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Foster Care System Effectiveness in Assisting Young Adults' Transition to College

Vivienne Mitchell
Walden University

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Walden University

College of Social and Behavioral Sciences

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Vivienne Mitchell

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Review Committee

Dr. Leslie Barnes-Young, Committee Chairperson, Psychology Faculty

Dr. Maxwell Rainforth, Committee Member, Psychology Faculty

Dr. Jesus Tanguma, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Abstract

Foster Care System Effectiveness in Assisting Young Adults' Transition to College

by

Vivienne Mitchell

MSW, Clark Atlanta University, 2009

BSW, Georgia State University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology specializing in Educational Psychology

Walden University

June 2019

Abstract

Research suggests that the relatively low rates of former foster youth enrolling in and graduating from a postsecondary institution may be related to lack of foster care system support. This study examined whether perceived support from the foster care system was related to the postsecondary enrollment and academic performance of former foster youth, and whether males and females differed in perceived support from the foster care system. Forty-five former foster youth aged 18-24 years who had transitioned from a southeastern state completed a measure of social support and reported whether they had attended a postsecondary institution and, if so, their cumulative grade point average (CGPA). Analysis showed no significant relationships between participants' perceptions of foster care system support and their postsecondary attendance or performance. Analysis also showed no difference between genders in perceived support from the foster care system based on gender. Two notable results of the study were that over half the sample reported they had attended or were attending a postsecondary institution, with over 90% of those planning to continue, and nearly 40% reported a college GPA of 3.0 or above, suggesting considerable success in postsecondary classes. A limitation of the study was its reliance on self-report data. Recommendations included repeating the study by surveying former foster youth in several states to obtain ample participants. A social change implication was that a number of former foster youth are overcoming the unique challenges they face that might hinder their postsecondary attendance and success.

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Dedication

This study is dedicated to all of the children who have aged out and transitioned out of the foster care system, social workers, transitional homes, and foster parents.

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I want to thank my chair Dr. Leslie Barnes-Young and my committee member Dr. Maxwell Rainforth for all of the advice, encouragement, and patience. I would also like to thank my family and friends who have stuck by me through this long road. A special thank you to my husband, Robert, my daughters, Dejah and Ariel, and my son, Darren, for believing in me and for accepting the sacrifices that had to be made during this journey. You all gave me a reason to push myself to be better and do better. Thank you to my mom, Suzette for instilling in me the meaning of being a great woman despite any life circumstances or bumps in the road. All of you have had an integral part in my life in building me into the proud wife, mother, daughter, sister, social worker, philanthropist, and now philosopher that I am today.

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Chapter 1: Introduction to the Study

This study focused on the effectiveness of the foster care system in supporting young adults aged 18 to 24 years in their transition to college. The study examined whether there is a positive correlation between foster youth's perceived social support from the foster care system and (a) their college and university enrollment, and (b) their academic performance in colleges and universities.

As Lewit (1993) noted, foster care is a social service provided to severely abused and neglected children who are unable to reside with their parents. This system costs society substantial financial outlay because caring for children is expensive. Most often, children enter the foster care system when their parents abuse or neglect them. The latest statistics from the National Child Abuse and Neglect Data System collected in 2013 estimated that public social service or child protective services agencies received 3.5 million referrals of child abuse or neglect (Children's Bureau, 2013). There were a reported 678,932 victims of child abuse and neglect, with 9.1 out of every 1,000 children up to age 18 victims of maltreatment. According to the National Children's Alliance (2014), 1,520 children died from abuse and neglect in the United States in 2013.

Abused and neglected children may fail to perform well in various dimensions of life such as education, in part because of a lack of school attendance, parental attitudes toward the children and education, and other barriers (Mendes & Moslehuddin, 2009). Those who enter the foster care system may be at risk for school failure due to factors such as special education needs and delayed services in new schools when they move from one school to another (Altshuler, 1997; Morton, 2015). Golonka (2010) claimed that the foster care system should do more to promote educational attainment. If states had

structured policies and programs to ensure that foster youth had minimal disruptions in their education, their educational opportunities would improve, along with their college and career outcomes, with an increased likelihood for financial stability over their lifetime (Golonka, 2010).

Kennedy and Kennedy (2004), Kleinberg and Moore (2011), and Kirk and Day (2011) reported that fostered children might fail to secure employment or complete their high school education because of their attitudes toward different dimensions of life, including education. As an example of such an attitude, children may surmise that, by being foster children, they are inferior to the rest of society (Rittner, Affronti, Crofford, Coombes, & Schwam-Harris, 2011). Diehl, Howse, and Trivette (2011) noted that compared to non-foster youth, older youth in foster care, and youth who age out of foster care are at risk for a variety of adverse outcomes that include both internalizing and externalizing behaviors, such as social withdrawal and feelings of guilt.

While some researchers have examined youth transitioning out of foster care, there has been limited research on the role of institutional social support in predicting foster youth's educational outcomes, creating a gap in the existing literature. With this study I aimed to investigate the effectiveness of the U.S. foster care system in assisting young adults to attend college or university via an assessment of their perceptions and attitudes regarding this transition. The study may contribute to social change by helping those in child welfare design programs to support youth transitioning out of foster care and into college. In addition, understanding any gender differences that emerge in self-reports of received support may help in designing gender-sensitive programs (Maccoby & Jacklin, 1974).

In the next section, I provide a more thorough analysis of the U.S. foster care system. Later sections describe the problem statement, the research questions and hypotheses, the purpose and significance of the study, the theoretical framework, and the nature of the study.

