.

Additional research on the development of resiliency at the individual-level may yield significant interventions at the community-level within the foster care system. The availability of alternative “therapeutic” caregivers is essential as these individuals can provide safety, dedication and a sense of nurturing as youth transition into foster care. “Therapeutic” caregiving requires an adult to acknowledge the child’s pain, understand a child’s needs to process their experiences, the ability to recognize that a child’s behaviors may be a result of their experiences, and a willingness to realize the importance that they



play in a foster care child's life, even if the results are not immediate (Lowenthal, 2005). Caregivers play an extremely important role in helping foster care youth to develop resiliency as they are can provide a sense of empathy, stability and a sense of belonging to youth during times of extreme stress (Moroz, 1993).

Social supports, including the emotional, psychological, and physical supports, are also essential to the development of resilience. The community can provide foster care youth with both informal and formal supports. Informal supports, including family, friends and teachers can serve as unofficial role models, providing encouragement and a sense of safety, a place to seek advice and other benefits to youth in care (Lowenthal, 2005).

Formal support systems can also serve as an intervention strategy to enhance resilience in foster care youth. Committed social workers, teachers, mental health counselors and other figures can provide a variety of benefits to the population. Perhaps one of the greatest sources of support from the community, however, can come from having a mentor to foster care youth (Geenen & Powers, 2007; Jackson & Martin, 1998). Foster care youth involved in formal community-based programs, for example are more likely to graduate from high school, enroll in college and find full-time employment than their peers who do not pursue similar opportunities (Geenen & Powers, 2007).

Youth who age out of the foster care system are thrust into what Geenen and Powers (2007) call "instant adulthood" (p. 1085), as they find themselves ill prepared to enter adulthood and lacking the social, financial and other skills necessary to smoothly make the transition. Research suggests that resilient foster care youth demonstrate

greater self-efficacy and enhanced positive decision-making skills (Hines, et al., 2005). As such, it is imperative that all youth learn these skills. To ensure the success of foster care youth during this process, it is imperative that they be given the opportunity to develop resilience and achieve success not only in higher education, but in life as well (Hass, Allen & Amoah, 2014).

## CHAPTER 3 METHODOLOGY

### Introduction

The purpose of this dissertation was to examine the educational outcomes of former foster care youth in Florida's public state and community colleges. It investigated the impact of time spent in foster care on an undergraduate student's grade point average, number of credits attempted and completed. This study also explored the gender and racial breakdowns of Florida's former foster care youth who utilized the Road to Independence, Adopted from DC, and Relative Caregiver exemptions to pursue higher education. Furthermore, it sought to determine if difference in academic performance or credit completion varies across exemption type or by gender and/or racial background. This chapter described the population proposed for the study, background on the data file collected, study variables, research approach and design, and the procedure for data collection and analysis.

### Research Questions

This research sought to develop a clear understanding of Florida's former foster care youth who were used tuition exemptions to seek enrollment in the state's state college and university system. This question was answered using the following sub-questions:

1. What differences exist between former foster care youths' racial background and gender across tuition exemption types?
2. What differences exist between academic major or type of degree across tuition exemption type?

3. What relationship exists between academic major and type of degree across among foster care youth when student race, gender, and type of tuition exemption are examined?

### Sample

The Florida College System consists of twenty-eight public state and community colleges (Florida Department of Education, 2014). When combined with the fourteen schools that make up the State University System, these institutions comprise Florida's public higher education system. Florida Statute 1004.65 (2014) established the Florida College System member schools' mission to be aimed at serving their community's needs for postsecondary and career education. As such, they are obligated to provide high-quality low-cost education while maintaining an open-door admissions policy for lower-division programs (Florida § 1004.65, 2014). The colleges are also charged with educational equality to ensure that all of Florida's citizens can be prepared for "full participation in society" (Florida § 1004.65.4, 2014).

In fall 2013, 879,948 students were enrolled in a course, lower and upper division, or non-credit hours (Florida Department of Education, 2014). Using data from that semester, the State College System boasts that 65% of the state's high school graduates begin their collegiate coursework within the system. It also reports that 82% of first and second year college students were enrolled in one of the 28 institutions (Florida Department of Education, 2014).

Floridians seek enrollment in one of the state's community colleges for a variety of reasons. Pursuing education at the institutions offers a variety of benefits including

earning an Associate's degree, career and vocational training, remedial coursework, dual enrollment, and adult education (Florida § 1004.65.4, 2014).

The system provides two options for students wishing to earn a baccalaureate degree. First, students may seek admission to upper-level coursework within their own institutions. Students may also choose to transfer to one of the state's public universities by taking advantage of one of many articulation agreements. These agreements were established to ensure a seamless transfer between institutions for students earning an Associates of Arts or Associate of Science degree. For example, students with A.A. and A.S. degrees from Valencia College, Lake Sumter College, Seminole State College and Eastern Florida State College are guaranteed admission to the University of Central Florida through its "DirectConnect" program (DirectConnect, 2014).

### Population

The population from which this sample was drawn includes former foster care youth enrolled at least part time in the Florida State College System during the 2012-2013. All members of this study received funding via one of four specific tuition exemptions available to Florida's former foster care youth population.

The data for this study was collected from an archival data set and reflects a purposive sample. The goal of purposeful sampling, a subset of non-probability sampling, is to select "information-rich" participants based on predetermined criteria (Gall, Gall & Borg, 2007). The research sample utilized for this study will consist of the approximately 2,000 of post-secondary students receiving fee exemptions are young adults who lived as foster children and/or were adopted after being wards of the State.

The following headcounts and percentages are related specifically to students receiving Relative Caregiver, Road-to-Independence, and Adoption tuition exemptions under F.S. 1009.24(2) (c, d, & f).

Table 8

*Percentage Usage of Fee Exemptions, 2010-2011*

Exemption Type	<i>n</i>	%
Road to Independence	1,434	2.53
Adopted from DCF	424	0.75
Relative Caregiver	153	0.27
Totals	2,011	3.55

(Adapted from Florida Department of Education, 2012)

Study Variables

*Independent Variables*

Two sets of independent variables, tuition exemption being utilized and demographic information, were investigated to determine the relationship of previous experience in foster care on academic performance. The variable of tuition exemption was broken down further into three levels (Road to Independence Exemption, Adopted from DCF Exemption, and Relative Caregiver Exemption) and was considered a selected, non-manipulated, categorical independent variable. Tuition exemptions were considered independent variables because eligibility requirements are tied to the laws that fund them.

Demographic data consisted of two parts: racial or ethnic background and gender. Racial or ethnic background has six levels: Asian, Black/African American, Hispanic/Latino, Multiracial, Other/Unknown, and White. The second demographic variable, gender consisted of two levels: Female and Male. Like tuition exemption type,

demographic variables are also considered selected, non-manipulated, categorical independent variables.