Background of the Study

As stated, foster care systems provide care to maltreated children when parents have been deemed by the judicial system as incapable of doing so. Governments spend considerable amounts to care for neglected and abused children. In 2013, there were an estimated 402,378 children in foster care (Child Welfare Information Gateway, 2015). According to the U.S. Department of Health and Human Services (2014), the FY2015 budget for the U.S. Administration for Children and Families was \$51.3 billion. It is the responsibility of the federal government to ensure that it protects and cares for all its citizens, including children neglected or maltreated. Approximately half of all children entering foster care stay longer than 60 days. However, children do not stay in foster care systems for the whole of their lives, as they have to leave when they reach the age of 18 (Child Welfare Information Gateway, 2015). This is where potential problems arise because youth who age out of foster care must make a transition to independent living.

Fortunately, the availability of data among policy makers and implementers concerning the needs of foster youths graduating from foster care has resulted in the formulation of public policies and the creation of public programs that offer essential support, such as the Foster Care Independence Act of 1999 and the John Chafee Foster Care Independence Program (Gardner, 2008). Over the past 25 years, policy makers have amended the Social Security Act three times in the pursuit of bettering support for the

transition to adulthood for foster youth. The Foster Care Independence Act, a response to the limitations and perceived ineffectiveness of the Independent Living Program (Gardner, 2008), amended the Social Security Act in 1999. The Foster Care Independence Act continues to be the central framework for child welfare legislation. For example, states are allowed to use up to 30% of their federal funds to provide room and board for youth up to age 21 who have aged out of foster care (Gardner, 2008). However, the lack of availability of suitable housing makes this option limited. Likewise, the Institute for Educational Leadership (2008) noted that the Education and Training Voucher Program provides financial assistance to former foster youth attending postsecondary education. In part, this support is provided on the assumption that, in too many cases, foster care youth are faced with many challenges, such as limited employment opportunities and unsuccessful completion of college or university education. This puts them at risk for confronting social problems such as homelessness (Emerson, 2007).

Foster youth who transition out of the foster care system have special needs and may face many challenges (Altschuler, Stangler, Berkley, & Burton, 2009). Challenges may include few financial resources, limited education and training, poor employment options, inadequate housing, and lack of support from family or from friends and the community (Kirk & Day, 2011). Further, the challenges former foster youth face may serve as obstacles to their education and may put them at risk of homelessness, unemployment, and becoming involved in the criminal justice system (Atkinson, 2008; Courtney, Dworsky, Lee, & Raap, 2010; Courtney, Dworsky, Cusick, Havlicek, Perez, & Keller, 2007; Kirk & Day, 2011). Courtney and Dworsky (2006) noted that even though

some former foster youth are living in relatively stable environments and are enrolled in higher education or are employed, a greater number are facing substantial difficulties in their transition out of the foster care system and into independence. Among the challenges they face are unstable housing and homelessness, behavioral health problems, lack of social connections, and inadequate access to healthcare (Courtney & Dworsky, 2006).

Findings of a study by Courtney, Dworsky, Cusick, Havlicek, Perez, and Keller (2007) suggested that former foster youth attend college at a significantly lower rate than other youth. Courtney et al. (2007) found that out of a sample of 588 mostly age-21 foster youth, 135 did not have a high school degree, 221 had a high school diploma only, 57 had a GED only, 164 had one or more years of college but no degree, and 11 had a two-year college degree. The total of 175 former foster youth who had some college amounted to 29.8% of the sample. Courtney et al. (2007) reported that in comparison, 53% of a sample of age-21 nationally representative youth surveyed in the National Longitudinal Study of Adolescent Health had attended college, although the researchers did not report whether there were any foster youth included in the National Longitudinal Study of Adolescent Health survey. The difference between foster youth and non-foster youth is even greater in regard to receiving a college degree. According to Pecora et al. (2005), only 2% of former foster youth earn a bachelor's degree, which is in contrast to 24% of young adults in the general population who do so.

Perceived social support has been shown to predict higher academic performance for non-foster youth. Kenny, Bulstein, Chaves, Grossman, and Gallagher (2003) investigated the role of perceived social support in a sample of 257 non-foster

adolescents in regard to academic performance at the high school level and reported that perceived support predicted academic performance and work success. In the case of youth in the foster care system, social support is expected to come from foster families and caseworkers, and some research suggests that caseworkers and foster parents can have a substantial positive or negative impact on the college achievement of former foster youth (Hass & Graydon, 2009; Salazar, 2011; Thorne, 2015). However, it appears that no research has been done specifically on how foster youth's perceptions of the support they received from the foster care system relate to their enrollment in colleges and universities and their academic performance after they enroll.

Other internal and external conditions that former foster youth have claimed were important to their success in college were a sense of competence, having goals, and involvement in community service (Hass & Graydon, 2009). A sense of empowerment is very important to instill in foster youth as they transition to independence (Kaplan, Skolnik, & Turnbull, 2009). Kaplan et al. (2009) stressed the importance of developing support systems and programs to help empower foster youth as they reach independence. These include mentoring and post-high school educational attainment programs that may include college preparation, help in completing applications, and ongoing assistance and support in college including career counseling and tutoring (Kaplan et al., 2009).

Some previous research (Courtney et al., 2007; Leve, Fisher, & DeGarmo, 2007) has investigated gender differences among foster youth. In advocating for gender-sensitive interventions, Leve et al. (2007) determined the presence of several gender differences in maltreated foster girls compared to non-foster peers, but not in maltreated foster boys. Foster girls showed inferior peer relations compared to their peers, even

when monitoring for the effects of behavior problems. Foster girls also had significantly more behavior problems than their peers did (Leve et al., 2007). Leve et al. (2007) also reported that girls suffered more vulnerability to sexualized behaviors and mental health problems than did boys. Although these differences were apparent during life in foster care, there is no documented evidence whether gender differences exist concerning former foster youth's perceptions of the support they received from foster care.

With regard to the effects of gender differences in social support and academic success, Courtney et al. (2007) found gender differences in the educational achievement of former foster youth. Former foster females aged 21 in Courtney et al.'s (2007) study had attended a higher education institution at a 38% rate compared to the 23% rate of 21-year-old former foster males in the study. In addition, there was a higher percentage of females than males currently enrolled in a two- or four-year college at the time of the study.

The findings that there are gender differences among former foster youth in academic achievement (Courtney et al., 2007) can be combined with findings that experiences in the foster care system can affect academic achievement (Hass & Graydon, 2009; Salazar, 2011; Thorne, 2015). These two findings suggest that there may be gender differences in former foster youth's perceptions of the foster care system, which affect the college achievement of the two genders. However, it appears that no previous research has been done on whether there are gender differences in perception of support provided by the foster care system.

In conclusion, many foster youth transitioning from the foster care system face serious challenges, including limited employment opportunities, lack of resources, and

poor social support that affect educational opportunities and achievement (Courtney & Dworsky, 2006; Courtney et al., 2007; Kirk & Day, 2011). Faced with these challenges, former foster youth attend college at a rate lower than their peers and complete college at a much lower rate than their peers (Courtney et al., 2007; Pecora et al., 2005).

Furthermore, researchers have found gender differences in social support and academic success among foster youths (Courtney et al., 2007; Leve et al., 2007). Despite these findings, two gaps in the literature were identified. The first is that researchers have not performed quantitative studies on the relationship between former foster youth's perceptions of the social support they received from the foster care system and their college enrollment and college achievement. The second gap is that researchers have not studied possible gender differences in former foster youth's perceptions of the support provided to them by the foster care system.

Problem Statement

The problem the study addressed was that former foster youths enroll in and graduate from a college or university at lower rates than non-former foster youth (Courtney et al., 2007; Leve et al., 2007). Research suggests that the relatively lower rates of foster youth's postsecondary educational achievement may be related to aspects of the foster care system (Hass & Graydon, 2009; Salazar, 2011; Thorne, 2015). To what extent this may be true may be better understood by conducting quantitative research focused on the issue of how former foster youth's perceptions of the support they received from the foster care system is related to their college enrollment and college achievement. However, no such research appears to have been done previously and thus there is a gap in the literature.

In order to better deal with the problem of transitioning foster youths attending and graduating from college at lower rates than their peers, it would also be useful to understand the ways in which gender may be a factor. One way in which gender may be a factor is that females and males may differ in their perceptions of the support they received from the foster care system. However, no previous research appears to have been done on this issue either, resulting in a second gap in the literature.

In order to address the problem of former foster youth's lower rates of college enrollment and completion, this study helped fill the two gaps in the literature identified above: how foster youth's perceptions of the support they received from the foster care system may be related to their college enrollment and achievement and whether female and male foster youth differ in their perceptions of the support they received from the foster care system. First, the study examined whether former foster youth's perceptions of the support they received from the foster care system is related to their college enrollment and achievement. Second, it examined whether there is a gender difference in former foster students' perceptions of the support they received from the foster care system.

Purpose and Significance of the Study

This quantitative study had two purposes. The first purpose was to help fill a gap in research by determining whether there are relationships between former foster youth's perceived support from the foster care system and their (a) college and university enrollment, and (b) academic performance in colleges and universities. The second purpose was to help fill another gap in research by determining whether there is a difference between male and female foster youths in their perceived support from the foster care system.

For the study's first purpose, the independent variable was perceived support from the foster care system overall. The dependent variables were foster youth's college and university enrollment and their academic achievement in colleges and universities. I expected perceived support to be a predictor of academic performance based upon the results of prior studies (Hass & Graydon, 2009; Salazar, 2011; Thorne, 2015).

For the study's second purpose, the independent variable was gender, and the dependent variable was foster youth's perceived overall support from the foster care system. I expected that former foster females in the study would have a significantly more overall positive perception of the foster care system than former foster males. This expectation was based on the finding that the academic achievement of former foster females is greater than that of former foster males (Courtney et al., 2007) and that experiences in the foster care system affect the academic success of former foster youth (Hass & Graydon, 2009; Salazar, 2011; Thorne, 2015).

The results of the research have the potential to contribute to social change by helping those in child welfare programs to better support youth transitioning out of foster care. In helping foster care youth make the difficult transition to adulthood and independent living, there is the potential of reducing homelessness, increasing education, and keeping these youth off welfare. Understanding gender differences may help in designing gender-sensitive programs for foster youth. In addition, results of the study may encourage both foster care systems and society members to take responsibility for supporting and motivating transition-age youth as they integrate with society. The government has a role to play in formulating policies that will promote former foster

youth enrolling and succeeding in higher education as part of a successful transition to independence.

Research Questions and Hypotheses

The following research questions derived from attachment theory (Bowlby, 1998) guided this study:

RQ1: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their college and university enrollment?

H₀1: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their college enrollment.

H_a1: There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their college and university enrollment.

RQ2: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their academic performance in colleges and universities?

H₀2: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their academic performance in colleges and universities.

H_a2: There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their academic performance in colleges and universities.

RQ3: Is there a difference between genders in foster youth's perceived support from the foster care system?

H_{03} : There is no statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

H_{a3} : There is a statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

Theoretical Framework

The research drew on attachment theory (Bowlby, 1998) to inform the study's hypotheses and make predictions about the role of perceived social support on postsecondary matriculation among foster youth. Bowlby (1998) defined attachment as the psychological connectedness that lasts between human beings. He articulated several subtypes: secure, anxious, avoidant, resistant, and disorganized.