The independent variables were chosen after a thorough review of the literature. The literature has yielded both positive and negative outcomes of former foster care youth based on gender and racial and/or ethnic background (Carpenter, Clymann, Davidson & Steiner, 2001; Dworsky & Perez, 2010; Naccarato, et. al., 2010; Smith, Stormshank, Chamberlain & Whaley, 2001; Zlotnick, Robertson & Wright, 1999). While federal and state policies fund efforts to encourage former foster care youth to aspire to, matriculate in, and complete higher education, limited research has been done to determine the outcomes of youth who are able to enroll in colleges and universities. The research that has been done yields mixed results (Davis, 2006; Day et al., 2011; Dworsky & Perez, 2010; Emerson, 2006; Harris et al., 2009; Wolanin, 2005). This research project sought to continue to build on this body of literature examining the educational outcomes of former foster care youth.

#### *Dependent Variables*

Academic major and type of degree served as the dependent variables in this dissertation. These benchmarks are also things that fall within students' control as they are actively engaged in course registration, performance and completion each semester.

#### Research Approach and Design

##### *Research Approach*

This study utilized a quantitative research approach. Quantitative studies are used to fill gaps in the literature that warrant further investigation (Creswell, 2011). They are

also used to compare groups using statistical analysis while answering specific research questions using positivistic and unbiased data (Creswell, 2008; Gall, et al., 2007). The limited research on foster care youth in higher education is instrumental in identifying and developing the purpose and variables used within this study. Finally, quantitative research utilizes a singles data collection instrument. In this study, the Florida Department of Education's data file served as that data collection instrument.

### *Research Design*

A casual comparative research design was utilized to determine the impact of the independent variables (tuition exemption being used and demographic information) on the dependent variable (educational performance). Within casual comparative studies, independent variable level assignments are based on pre-existing characteristics that cannot be manipulated by the researcher. Additionally, random assignment is not possible within this design (Shadish, Cook & Campbell, 2002). Failing to rely on a random assignment eliminates the researcher's ability to determine cause and effect relationships. Significant differences, however, can be observed between levels of the independent variables on the dependent variable within this causal comparative design. Tuition exemption, one of the independent variables within this study, is considered a non-manipulated selected independent variable. Since this variable cannot be randomly assigned, a quasi-experimental design will be utilized (Shadish, et al., 2002).



## Data Collection and Analysis

### *Data Collection*

Once approval from the University of Central Florida's Institutional Review Board and the Florida Department of Children and Families was granted, the researcher was granted access to the Student Data File. The Community College and Technical Center MIS department of the Florida Department of Education's Division of Accountability, Research and Measurement collected and coded the data contained within the file. In order to ensure confidentiality, all personal identifiers were removed prior to the dataset being provided to the researcher (B. Pengelley, personal communication, April 1, 2015).

The data stored in this file is collected by institutions and submitted to the Florida State College System and State University System Board of Governors for processing. Students eligible for tuition exemptions submit completed paperwork each semester to ensure that their student account information is up-to-date and accurate. Former foster care youth receive this paperwork from their case managers each semester (B. Pengelley, personal communication, April 1, 2015; Florida's Children First, 2007). A statewide team of data analysts uses this data to create annual reports indicating enrollment, academic and other information (B. Pengelley, personal communication, April 1, 2015).

### *Data Analysis*

A series of statistical tests will be conducted to determine the educational performance of foster care youth enrolled in Florida's state college system. Additional

descriptive statistics will be used, as they provide a powerful summary of the sample and its subsets.

- To answer RQ 1 (Is there a relationship between former foster care youths' racial background and gender across tuition exemption types?) two tests were conducted. First, an ANOVA (One-Way Analysis of Variance) was performed. An independent t-test was also conducted. In this question, race/ethnicity and gender serve as independent variables and type of tuition exemption serves as the dependent variable. An ANOVA is appropriate to test race/ethnicity because its goal is to identify differences in the dependent variable between each of the independent variables. It also seeks to determine if a relationship between these variables can be identified (Gall, et al., 2007). Independent t-tests are also relevant because they compare the means between two groups (in this case gender) using the same continuous, dependent variable (Gall, et al., 2007).
- To answer RQ 2 (Is there a difference in academic performance, time to degree completion and credits attempted or completed across tuition exemption type?), an ANOVA was again used. Tuition exemptions served as the independent variable in this scenario with the subcategories of educational performance (time to degree completion, number of credits attempted and credits completed) acting as the dependent variables.
- To answer RQ3 (What relationship exists between academic discipline among foster care youth when student race, gender, area of study, and type of tuition exemption are examined?), a multiple regression was used. In this example,

race/ethnicity, gender, and serve as independent variables with academic discipline serving as the dependent variable. As the goal of a multiple linear regression is to investigate the relationship between multiple variables, it is the most appropriate test to use (Gall, et al., 2007).

Statistical significance was examined at the  $\alpha = .05$  level. Descriptive statistics were also reported.

#### Authorization to Conduct Research

The University of Central Florida requires that all research be conducted with the expressed written permission of the Institutional Review Board (IRB) prior to data collection. After submission of an application to the Institutional Review Board for review, this project was categorized as “not human research” (Appendix A). The Florida Department of Children and Families made the same determination (Appendix B). A signed data sharing agreement is also included (Appendix C).

#### Summary

The purpose of this study was to examine and describe the impact of time spent in foster care on a college student’s educational outcomes. Furthermore, an examination of the former foster care youths’ gender and racial and/or ethnic background was done to determine if these factors impact the students’ educational performance. Archival data collected from the Florida Department of Education was used. A quantitative approach and causal comparative design were employed to determine if significant main effects of the independent variables of tuition exemptions and demographics on the educational performance of Florida’s former foster care youth.

The research questions that this research sought to explore determined if significant differences on former foster care youth based on tuition exemption type (Road to Independence, Relative Caregiver, and Adopted from DCF) on academic discipline or degree program. Additionally, gender and racial and/or ethnic background were examined to determine if these factors influenced the educational performance of former foster care youth. Data analysis consisted of descriptive and inferential statistical procedures. ANOVAs, independent t-tests, and a multiple linear regression were conducted to evaluate data to best answer each of the research questions dealing with exemption type. The results of this study were presented in Chapter 4 of the dissertation. Chapter 5 contained a summary and discussion of these results.

## CHAPTER 4 RESULTS

### Introduction

The results of this study, based on the statistical analyses performed to answer the three research questions, are presented in this chapter. The data was analyzed using SPSS 18 for Macintosh. Inferential statistics were analyzed using a 0.05 significance level.

### Population

A sample of 1,822 students was analyzed. Incomplete items within the dataset were eliminated. Reasons for elimination included missing demographic or academic information. Duplicate records with the same student identification number were also eliminated prior to analysis. This led to 586 data points being removed from the file: 86 Relative Caregiver, 176 Adopted from DCF, and 324 Road to Independence, files. The original dataset contained 2,410 data points. Table 9 illustrates the percentage change from the original population to the sample used for analysis within this dissertation.