Kennedy and Kennedy (2004) reported that school psychologists use Bowlby's (1998) ethological attachment theory because it provides a "framework for understanding the impact of early social/emotional relationships on cognitive-affective structures used by children to construct views of the world, self, and others" (p. 247). Furthermore, attachment theory addresses social-emotional development from the perspective of both process and outcome, which may be helpful as foster youth transition out of the foster care system. This transition stage is important for fostering the personal growth, social competence, and academic success of foster youth (Walters, Zanghi, Ansell, Armstrong, & Sutter, 2010).

Children who have secure attachments to parents and guardians feel safe and strive to achieve their full potential in life. According to Bowlby's (1998) ethological attachment theory, emotional support provides young adults with psychological safety that gives them confidence to achieve the best in life. Bowlby's (1998) attachment theory

asserts that in the absence, inconsistency, and unpredictability of the parent or caregiver, the infant develops one of the two organized insecure patterns of attachment: ambivalent-resistant or avoidant. Bowlby (1998) focused on the attachment bond between a child and mother, and he used the term “attachment behavior” to describe the signals or actions an infant uses such as smiling, crying, and vocalizing, which summon their caregivers while enabling the infant to feel safe and calm. An infant seeks comfort from the caregiver as he or she develops a sense of security. Attachment theory describes a secure attachment as an intimate, warm, and continuous relationship with a caregiver substitute whereby both parties find enjoyment and satisfaction (Bowlby, 1998). A small child usually finds satisfaction and enjoyment with their mother because of the bond between them.

When foster children are separated from their biological parents, they must depend on the foster care system for support and a sense of attachment. However, foster parents may not serve very well as an attachment substitute. State agencies may even discourage foster parents from forming too great an attachment to a foster child (Atkinson, 2008). When a foster youth ages out and is suddenly released from the foster system, whatever attachment there was with a foster family may be abruptly broken. Foster parents and others should provide transitioning youths with opportunities to exercise independent decisions as they approach the aging-out time (Kaplan et al., 2009). When these youth are in society by themselves, they may have feelings of danger and insecurity, and patterns of positive interaction with caring adults promote a greater sense of safety.

Either hyperactivation or deactivation of the attachment system is involved in foster youths’ defensive strategies (Bowlby, 1998). In explaining the behaviors of foster

youth, scholars can use attachment theory to indicate what happens to these youth when they detach from their caregivers. This is where foster youth resist doing what people recommend. Clark et al. (2008) noted that strategies of escaping from caregivers that result in foster youth running away from placements could be associated with various factors including feelings of aloneness, problems at school, and either positive or negative phone conversations with biological family members. These youth may feel lonely due to lack of attachment and may fail to consider the assistance of their caregivers as sufficient.

In agreement with attachment theory, attachment to biological or foster parents is supportive of a successful transition to adulthood for foster youth (Cusick, Courtney, Havlicek, & Hess, 2010). Development of foster youth is likely to be disturbed by an absence of secure attachments, and involvement in the foster system makes it difficult to have typical adolescent experiences. Positive attachments to biological parents or foster parents are important for foster youth's development both psychologically and socially (Collins, Paris, & Ward, 2008). The attachment created between foster youth and caregivers helps ensure the youth have people they can rely on for advice and other services. Such attachments have been shown to be predictors of successful outcomes such as educational achievement as the foster youth transitions to independence (Pecora et al., 2005).

In summary, Bowlby's (1998) attachment theory describes a secure attachment as an intimate, warm, and continuous relationship with a caregiver substitute whereby both parties find enjoyment and satisfaction. The attachment theory describes several behavioral systems. The attachment theory claims that when a parent or other caregiver is

not present or the caregiver's actions are inconsistent and unpredictable, an infant will develop insecure patterns of attachment, either avoidant or ambivalent-resistant.

According to attachment theory, attachment with families and institutions promotes a successful transition to independence (Cusick et al., 2010). This study addressed the gap in research by determining whether there is a relationship between support from the foster care system and foster youth's academic attendance and performance.

Nature of the Study

The nature of the study was quantitative in focus and scope, and in it I sought to determine whether there was a correlation between foster youth's perceived support from the Georgia state foster care system and their college and university enrollment and academic performance. Specifically, the study determined whether, among foster youth who have transitioned out of foster care, there was a relationship between their perceptions of support from the foster care system overall and their college and university enrollment and academic performance. The study also examined whether there was a difference between male and female foster youth in their perceived overall support from the foster care system.

I used a quasi-experimental design to answer the research questions by indicating whether there was a significant relationship between variables. I conducted logistic regression analysis to determine whether there was a significant relationship between foster youth's perceptions of the support they received from the foster care system overall and their college and university enrollment. For those participants who indicated that they did enroll in an institution of higher education, I conducted linear regression analysis to determine whether there was a significant relationship between the participants'

perceptions of the support they received from the foster care system overall and their college and university academic progress. A two-tailed independent samples *t* test was used to determine whether there was a difference between male and female foster youth in regard to their perceived support from the foster care system.

I recruited participants aged 18-24 years who were foster youth under custody of the Georgia Child Welfare Department of Children but who had transitioned from foster care to participate in an online study administered by the website organization SurveyMonkey. I used a convenience sampling method. The study used the Medical Outcomes Study (MOS) Social Support Survey (Sherbourne & Stewart, 1991).

Definitions

Aging out: The point when a youth reaches the age of majority without having been reunited with their family or otherwise given a permanent family and thus leaves the foster care system (Altschuler et al., 2009).

College enrollment: A student's enrollment in a two- or four-year postsecondary institution (Courtney et al., 2007).

College and university academic achievement: A higher-education student's cumulative grade point average (CGPA) multiplied by the credit hours that have been earned by the student.

Foster care: A term used for fulltime substitute care for children outside their own homes. This can include but is not limited to foster family homes, relative foster homes, group homes, residential homes, emergency shelters, and preadoptive placements.