Table 9

#### *Percent Change of Dataset to Sample*

Exemption Type	Original	Excluded	%
Road to Independence	2,021	324	16.0
Adopted from DCF	245	176	28.2
Relative Caregiver	144	86	59.7
Total	2,410	586	

Road to Independence tuition exemptions represented the largest subset of exemptions processed during the 2012-2013 academic year with 1,697 or 93.1% of the

files processed. Sixty-nine Adopted from DCF (3.8%) waivers were processed during the academic year. Finally, 58 Relative Caregiver tuition exemptions were processed, representing 3.1% of all waivers received. Table 10 illustrates the breakdown of tuition exemptions processed.

Table 10

*Comparison of Tuition Exemptions Processed within Dataset 2012-2013*

Exemption Type	<i>n</i>	%
Road to Independence	1,697	93.1
Adopted from DCF	69	3.8
Relative Caregiver	56	3.1
Total	1,822	100

#### Demographic Information

Table 11 contains the demographic characteristics for all tuition exemption filed by race/ethnicity and gender. The majority of waivers (45.7%) processed during the academic year belonged to black students. This percentage is higher than the overall percentage of black youth in the foster care system (24%)(U.S. Department of Health and Human Services, 2014). The tuition exemptions filed by gender also differ greatly from the percentages of youth in care during the same year. Tuition exemptions processed for women only represented 30.8% of those processed during the academic year while women and girls represented 48% of youth in care. Exemptions for male students represented 69% of all files processed during the academic year which represents an increase of 17.2% over men and boys in the foster care system during the 2012-2013 fiscal year (U.S. Health and Human Services, 2014).

Table 11

*Gender & Racial Composition of Youth Utilizing Exemptions FY 2012-13*

Race	%	<i>n</i>	Gender	%	<i>n</i>
American Indian/Alaskan Native	0.5	9	Male	69.2	1,61
Asian	0.7	12	Female	30.8	561
Black	45.7	833			
Caucasian/White	32.6	594			
Hispanic (of any race)	16.7	305			
Multiracial	3.6	66			
Native Hawaiian/Pacific Islander	0.1	2			
Unknown	3	1			
Total	100	1,822			

*Note:* Percentages may not total 100%.

The percentage of individuals included within the dataset of who are of Hispanic origin was represented in Table 12. The U.S. Census (2012) reports that individuals of Hispanic origin represented 16.7% (52 million people) of the country’s population. The proportion of tuition exemptions contained within this dataset yields similar results.

Table 12

*Proportion of Exemptions Filed for Students of Hispanic Origin 2012-2013*

Exemption Type	<i>n</i>	%
Yes	284	15.6
No	1,538	84.4
Total	1,822	100

Table 13 indicates the breakdown of ages of those youth utilizing tuition exemptions during the 2012-2013 academic year. The National Center for Education Statistics (n.d.) defines traditionally-aged college students to be those individuals under the age of 23 and adult, or non-traditional, learners to be 24 or older. Approximately 90% of the students represented in this dataset can be considered traditionally-aged. The remaining 10% were 24 years of age or older.

Table 13

*Age of Youth Utilizing Exemptions FY 2012-13*

Age	%	<i>n</i>
18	16.1	294
19	22.1	402
20	20.7	377
21	14.9	271
22	10.0	182
23	6.2	113
24	3.6	65
25	2.1	39
26	1.9	35
27	1.0	19
28	1.4	25
Total	100	1,822

Educational Information

Table 13 represents a breakdown of degrees pursued by youth utilizing tuition exemptions to earn their degrees. Florida college students, a total of 694,609, sought enrollment in these academic programs (the system allows students to enroll in multiple areas of study simultaneously). Of the exemptions filed, 57.2% were led to the completion of an A.A degree, 1.4% to an A.S. degree, and 2.3% being linked to a Bachelor’s degree. Finally, 9.2% of exemptions were linked to GEDs or vocational certificates. Tuition exemptions in this dataset indicate that while foster care youth sought A.A. (57.2% vs. 50.1%) and A.S. (31.4% vs. 17.4%) degrees at rates greater than the average, foster youth pursued fewer Bachelor’s degrees (2.3% vs. 4.7%) and GED or vocational degrees (9.2% vs. 27.4%)(Florida Department of Education, 2015).



Table 14

*Breakdown of Degrees Pursued by Foster Youth 2012-2013*

Degree	<i>n</i>	%
A.A	1,042	57.2
A.S	572	31.4
B.S	41	2.3
GED & VOCATIONAL	167	9.2
Total	1,822	100.0

Academic disciplines indicated on the tuition exemptions filed during the 2012-2013 academic year were represented in Table 14. Majors and academic disciplines were sorted into a total of nine categories. Categories were created after a careful synthesis of degree offerings and academic departments at institutions across the state. The “Academic” category includes all waivers that indicated a student’s academic major include “General Degree Transfer,” “General-Liberal Arts,” and pre-professional programs. “Arts and Entertainment” majors include studio and fine art, music business, graphic design, computer arts, and animation. Programs within the “Developmental Education” program include GED preparation programs, adult high school, and students enrolled in remedial coursework. The “Health and Public Affairs” category includes criminal justice, human services, nursing, dental, radiography, and other medical programs. “Job ready” programs include cosmetology, fire sciences, funeral services, and other programs that lead to immediate employment upon completion. Finally, “STEM” programs emphasize science, technology, engineering, and math disciplines.

Table 15

*Breakdown of Academic Disciplines Pursued by Foster Youth*

Academic Discipline	<i>n</i>	%
Academic Transfer	814	44.7
Arts & Entertainment	58	3.2
Business	147	8.1
Developmental Education	16	0.9
Education	74	4.1
Health & Public Affairs	432	23.7
Hospitality	32	1.8
Job-Ready	171	9.4
STEM	78	4.3
Total	100	100

Research Questions

*Research Question 1*

Prior to analyzing the data by exemption type, tests of normality and homogeneity were conducted. These tests are conducted to ensure accurate calculation and interpretation during the analysis of inferential statistics. Normality is defined as having skewness and kurtosis values between -2.0 and 2.0.

*Gender*

An independent t-test was performed to compare gender across tuition exemption types. Tests of normality were performed before the test itself was conducted with both variables meeting these assumptions. This is an appropriate analysis for this sub-question because two categories (male and female) are present. Males represented 69.2% (n=1,261) of the sample with females accounting for the remaining 30.8% (n=561).

No statistical differences were found when examining gender across tuition exemption types [ $t(1821) = -2.127, p = 0.034$ ). Although not statistically significant, the mean of female students and tuition exemptions ( $M = 1.13, SD = .349$ ) was greater than that of male students ( $M = 1.09, SD = .464$ ). Table 14 illustrates these results.