The term is also used for a network in which a child has been removed from their home and placed into a ward, group home, or private home (Child Welfare Information Gateway, 2015).

Perceived social support: Perception of social-emotional support including perceptions of tangible support, emotional-informational support, affectionate support, and social interaction (Sherbourne & Stewart, 1991).

Postsecondary education institution: “[A]n academic, vocational, technical, home study, business, professional, or other school, college or university—or other organization or person—offering educational credentials or offering instruction or educational services . . . for attainment of educational, professional, or vocational objectives” (Putnam, 1981, p. 3).

Social support: “[I]nformation from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations” (Kim, Sherman, & Taylor, 2008, p. 518).

Assumptions

The study was founded on several assumptions related to the sample of participants. These assumptions included that all participants were psychologically healthy and would follow written instructions when completing instruments. It was also assumed that all participants would be truthful and accurate in answering instrument items. The assumption of accuracy included assuming participants who had attended an institution of higher education accurately reporting their most recent CGPA and the number of credit hours they had earned. For the study I assumed that the use of quantitative analysis of data collected would provide sufficient information to make a

reasoned judgment on whether there were relationships between foster youth's perceived support from the foster care system and their college and university enrollment, as well as their academic performance in colleges and universities if they did attend, and whether there were gender differences in foster youth's perceptions of the support they received from the foster care system.

Scope and Delimitations

The nature of the study was quantitative, and I sought to determine whether there was a correlation between the independent (perceived support from foster care system) and dependent variables (foster youth's college and university enrollment and their academic performance in colleges and universities), and whether there were gender differences in foster youth's perceived support from the foster care system. The scope was determined by delimited data sources consisting of former foster children who had transitioned from foster care in the Georgia state foster care program. The study focused on the effectiveness of the foster care system in supporting young adults aged 18 to 24 years in their transition to higher education.

Limitations

Data were derived from a self-report questionnaire to measure the dependent variables. Such reliance on a self-report questionnaire may have overvalued the reliabilities found among the theoretical variables. Bias was reduced by analyzing all data, which is being stored securely for a period of 5 years until the data is discarded (Smith, 2003). It is understood that while possible correlations between variables were investigated, correlation does not guarantee causation (Kenny, 2004). Lack of random sampling limits generalizability of results beyond the study sample (Creswell, 2014).

Threats to internal validity included possible selection bias, occurrences during the study that may have influenced responses but had no relationship to the independent variable, and social desirability responses. There is a threat to external validity because the sample was not randomly selected and participants self-selected to take part in the study.

Therefore, the results of the study cannot be generalized to the entire population of 18 to 24-year-old former foster youth of the Georgia state foster care program, but are only suggestive.

Significance

The problem that this study addressed is that only an estimated 5% of former foster youth earn a college degree (Stuart Foundation, 2009). I deemed that the study might provide information to help enhance the foster care system if results showed a relationship between perceived support from the foster care system and foster youth's college and university enrollment or that a relationship between perceived support from the foster care system and foster youth's academic performance in colleges and universities. I also deemed that the findings of the study in regard to possible gender differences among foster youth in their perceived support from the foster care system might also be of value to the foster care system.

In addition, the study may serve to advance policy by helping promote the view that former foster youth's perceptions of the support they received from the foster care system may influence the youth's educational outcomes. The study may also serve to advance policy by providing suggestions to organizations dealing with foster youth's educational outcomes. The results of investigating the connection between perceived support from the foster care system and youth's educational outcomes might lead to

insights and policies that result in more cases of foster youth's college and university enrollment, which might have potential implications for positive social change that are consistent with and bounded by the scope of the study. In addition, the study may contribute to positive social change by helping those in child welfare design programs to support youth transitioning out of foster care. Also, understanding any gender differences revealed in self-reports of received support may help in designing gender-sensitive programs.

Summary

Chapter 1 outlined the introduction, the background of the study, the problem statement, the purpose of the study, research questions and hypotheses, theoretical and conceptual framework for the study, nature of the study, the definition of terms, assumptions, scope, delimitations, and limitations. The purpose of this quantitative study was to determine if there was a relationship between foster youth's perceived support from the foster care system and their (a) college and university enrollment, and (b) academic performance in colleges and universities if they did enroll. Attachment theory was used as a conceptual framework because within the foster care system, children have to continuously make and break attachments and bonds. The relationship, if any, of perceived support from the foster care system on foster youth's college and university enrollment was determined by logistic regression analysis. The relationship, if any, of perceived support from the foster care on foster youth's academic performance in colleges and universities was determined by bivariate correlation analysis. The difference, if any, between genders in perceived support from the foster care system was determined by a *t*-test analysis. In Chapter 2, I examine current research on college

enrollment and perceived support from the foster care system, former foster youth, and possible gender differences among former foster youth in their educational aspirations and achievement.

Chapter 2: Literature Review

Introduction

Biological parents are responsible for providing for their children until adulthood. However, this does not always happen as it should, as neglect and/or abuse of a child occurs in some families. According to the Centers for Disease Control and Prevention (2015), factors that can make the risk for neglect or abuse greater include a family history of unemployment, violence, drug or alcohol abuse, poverty, and social isolation. Ongoing violence in the community may also contribute to an environment where child maltreatment is more likely (Centers for Disease Control and Prevention, 2015). Another risk factor for child neglect is being born outside of marriage, where the presence of just one parent makes children vulnerable to multiple challenges. According to the American Academy of Child and Adolescent Psychiatry (2012), children born in the United States to teenage mothers and fathers are at risk for long-term problems in life such as school failure, poverty, physical illness, and mental illness.