Table 16

*Descriptive Statistics for Gender: Exemption Type*

Gender	M	SD	95% CI	
			LL	UL
Male	1.09	.349	-0.81	-0.03
Female	1.13	.464	-0.85	.001

*Note.*  $t(1821) = -2.127, p = 0.034$ . CI = confidence interval, LL = lower limit UL = upper limit.

*Race/Ethnicity*

Due to the small number of respondents in racial categories other than black, white and Hispanic, a fourth category was created using the five remaining groups (Asian, American Indian and Native Alaskan, Multiracial, Native Hawaiian and Pacific Islander, and unknown). The Black/African American group represented 45.7% of the sample (833 respondents) with the White group accounting for 32.6% of the sample (594 respondents), the Hispanic group equating to 305 participants (16.7%), and the unknown category making up 4.9% of the sample (90 participants). This breakdown is illustrated in Table 16.

Table 17

*New Descriptive Statistics for Race/Ethnicity*

Race	<i>n</i>	%
Black	833	45.7
White	594	32.6
Hispanic	305	16.7
Other	90	4.9
Total	1,822	100

Prior to analyzing the data by exemption type, an ANOVA requires that assumptions of normality and homogeneity of variance are met. Normality is defined as skewness and kurtosis between -2.0 and 2.0. Skewness was found to be .627 with Kurtosis equaling -1.455. Levene’s test of homogeneity of variance can be assumed with  $p>0.05$ .

No statistically significant difference [ $F(2, 1819)= 2.165, p= .115$ ] in race existed among tuition exemption types when an ANOVA was used. Approximately 2% of the differences between tuition waivers could be explained by examining race/ethnicity as the independent variable ( $\eta^2 = .0023$ ). As a whole, diversity of race and ethnicity decreased across tuition exemptions with Road to Independence ( $M=3.78, SD= 2.311$ ) to Adopted from DCF ( $M=3.46, SD=2.23$ ) to Relative Caregiver ( $M=3.21, SD= 2.163$ ). These results are illustrated in Table 17. As these results were not statistically significant, a relationship between race/ethnicity and tuition exemption cannot be assumed.

Table 18

*Descriptive Statistics for Race/Ethnicity: Exemption Type*

Exemption	M	SD	95% CI	
			LL	UL
Road to Independence	3.78	2.311	3.67	3.89
Adopted from DCF	3.46	2.233	2.93	4.00
Relative Caregiver	3.21	2.163	3.64	3.79

*Note.*  $F(2, 1821)=7.657$ .  $p<0.00$ .  $\eta^2 = .99$ . *CI= confidence interval, LL= lower limit UL=upper limit.*

*Research Question 2*

The second research question analyzed the types of academic majors and degrees selected across each of the three tuition exemptions.

*Degree Pursued*

An ANOVA requires that assumptions of normality and homogeneity of variance are met. Though normality was met within this grouping, homogeneity of variance was violated. Keppel (1993) determined that unequal sample sizes do not cause heterogeneity of variance to be a problem while conducting an ANOVA and therefore a variation of the test, a Welch’s *F*, was conducted. This test allows for the comparison of heterogeneous groups to be compared.

As shown in Table 18, a statistically significant difference between groups was determined by a Welch’s *F* [ $F(2, 1821)=6.084$ ,  $p=0.002$ ]. A Tukey HSD post-hoc test revealed that waivers filed utilizing the Road to Independence waiver (M=1.26, SD=.533) was statistically different than the Relative Caregiver (M=1.63, SD= .910) or the Adopted from DCF (M=1.20, SD= 4.62) groups. Less than 1% of the variability in exemption type can be linked to academic degree being pursued, which serves as the

independent variable ( $\eta^2 = .0067$ ). Therefore, a relationship exists between academic degree and the Road to Independence tuition exemptions. Taken together, however, relationships among academic degree and Relative Caregiver, and Adopted from DCF exemptions cannot be identified.

Table 19

*Descriptive Statistics for Academic Degree: Exemption Type*

Exemption	<i>M</i>	<i>SD</i>	95% <i>CI</i>	
			<i>LL</i>	<i>UL</i>
Road to Independence	1.65	.929	1.61	1.69
Adopted from DCF	0.69	.533	1.13	1.39
Relative Caregiver	1.63	.489	1.59	1.75

*Note.*  $F(2, 1821)=6.084$ .  $p=0.02$ .  $\eta^2 = .99$ . *CI*= confidence interval, *LL*= lower limit *UL*=upper limit.

*Academic Discipline*

Again, an ANOVA require tests of normality and homogeneity of variance.

While normality was met within this sub-question, homogeneity of variance testing was violated once again; therefore, a Welch's *F* was used.

Table 19 illustrates the statistically significant difference between groups as determined by a Welch's *F* [ $F(2, 1821)=18.585$ ,  $p=0.000$ ]. A Tukey HSD post-hoc test revealed that waivers filed utilizing the Relative Caregiver waiver ( $M=5.38$ ,  $SD= 1.764$ ) was statistically different than the Road to Independence ( $M=3.67$ ,  $SD= 2.814$ ) or the Adopted from DCF ( $M=2.33$ ,  $SD= 2.411$ ) groups. Approximately 2% of the variability in exemption type can be linked to career choice, which serves as the independent variable ( $\eta^2 = .0193$ ). Therefore, a relationship exists between students' declared academic major and the Road to Independence tuition exemptions. Taken together,

however, relationships between major selection and Road to Independence, and Adopted from DCF exemptions cannot be identified.

Table 20

*Descriptive Statistics for Academic Discipline: Exemption Type*

Exemption	<i>M</i>	<i>SD</i>	95% <i>CI</i>	
			<i>LL</i>	<i>UL</i>
Road to Independence	3.67	2.814	3.54	3.80
Adopted from DCF	2.33	2.411	1.75	2.91
Relative Caregiver	5.38	1.764	4.90	5.85

*Note.*  $F(2, 1821)=18.585$ .  $p<0.00$ .  $\eta^2 = .0193$ . *CI*= confidence interval, *LL*= lower limit *UL*=upper limit.

*Research Question 3*

The third question sought to identify differences in academic major selection and intended degree based on foster care youths’ race and gender. Further, the tuition exemption being utilized to support these academic pursuits were considered.

Multiple regressions are used to investigate the relationships that may exist among variables. Specifically, they are often used to predict the relationships between these variables and to examine the variance of the model and the contributions that fit each variable (Gall, et al., 2007).

A standard multiple regression analysis, with tuition exemption as the controlled variable, was conducted to examine the relationship between gender, degree type, career, and race/ethnicity. The linear combination of tuition indicated a statistically significant relationship between exemption type and degree and career  $F(4, 1817) = 8.131, p<0.05, R^2=0.18$ . The multiple correlation coefficient was .133, indicating that approximately 13% of the variance of tuition exemption being utilized can be accounted for by the linear combination of gender and degree type. The regression equation for predicting this

relationship was: Tuition exemption type=  $-.068 \text{ degree} + .02 \text{ x career} - 1.125$ . The multiple regression also indicated that two of the four variables, race and major choice were not predicted by tuition exemption: Gender:  $F(4, 1821) = 32.393, p = .230$  and Race:  $F(4, 95) = 32.393, p = .091$ . This indicates that relationships between those variables cannot be identified. Table 20 illustrates the results of this multiple regression.