When child maltreatment is discovered, officials take charge of the maltreated child or children and place them in the state's foster care system. While these children may eventually be returned to their biological parents or be assigned to the care of some other biologically related person, many stay in the foster care system for years, entering one foster home after another as they lead a young life with little stability in parenting or schooling. At the end of 2012, there were 397,122 children in foster care (U.S. Department of Health and Human Services, 2013).

However, children do not stay in foster care systems for the whole of their lives, as they have to leave at age of 18 in most states and make a transition to independent

living. This is a point where problems may arise (Atkinson, 2008). Foster youth transitioning out of the foster care system are often poorly prepared for independence. They may age out of the system with few resources and no strong attachments to any adult mentor and, as a result, face a greater risk of homelessness, unemployment, and incarceration than their peers (Krinsky & Liebmann, 2011). Such transitioning foster youth are among the most underprivileged groups in society (Mendes & Moslehuddin, 2009). Their challenges are typically due to several factors, including a history of neglect and often physical, emotional, or sexual abuse; multiple foster placements and placements with inadequate caregivers; multiple school changes; and a general lack of stability (Mendes & Moslehuddin, 2009). At a certain age, these youth are suddenly left to fend on their own, often with no caring adult to help guide them or assist them in their efforts at independence. The challenges that foster youth must face serve to decrease their ability to successfully transition from the foster care system and frustrate their employment, educational, and training opportunities (Mendes & Moslehuddin, 2009).

It is important to realize that some foster youth are disabled or have special health care needs. White and Gallay (2005) noted that a protective factor for such vulnerable youth is support provided by family and friends. This is true of all foster youth. For these youth, support may be offered by the biological family or by a foster family, or both. Those foster youth who find more stable and supportive placements with foster parents and positive interactions with caring adults have an increased chance of successfully meeting the challenges they face. Unfortunately, however, foster youth are granted their independence from the foster system abruptly, and often with no further assistance from their foster care parents (Mendes & Moslehuddin, 2009).

A second protective factor for vulnerable youth with special health needs noted by White and Gallay (2005) is success in school following transition. This, too, is likely true of other vulnerable youth, including foster youth. However, White and Gallay (2005) noted that lack of success in school following transition can be a precursor to failure in other domains, including employment, drug and alcohol ingestion, the criminal justice system, and personal relationships. This testifies to the importance of educational achievement for vulnerable youth of all types, including former foster youth.

Following this introduction and the next section on the literature search strategy, the aim of this chapter is to describe the theoretical foundation of the study and provide a critical review of the literature associated with the study. The chapter ends with a summary and conclusions. The next section addresses the literature search strategy.

Literature Search Strategy

I identified literature for this study via EBSCOHost, ProQuest Dissertations and Theses, Google, Google Scholar, Moody's, and library searches from the Walden University database. Key search terms included *U.S. foster care system*, *John Bowlby*, *attachment theory*, *foster youth's college enrollment*, *perceived support from the foster care system*, and *difference in foster youth's attitudes toward college between men and women*. Literature for this study came from publicly available peer-reviewed sources found using search engines. The next section addresses the theoretical foundation of the study.

Theoretical Foundation

The research drew on attachment theory to inform the hypotheses and make predictions about the effect of foster youth's perceived social support on their college

enrollment and academic performance. Bowlby's (1998) attachment theory maintains that an infant develops a sense of security from attachment to biological parents, especially the mother, which is important for the child's behavioral development. When an infant's caregiver is absent or is inconsistent in caring for the infant, the child develops insecure patterns of attachment. Absence of a secure emotional attachment to parents may cause developmental problems for the child (Bowlby, 1998). If the child is then taken from parents and brought into the foster care system, this may exacerbate the problems (Heineman, 2010). Ideally, the child can develop a secure attachment to foster caregivers, but this is not always the case (Weston & Cheng, 2007).

In explaining the behaviors of foster youths, some scholars emphasized the importance of attachment. Mitchell, Kuczynski, Tubbs, and Ross (2010) emphasized the importance of attachment by holding that for healthy development; children require a continuing secure relationship with a caregiver. Mitchell et al. based this statement on interviews with 20 foster children from 8 to 15 years of age. Themes that arose from the interviews included the importance to the children of staying with the same foster caregivers for substantial time and living in a stable environment. The foster children also expressed the importance of support from counselors and others.

Unrau, Seita, and Putney (2008) noted that theories of attachment can be useful in understanding former foster youth's perceptions of multiple move experiences. Unrau et al. (2008) emphasized that attachment is difficult to form for foster children who experience multiple placements with foster caregivers. The researchers interviewed 22 former foster youth between 18 and 65 years of age and found that these adults recalled the multiple moves as a chain of significant losses that left negative emotional imprints in

regard to trust and developing successful relationships. Unrau et al. (2008) noted that the common practice of changing a foster child's placement without prior warning leaves inadequate opportunity for grieving and, as a result, it becomes more difficult for the child to form attachments to adults. The researchers suggested that the foster care system develop protocols to help ensure that foster children are given the opportunity to share their emotions with a trusted adult. Unrau et al. (2008) also suggested that foster system practitioners attempt to minimize unnecessary moves and attempt to reduce negative impacts of moves to better serve foster children and youth in regard to issues of attachment, trust, and connection.

An analysis of young people from 12 to 24 years old who are homeless—without stable housing and unaccompanied by an adult—was undertaken by Heineman (2010), who emphasized the value of attachment theory for understanding issues of trust and relationship among these youth. Heineman pointed out that attachment theory can help adults better understand the reactions and behaviors of foster youth. In particular, Heineman claimed that the attachment patterns of foster youth are typically developed very early in life, and that foster care experiences will be interpreted in the light of these attachment patterns. Many foster youth develop their attachment patterns as a result of early traumatic experiences, and their responses to the foster system and parents and to other programs and adults may be dependent on those early attachment patterns. Realizing how attachment patterns form early and that the foster child's attachment pattern may be compromised by early trauma may help caseworkers, foster parents, and others to better understand why moving a youth out of an abusive environment into a safer home may not result in the child immediately feeling safe and secure. A consistent

application of caring, unconditional support for the foster youth, and respecting the youth's pace of becoming adjusted may serve to alleviate insecure patterns of attachment that the youth has developed (Heineman, 2010).