Table 21

*Descriptive Statistics for Multiple Regression: Tuition Exemption as Constant*

Model	b	SE b	$\beta$
Constant	1.125	.030	.133*
Gender	.023	-.159	.230
Degree	-.068	-.014	-.159*
Career	.021	.005	.000*
Race	-0.07	.004	.091

### Summary

After analyzing the data generated by the 1,822 tuition exemptions filed on behalf of foster care youth enrolled in Florida's State College System during the 2012-2013 academic year, it was determined that only a limited number of statistical differences existed. Statistical tests of race/ethnicity and gender did not yield significant results. However, significance was found when testing for degree being pursued and academic discipline. A summary of each of these findings is presented below.

Table 22

*Summary of Statistical Significance by Race, Gender, and Tuition Exemption (RQ1)*

Variable	Statistical Significance
Race x Tuition Exemption	Not significant
Gender x Tuition Exemption	Not significant



Table 23

*Summary of Statistical Significance by Academic Discipline, Degree Pursued and Tuition Exemption (RQ2)*

Variable	Statistical Significance
Degree Pursued x Tuition Exemption	Statistically significant
Academic Discipline x Tuition Exemption	Statistically significant

Table 24

*Summary of Predicted Relationship between Race/Ethnicity, Gender, Academic Discipline, Degree Pursued and Tuition Exemption (RQ 3)*

Variable	Statistical Significance
Race	Not significant
Gender	Not significant
Degree Pursued	Statistically significant
Academic Discipline	Statistically significant

Each of the three tuition exemptions provided inconsistent findings across each of the variables investigated. While no statistical significance was found when examining gender and race/ethnic background, significance was identified when examining degree being pursued and academic discipline.

## CHAPTER 5 DISCUSSION

### Introduction

This dissertation sought to examine the foster care youth matriculating in Florida's state and community colleges in the 2012-2013 academic year. It was also designed to paint a portrait of those students utilizing the tuition exemptions to fund their educational expenses by seeking to understand their demographic and academic information. Finally, the research hoped to explore the relationships between the three distinct tuition exemptions and the student utilizing them. This chapter presents a review of the methodology employed to answer the research questions, as well as a summary of its findings. Conclusions regarding these results will also be addressed. Finally, implications for theory, practice and future research suggestions will be offered.

### Discussion

Education is a “powerful determinant of quality of life and confers economic, social, civic, and personal benefits” (Day, et al., 2012, p. 1008). Researchers have only recently begun to investigate why so few foster care youth postsecondary education and why even fewer earn a degree (Merdinger, et al., 2005). Many factors have been considered, including housing and financial instability, limited social supports, and academic under-preparation (Courtney, 2009; Day, et al., 2012; Dworsky & Perez, 2009). Further, adolescents in care are often discouraged from seeking post-secondary enrollment, and instead pushed toward employment and other outcomes that provide stability after the transition into independent living (Merdinger, et al., 2005). Therefore

understanding the educational choices of this population becomes much more critical when creating support services aimed at increasing the odds of their success.

### *Gender*

In the 2011-2012 academic year, 53.6% (104, 006) of all transfer students in Florida's state university system transferred from the Florida College System. Of that group, 81,756 earned A.A degrees and 2,948 earned A.S degrees prior to transferring (Community College Technical Center, n.d). These statistics indicate just how critical the results of research like this on the state's foster care youth can be.

After analyzing the literature on foster care youth seeking college enrollment, gender yielded some of the most interesting results within this dataset. Of the 402,346 youth in the foster care system during the 2012-2013 fiscal year, 48% (191,608) were women (U.S. Department of Health & Human Services, 2014). Women also represented 59% of the total enrollment in Florida's state college system during the fall 2013 academic semester (Facts at a Glance, 2015). It is also in direct conflict with data suggesting that women represent the majority of students seeking postsecondary education during the fall 2015 semester (11.5 million) (National Center for Education Statistics, 2015). In this dataset, however, women only represented 30.8% (561) of the sample.

These findings are contrary to the previous literature suggesting that girls in care aspire to attend college at greater rates than their peers. While factors such as premature parenting can contribute to this discrepancy, it is troubling to note that such a disparity between men and women utilizing exemptions in the state college system exists.

Longitudinal data may be helpful in understanding this inconsistency in order to determine appropriate interventions within the state.

### *Race/Ethnicity*

The National Center for Education Statistics (2015) has found that the percentage of Black and Hispanic students attending college has been growing since 2000. In Florida, approximately 55% of all students seeking enrollment in the fall 2013 semester were identified as minority (Facts at a Glance, 2015). Forty-six states were found to have disproportionately high numbers of Black youth in the foster care system while the group represents just 15% of the national population of youth under age 18 (Center for the Study of Social Policy, 2004; Salazar, 2011). National data suggests that youth of color, especially those from low-income backgrounds, are less likely to pursue and/or complete postsecondary education (Nora & Cabrera, 1996; Walton & Cohen, 2011). These feelings of inadequacy are heightened when additional labels, such as participation in the foster care system, are associated with a student's self-identity.

Because members of stigmatized groups may link their academic success to a sense of belonging and acceptance, an analysis of their participation in higher education can be paramount to their success (Walton & Cohen, 2011). Nationally, White foster care youth represent the largest proportion of youth in the foster care system (42%) with Black (24%) and Hispanic (22%) youth accounting for approximately 46% of the population (U.S. Department of Health & Human Services, 2014). Within this dataset, however, Black students represented alone represented 45.7% of the tuition exemptions processed during the 2012-2013 academic year. White students accounted for 32.6% of the

population with Hispanic youth (16.7%) and youth of Hispanic origin (15.6%). To better understand the experiences of Florida minority youth, and especially those from the foster care system, a deeper analysis of the interventions available to them in the K-12 educational system is necessary to quantify the differences between this dataset and national norms.

### *Academic Degree Selection*

A simple internet search provides students with lists of highest paying associate degrees by salary potential (PayScale, 2015), and the top 200 associate degrees in America (My Plan, 2015). The U.S. Bureau of Labor and Statistics (2015) indicates that job growth for individuals with associate's degrees or postsecondary non-degree awards will continue to grow 26.9% between 2012 and 2022. Access to information like this can be influential in the academic disciplines that all students pursue after completing high school. Since foster care youth are often encouraged to seek employment or postsecondary opportunities that lead to financial stability (McMillen, et al., 2003), webs searches like these can become that much more informative.