In summary, according to Bowlby's (1998) attachment theory, a secure attachment is a caring, intimate, and continuous relationship with a caregiver that normally develops when a child is an infant. However, in cases of maltreatment, the child may develop an insecure attachment pattern. Attachment theory is most appropriate for a study that examines foster youth for whom an insecure attachment pattern has developed and may even be reinforced through the foster system (Heineman, 2010). According to attachment theory, in the absence, inconsistency, or unpredictability of the parent, the infant develops one of two organized insecure patterns of attachment: ambivalent-resistant or avoidant.

As its theoretical foundation, this study applied attachment theory, which posits that secure attachments developed between children (including foster youth) and their caregivers "provide a foundation for emotional well-being" (Heineman, 2010, p. 2). In the case of foster youth, secure attachments increase their probability of success after emancipation from the foster system. Based on these principles of attachment theory, the first hypothesis of the study was that the more support foster youths believe they received from the foster system, the more likely they will attend college. Also based on the principles of attachment theory, the more support foster youths believe they received from the foster system, the more likely they will be successful in higher education if they choose to go on to a college or university, which was the study's second hypothesis. Finally, attachment theory also formed part of the basis for the study's third hypothesis,

which was that there is a gender difference among foster youths in regard to their perceived support from the foster care system. This hypothesis was motivated by findings from several studies (Courtney, Dworsky, Cusick, Havlicek, Perez, & Keller, 2007; Kirk, Lewis, Brown, Nilsen, and Colvin, 2012; Wall, Covell, & Macintyre, 1999) that there are gender differences among foster youths in their attitudes toward and achievements in higher education, and the possibility that any such differences may be caused by a gender difference in foster youth's perceived support from the foster care system.

This section focused on the theoretical foundation of the study, which was attachment theory (Bowlby, 1998). In the section I explained the basics of attachment theory, which holds that secure attachments with others form an important foundation for children and youth. In the section I also explained that secure attachments are often a serious problem for foster youth who face the situation of being taken out of their biological family and assigned to one or more foster families over time. The lack of secure attachments can then have major negative repercussions for foster youth even after aging out of the foster care system.

The next section consists of the review of literature. It is divided into five major sections. The first two sections define the term "aging out" and discuss policies related to foster youth. The third main section reviews studies that have focused on the mental health of foster youth, especially after they age out of the foster care system. The fourth section reviews studies about the postsecondary achievements of former foster youth. The fifth major section reviews studies that have investigated the possibility that there are gender differences in the postsecondary achievements and aspirations of former foster youth. A summary of the chapter follows the review of literature.

Literature Review

This section addresses research related to the problems and needs of adolescents aging out of foster care, especially as they relate to mental health and post-secondary education. Of special interest in regard to post-secondary education are studies concerned with foster youth's college enrollment and academic performance, and with possible gender differences in college achievement. First, however, the concept of aging out is defined and recent policy related to foster youth who transition out of the foster care system is outlined.

Defining Aging Out

Aging out describes children who do not live with their parents and are not adopted by 18 years of age after living in foster care (Downs, Moore, McFadden, & Costin, 2009). Across the United States, as each child enters state custody, social workers create a plan for permanency and stability in a living arrangement (State of Tennessee Department of Children's Services, 2010). Around 25,000 foster care adolescents turn 18 and thus age out of foster care each year (U.S. Department of Health and Human Services, 2011). When this occurs, these adolescents are emancipated but lose financial assistance, housing, and case management support. This raises the issue of policy that has been put in place to address these challenges, which is the topic of the next section.

Policy Related to Youth in Transition From the Foster Care System

Several studies have addressed or discussed the plight of youth in transition from the foster care system in relation to policy (Courtney & Heuring, 2005). In the 1980s, the number of children in foster care increased. As a result, there was a concomitant increase in the number of children aging out of foster care. The government addressed the issue

through policy and allocated budgetary funds for programs to help youth in foster care (Courtney & Heuring, 2005).

With the Foster Care Independence Act of 1999 (the Chafee Act), the government provided \$140 million for meeting foster children's health needs and transitional needs. However, despite such initiatives in policy, transitioning foster youths who age out are still at higher risk than their peers for problems in gaining economic self-sufficiency, finding adequate housing, physical and mental health, drug and alcohol abuse, the criminal justice system, family formation, and educational achievement (Courtney & Heuring, 2005). The next section addresses the problems and needs of adolescents aging out of foster care in regard to mental health.

Mental Health of Foster Care Alumni

Youth in the foster care system have more mental, behavioral, and developmental problems than other youth (Leslie, Gordon, Lambros, Premji, Peoples, & Gist, 2005). Foster youth who age out of the foster care system also show disproportionate rates of mental health problems (Atkinson, 2008; Courtney & Dworsky, 2006; Pecora, Jensen, Romanelli, Jackson, & Ortiz, 2009). This was an important issue for this research because the study focused on the college enrollment and achievement of former foster youth, and mental health issues for such youth have been found to predict college disengagement (Salazar, 2011).