MyPlan.com (2015), a website designed to help students make “well-informed decisions about their education and careers” (para. 1), provides “Top 10” lists using data tracking degrees awarded each year. Students within this dataset were pursuing seven of the top ten certificate programs advertised: Medical/Clinical Assistant, Licensed Nurse (LPN, AAS), Cosmetology, Nurse/Nursing Assistant/Patient Care Assistant, Automotive Mechanic Technology, Emergency Medical Technology, and Dental Assisting. Upon examination of the sample's declared majors in associate degree programs, six of the top

ten were listed: Liberal Arts, Nursing (RN, A.S.N., B.S.N), Business, General Studies, Criminal Justice, and Accounting (myplan, 2015). Two additional majors, Culinary Arts and Hospitality (ranked 11th), and Electrical Engineering Technology (18th) were also included.

PayScale's 2015-2016 College Salary Report ranks associate degrees by salary potential. The website compiles its data using survey response data from its annual PayScale Salary Survey and boasts a sample of 1.4 million graduates (PayScale, 2015). The report itself includes seven common majors within this dataset (Mechanical Engineering Technology, Electronics and Communications Engineering, Dental Hygiene, Computer Science, Diagnostic Medical Sonography, and Computer Programming, and Electrical Engineering Technology).

A variety of factors such as these can greatly impact the career research that students conduct prior to, and during, their postsecondary educational careers. Students considering careers in science, technology, engineering and math may consider factors such as their level of math preparation (Simpson, 2001), writing skills (Astin, 1993), geographic restriction (Arcidiano, 2004), and earning potential (Wills & Rosen, 1979). A student's self-efficacy or belief that she will be successful also plays an important role in the major selection process (Bandura, 1997).

The influence of parental or guardian on a student's major selection also cannot be ignored (Porter & Umbach, 2006). Therefore, it is critical that foster care youth be provided with adult mentors who can not only encourage their interest in postsecondary education (Strayhorn, 2014), but also provide them with the tools and resources necessary

to make informed career and academic choices. Though social workers and case managers may sometimes emphasize stability over educational achievement, encouraging educational pursuit may provide foster care youth with greater lifetime earning potential, greater life satisfaction and overall health.

### *Resilience*

Though difficult to examine in a quantitative dissertation, the concept of resilience remain within the literature on foster care youth. Foster care youth note their strength to survive within the contexts of their childhood traumas as important sources of pride, autonomy, and self-esteem (Osterling & Hines, 2006; Samuels & Joyce, 2008). They describe how their previous experiences have provided them with ingenuity, coping skills, psychological endurance, a strong sense of, and need for, independence, self-reliance and other characteristics that provide them with resilience (Samuels & Joyce, 2008). This “survivalist” mentality can be extremely beneficial for youth transitioning out of care and into the college classroom (Samuels & Joyce, 2008, p. 1208).

These coping skills may influence the choices that foster care youth make in the classroom. For example, resilient foster youth seeking enrollment in Florida’s state college system may be willing to demonstrate their self-efficacy by pursuing academically rigorous coursework. Those youth seeking enrollment also demonstrate this resilience by willingly facing the financial, personal, and academic obstacles placed in front of them while seeking a postsecondary degree. Additional research is necessary to examine the population’s ability to demonstrate resilience in light of academic

difficulty, academic transfer, or other factors that impact a student's decision to continue enrollment in postsecondary education.

### Limitations of the Study

Like all research, this study contains both strengths and weakness. This is the first study to investigate the academic pursuits of foster care youth utilizing tuition exemptions to pursue post-secondary education in Florida's state and community colleges. Additionally, the large and diverse sample only contains students enrolled in state and community college programs.

It is important to note, however, that limiting the study to youth enrolled in state and community colleges can serve as a limitation as well. As these institutions are considered open-access, the students in this sample may not include those youth who matriculated into institutions with more rigorous admissions requirements. Support services available to foster care youth vary dramatically from institution to institution. Thus, the influence of access to programmatic and support services cannot be observed. While participants within the dataset utilized exemptions to pay for their educational expenses, it cannot be guaranteed that other former foster care youth are pursuing post-secondary education that may not be aware of, qualify for, or know how to utilize tuition exemptions.

It is also important to note that this dataset may capture a higher number of successful and resilient foster care youth in Florida who may have faced fewer barriers than their peers who have been represented in previous research on the topic. As such, it cannot be assumed that the results of this study will reflect the experiences of all former



foster care youth in Florida. Finally, participants experienced foster care within the state of Florida; as such, findings may not reflect the experiences of former foster care youth in other states.

The dataset itself presented several problems to the researcher. First, the sample is not equally distributed across each of the three types of tuition exemptions. Though this sample is reflective of the tuition exemptions provided annually, it limits the level of analysis that can be done to examine differences between each of the groups. While merging both Relative Caregiver and Adopted from DCF exemptions into a larger category could have potentially impacted the results, it would limit what is known about the students using those unique waivers to fund their educational expenses. It is also imperative that campus officials accurately record data on tuition exemption paperwork to ensure that data files represent all of the students who utilize them. The state of Florida has created a Student Database Data Dictionary to ensure that all information is correctly coded for tracking and recording purposes (College Data Portal, n.d.). However, these codes were not instituted unanimously, leading to incomplete, incorrect and inaccurate student files. Future research should examine each of the three tuition exemption types individually to learn more about the students they represent. It is also imperative that campus officials accurately record data on tuition exemption paperwork to ensure that data files represent all of the students who utilize them.

It is also important to note that the dataset is limited to the 2012-2013 academic year. Therefore, long-term trends for each student cannot be observed. Longitudinal observations are critical because previous research indicates that the group faces many

obstacles while enrolled in postsecondary education that may force them to stop-out or withdraw. Merdinger and colleagues (2005), for example, determined that 36% of participants had either previously withdrew from or were considering withdrawal at the time of the study. A landmark longitudinal study of foster care youth enrolled in post-secondary education in the Midwest determined that 26% of youth earned a degree or certificate, one-sixth completed a vocational or technical degree and only 2.7% earned a Bachelor's degree (Pecora, et al., 2006a). To truly determine the educational outcomes of foster care youth in pursuit of post-secondary education, longitudinal research is necessary.

Next, the dataset used within this research did not control for several confounding variables that are present within the literature. These limitations include foster care placement history (time spent in care and number of placements), number of school transfers, and diagnosis of learning disability. Additionally, the students' academic history, including their SAT/ACT score(s), high school G.P.A., and rigor of coursework cannot be considered because that information is not available.

Finally, issues may exist with the use of archival data. The dataset provided by the Florida Department of Children and Families was compiled after representatives from participating Florida colleges entered them into a statewide database for exemption processing, therefore, accuracy and level of completeness cannot be guaranteed. Though the Department of Education provides institutions with a dictionary of terms to use when submitting waiver information, not all individuals responsible for entering this information utilized these terms. As such, inconsistencies have been identified.

Furthermore, the decoded data prevented the researcher from seeking out additional or missing information from participants.

### Recommendations for Future Research

This research has contributed to the growing body of literature on the educational outcomes of foster care youth, specifically those youth enrolled in post-secondary institutions. It also investigated the impact that tuition waiver exemption, and by extension experience in foster care, has on a student's selection of academic major and degree program. This study provides an important first step in understanding former foster care youth, but there are numerous possibilities that remain unexamined.

First, research on the educational outcomes of foster care youth can benefit tremendously from providing the population a forum from which to share their experiences. Qualitative research provides participants with the opportunity to describe their lived experiences prior to, and while enrolled, in college coursework in their own words. Qualitative methodologies would provide researchers with a better understanding of how foster care youth derive meaning from their experiences and the commonalities and differences of the group as a whole (Creswell, 2007). Much of the previous literature on this topic emphasizes the student's experiences while enrolled in post-secondary institutions. Kuh and colleagues (2010) proposed that student success is a combination of the student's efforts and the institution's "educational effectiveness" (p. 9). Therefore, analyses of programmatic efforts to support foster care youth on college campuses may provide greater insights into the efforts made to retain and graduation the population.

Second, future research should explore the experiences of foster care youth at other types of post-secondary institutions, both within and outside of Florida. Since Florida's state colleges are considered open-access, admissions requirements are less rigorous than they may be at other institutions. Admissions requirements and support services for foster care youth, however, vary nationwide so an analysis of the educational outcomes of foster care youth elsewhere is also necessary. To truly understand the educational experiences of foster care youth in post-secondary institutions, it is imperative that the experiences of the population be examined at a variety of institutions. Student support services, for example, vary tremendously from campus to campus. In fact, many highly selective institutions boast excellent support services to support and graduate their multicultural students (Brock, 2006; Griffith, 2008). To examine the generalization of the results above, similar studies should be done to examine the educational outcomes of foster care youth across institution type.

In an effort to better inform higher education professionals about foster care youth, their experiences in college should be compared to other "at-risk" populations. Because foster care youth are also considered to be first-generation college students, for example, an analysis of their experiences on campus may be beneficial. Institutions may also benefit from comparing the needs of this population against others, including low-income students, adult learners, students with children and other "non-traditional" student groups.

In order to better understand the concept of resilience within the foster care community, additional research should be done within the population. To truly

understand resilience among foster care youth pursuing post-secondary degrees, a comparative study should be conducted with other foster care youth. By interviewing youth as they develop plans to transition into independent living, researchers could determine what factor most influence a student to pursue postsecondary education, employment, military service or other outcomes. Additional research could examine the longitudinal outcomes of these subsets of the population to investigate their employment, health, and other outcomes.

Finally, while Florida provides financial and transition services to foster care youth as they transition out of care, these supports are not mandatory. Therefore youth may elect to be unified with their biological families, remain in foster home placements, participate in independent living programming, seek out their own housing, or choose to move into campus owned- or affiliated- housing. To determine the impact of on-campus housing on foster youths' success in college, an examination of their outcomes based on their housing selections may be beneficial. This information may be used to inform policy and education leaders about supports necessary to increase the population's persistence to graduation.

### Implications

The results of this research should be of interest to those who work in education and social work, as well as those individuals directly involved in the policy creation that impacts foster care youth as these individuals can influence the success, and failures, of this population.

### *Implications for Higher Education Professionals*

The Nancy C. Detert Common Sense and Compassion Independent Living Act, established in 2013, requires that the Florida Department of Children and Family, Board of Governors for the State University System, the State College System, and the Department of Education work together to ensure that all public colleges and universities provide campus coaches to foster care youth. These coaches are tasked with providing comprehensive support services to assist youth as they transition into independent living and onto college campuses and reporting academic progress, retention rates and other academic milestones. These initiatives are not unique to Florida, however, as many states have established similar programs to ensure compliance with the federal Fostering Connections to Success and Increasing Adoptions Act.

To ensure that campuses are effectively assisting the population, a variety of programs have been enacted. While the structure of campus support services differ as much as the institutions housing them, commonalities in efforts have also been identified. These include access to financial aid and scholarships, opportunities for yearlong housing, and academic, personal, and social supports (Dworsky & Perez, 2009). The findings of this research, as well as previous studies, support the need for additional support services for foster care youth. When matched with mentors on campus, for example, foster care youth report less perceived stress and fewer symptoms of depression as well as greater satisfaction with life (Munson & McMillen, 2009). These benefits are especially important for young men and youth of color, two populations at a greater risk of attrition (Strayhorn, 2014).

These findings also provide insights into the academic decisions that the population is making. Utilizing information like academic major selection, for example, can provide higher education professionals with the unique opportunity to target presentations, tutoring, and other academic supports to students in those majors. Academic advisors and other campus advocates can play an important role in targeting the population and encouraging their participation in relevant campus and community resources designed to encourage their success (Bonnell, 2007).

In order to ensure the effectiveness of these efforts, it is crucial that university faculty, staff and administrators are educated about the needs of foster care youth on their campuses. The need for training is especially important in campus financial aid offices that can provide the group with important financial and educational resources. Administrators should not only be cognizant of the language associated with the foster care system but also the funding sources available to support educational expenses. While foster care youth qualify for all resources available to low-income and under-represented students, the population may also qualify for additional tuition waivers, scholarships and grants that can offset student costs (Bonnell; Draeger, 2007). Trainings for academic advisors, residence life professionals, professors and others likely to interact with the population can only benefit the students and increase their ability to persist to graduation.

Former foster care youth are at a much higher risk of dropping out than their peers (Emerson, 2006; Hines et al., 2005; Pecora, 2009). Therefore it is the responsibility of higher education professionals to develop programs aimed at supporting their academic,

career and personal successes. It can be assumed that programs targeting foster care youth may also benefit other at-risk populations on campus, especially their peers from low-income areas who may also be academic underprepared for collegiate coursework. By encouraging their persistence to graduation, institutions may see gains in overall retention rates as well.

### *Implications for Social Services and Public Policy Administrators*

An overabundance of previous research indicates that time spent in foster care has many negative educational and life outcomes. Multiple school placements, for example, have been linked to excessive absences and grade failure. To reduce the consequences associated with multiple placements, a system should be devised to create a mainstream placement process similar to those that exist for youth with disabilities (Day, et al., 2011). By providing college and university administrators with access to this information, interventions and other supports can be made immediately available to the population upon matriculation on campus (McNaught, 2009).

Previous research indicates that youth in foster care are less likely than their peers to pursue college preparatory coursework (Harris, et al., 2009; Rumberger, et. al., 1999). In fact, social workers and case managers often encourage youth to seek full-time employment or vocational training upon emancipation because they believe these options encourage financial stability. As such, high school completion, not college readiness, is encouraged (Acosta, 2010; Freundlichm & Avery, 2008). By simply changing the message given to youth from seeking job stability to nurturing curiosity and investigating new opportunities, youth become empowered to become engaged adults. To ensure



consistency in this message, these conversations should also be had with all stakeholders who interact with foster care youth (Russ & Fryar, 2014).

Another potential roadblock for foster care youth seeking enrollment in postsecondary education is the often complicated nature of the college admissions process. Obtaining academic transcripts from multiple schools or seeking out faculty to write letters of recommendation, for example, can be difficult for youth who experienced multiple school transfers while in care. Completing the FAFSA can also provide difficulty for youth who may not be aware of, nor know how to articulate, their experiences in the foster care system. To lessen these burdens, greater exposure to college admissions and financial literacy programming while in care can ameliorate the frustrations associated with these complicated processes (Kirk, et al., 2012). An unforeseen benefit of increasing college access and completion among foster care youth is that many go on to careers in social work, advocacy, counseling, and other fields that enable them to work with youth experiencing similar events to what they themselves overcame. These adults can serve as positive role models for youth in care (Draeger, 2007).

Furthermore, current legislation funding tuition exemptions limit students' access to remedial coursework and places caps on the maximum numbers of credits that can be completed. These policies also place limits on students who were adopted or experienced foster care at some point during their lives (Day & Pennefather, 2014; Florida's Children First, 2014). These limits reduce foster care youths' ability to complete the developmental education that may be necessary to ensure their success in collegiate level

coursework. They also limit students' opportunities to explore academic majors, pursue minors and electives that exceed degree requirements and force the population to complete their degrees more quickly than their peers. Furthermore, current exemptions exclude some youth who experienced foster care, including those who were adopted or reunified with their parents prior to age 16 who may also benefit from support services. By lessening or eliminating these restrictions, foster care youth can be provided with opportunities to seek help and or explore their academic passions prior to and during their postsecondary educational journey.

Finally, and perhaps most importantly, greater funding needs to be allocated to support institutional efforts to support foster care youth. While Florida's Nancy C. Detert Common Sense and Compassion Independent Living Act and other policies like it mandate that colleges and universities create programs to support the population, additional state appropriated funding has not been made available. To truly support foster care youth as they transition out of the foster care system and into the postsecondary classroom, monies should be allocated to ensure that costs associated with educational and living expenses are met. In addition, funding should be made available to support programming efforts within the institution to support foster care youth. This funding for programming expenses, student scholarships, administrative costs associated with running a program or training costs for university coaches, faculty and staff.

The National Association of Social Workers Code of Ethics (2008) states that a social worker's primary responsibility is to "enhance human well-being and help meet the basic human needs of all people with particular attention to the needs and empowerment

of people who are vulnerable, oppressed and living in poverty” (para. 1). Foster care youth are considered to be a vulnerable population that may struggle to achieve positive adult outcomes (Arnett, 2000; Pecora, 2009). As such, it is imperative that social workers emphasize college as a viable option for youth transitioning out of care. Social workers and case managers should also ensure that youth are provided with access to health services, specialized career and employment coaching, life skills training including assistance obtaining a driver’s license, and other skills as they prepare to transition into independent living (Salazar, 2013). By providing youth in care with access to this important information, the population can be empowered to make informed decisions about their economic, educational, and personal futures.

### Conclusion

While higher education does not provide a solution for all individuals and families in poverty, it can “provide important ways out of poverty” (Kates, 1996, p. 555). Each year, federal, state and even local governments spend millions of dollars to offer services aimed at transitioning foster care youth out of care and into independence. This research suggests that Florida’s foster care youth are, in fact, utilizing tuition exemptions to support their postsecondary pursuits. However, national persistence rates suggest that while financial support may be available, the population remains at risk. It is critical that higher education administrations, social workers, and policy makers continue to support this important population. After all, this work is more than just a scholarly pursuit; postsecondary education can provide foster care youth with the “important ways out of poverty” that they need to become successful, engaged, and resilient adults.



APPENDIX A  
UNIVERSITY OF CENTRAL FLORIDA INSTITUTIONAL REVIEW BOARD  
OUTCOME LETTER



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

From : **UCF Institutional Review Board #1  
FWA00000351, IRB00001138**  
To : **Lauren I. Murray**  
Date : **July 13, 2015**

Dear Researcher:

On 07/13/2015 the IRB determined that the following proposed activity is not human research as defined by DHHS regulations at 45 CFR 46 or FDA regulations at 21 CFR 50/56:

Type of Review: Not Human Research Determination  
Project Title: Fostering college student success: Analyzing the educational outcomes of Florida community college students receiving Relative Caregiver, Road-to-Independence, and Adoption tuition waivers  
Investigator: Lauren I Murray  
IRB ID: SBE-15-11446  
Funding Agency:  
Grant Title:  
Research ID: N/A

University of Central Florida IRB review and approval is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are to be made and there are questions about whether these activities are research involving human subjects, please contact the IRB office to discuss the proposed changes.


On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

A handwritten signature in black ink that reads "Joanne Muratori".

Signature applied by Joanne Muratori on 07/13/2015 12:26:26 PM EDT

IRB manager

APPENDIX B  
FLORIDA DEPARTMENT OF CHILDREN AND FAMILIES INSTITUTIONAL  
REVIEW BOARD OUTCOME LETTER

Submitted Research Proposal, Fostering college student success, deemed by the IRB as not human research  Inbox x  



**Linn, Elyse** <Elyse.Linn@myffamilies.com>

Aug 19 ☆



to me, Denise, Gloria, LAURIE, Ute, Wanda, Elisa, Becky ▾

Good Morning Ms. Murray,

The Department concurs with the University of Central Florida IRB that your study, Fostering college student success: Analyzing the educational outcomes of Florida community college students receiving Relative Caregiver, Road-to-Independence, and Adoption tuition waivers, is not human research as defined by DHHS regulations at 45 CFR 46.

This determination applies only to the activities described in your IRB submission and does not apply should any changes be made. If there are changes in your study or if you need to revise the protocol in any manner, please contact our office.

Thank you.

Elyse Linn, M.S.W.  
Office of Substance Abuse and Mental Health  
1317 Winewood Blvd.  
Building 6, Office # 233  
Tallahassee, Fla. 32399  
(850) 717-4423  
[elyse.linn@myffamilies.com](mailto:elyse.linn@myffamilies.com)



APPENDIX C  
INTERAGENCY DATA SHARING AGREEMENT

**Exhibit A**



**Department of Children and Families  
Annual Affirmation Statement**



Agreement ID: \_\_\_\_\_

Date: February 23, 2015

In accordance with Section VI., Part C, of the Data Sharing Agreement between Department of Children and Families and Lauren Murray, Lauren Murray hereby affirms that she has evaluated and have adequate controls in place to protect the Covered Data from unauthorized access, distribution, use and modification or disclosure and is in full compliance as required in the Agreement between the Department and Lauren Murray.

\_\_\_\_\_  
Signature

Lauren Murray  
Printed Name

Doctoral Candidate  
Title

February 23, 2015  
Date

University of Central Florida  
Name of Agency

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