Several studies have focused on aspects of the mental health of foster youth who have aged out of the foster care system. In the Northwest Foster Care Alumni Study, a study investigating the rates of mental health problems among young people aging out of foster care, Pecora et al. (2005) found that young foster care alumni were more likely

than their peers to experience mental health problems. Pecora et al. (2005) reviewed records of 659 alumni of the foster care system aged 20 to 33 who had spent at least 12 months in family foster care between the ages of 14 and 18 in Washington state or Oregon, and interviewed 459 of this sample. The researchers found over 50% of these alumni with clinical levels of one or more mental health problems and nearly 20% with three or more problems. Pecora et al. (2005) noted that these rates of mental health problems were substantially higher than for individuals in the same age range in the general population and that the post-traumatic stress disorder rate was as much as twice as high as for military veterans of U.S. wars.

A strength of Pecora et al.'s (2005) study is its large sample size. A limitation of the study was that the sample came from only two states, Oregon and Washington. Therefore, the findings are not generalizable because foster care systems in other states may be more or less effective as those in Oregon and Washington. As a result, the rates of mental health problems for foster youth and young people in other states may be lower or higher than those in Oregon and Washington.

Due to foster youth's high rate of mental health problems (Pecora et al., 2005), it is important to understand to what extent aging out of foster care affects foster youth's use of mental health services. To evaluate and predict how use of mental health services may change among adolescents who graduate from the foster care system, McMillen and Raghavan (2009) interviewed 325 foster youth in Missouri who were leaving the foster care system. The researchers found that mental health services use by the graduating foster youth dropped significantly across time. This drop was highest from the month prior to the youths leaving the system to the month after leaving, when it amounted to

about 60%. This reduction in usage of mental health services included youth who stopped using pharmacotherapy.

A limitation of McMillen and Raghavan's (2009) study is the fact that foster youth from only one state were interviewed. A second limitation mentioned by McMillen and Raghavan (2009) was that information about use of mental health services came only from the foster youth, and providers of the services might have contributed different information. Also, the researchers were unable to determine the quality of services that were used or whether they were indicated clinically.

Brown, Courtney, and McMillen (2015) conducted a study concerned with the behavioral health needs of foster youth who had aged out of the foster care system and the delivery of behavioral health resources to those foster youth. The researchers used a multi-state sample of 732 older adolescents who were in foster care and surveyed them for six years after they had left the foster system. The youth were first surveyed when they were 17 or 18 years old and then three more times at two-year intervals.

Brown et al. (2015) found that there was a strong need for behavioral health services after the foster youth's 18th birthday. At the same time, there was a significant reduction in the youth's use of behavioral health services. At the age of 18, over two-thirds (68.4%) of the youth had behavioral health needs, but only 55.7% were receiving behavioral health care services. The most common behavioral health issues were symptoms of depression and post-traumatic stress disorder. The researchers also found that foster youth who remained in foster care past their 18th birthday received a significantly greater amount of behavioral health services. At the age of 20, this difference amounted to it being twice as probable that youth remaining in foster care

obtained behavioral health services as those who did not remain in foster care. In discussing their findings, Brown et al. (2015) noted that there was a need for effective services targeting the behavioral health of older adolescents remaining in foster care and for ongoing services to be provided to youth who leave the foster care system.

Two strengths of Brown et al.'s (2015) study are that it had a fairly large sample size and it sampled foster youth from more than one state. Also, the researchers followed foster youth for six years, which allowed changes in behavioral health needs and services used to be observed. However, the results of the study cannot be generalized to foster youth throughout the U.S. because of differences in state foster care systems that were not taken into account in the study. A further limitation of the study mentioned by Brown et al. (2015) is that over the length of the study, the wording that was used for the survey questions was changed, which may have resulted in some differences in responses to questions.

Foster Youth in Postsecondary Education

A number of studies focusing on former foster youth who have attended college indicate that they are more likely than non-foster youth to have difficulties in college. This may lead to early exit from college. Pecora et al. (2006) found that the 2.7% college completion rate for former foster youth 25 years and older was more than eight times less than for the general population. In this section of the literature review, several studies focusing on the college achievements and preparation of former foster youth are reviewed in detail.

Salazar (2011) conducted a study to determine predictors of postsecondary college success for foster alumni. In Part One of the study, 329 foster youth alumni who

had been awarded college scholarships by one of two foster youth organizations were surveyed to determine whether after enrolling in college they had gone on to graduate or had left college and the scholarship program before graduation. A total of 65.8% of the sample had completed a bachelor's degree, 15.5% had completed a Master's or PhD degree, and 9.4% had completed only a certificate or had completed no degree. The sample was divided into two groups, those who had graduated with a bachelor or associate degree without disengaging from college, and those who had dropped out of the scholarship program and had disengaged from college at least for a period of time. Participants completed an online survey with items asking them to report their perceptions of barriers and supports they had experience both before and during their time in college.

Results of Salazar's (2011) study indicated that several factors specifically related to foster care were associated with disengagement from college. These factors included history of severe maltreatment, experience of post-traumatic stress disorder during college, and having a history of being diagnosed with any type of mental health issue. Factors also included the hours worked, perceptions of difficulty of working while going to college, and lack of sufficient support in the development of academic skills and for helping the youth to decide on a college pathway.

A limitation of Salazar's (2011) study mentioned by the author is that the sample was a convenience sample and for that reason, the reasons are not generalizable to a larger population. Similarly, the study involved correlational relationships only and therefore causal connections are only suggested. Salazar (2011) also pointed out that the youth's reports were collected after completion of college or disengagement occurred,

and the youth's recollections might have been affected by their outcome in college. Finally, the study sample was composed of youth who had been awarded a college scholarship and for that reason too, the result of the study cannot be generalized to the population of foster youth who age out of the foster system.

A study by Unrau, Font, and Rawls (2012) compared college freshmen who had aged out of the foster care system to first-time college freshmen nationally to examine college readiness, including motivation for attending college, and academic performance. The researchers surveyed a convenience sample of 81 foster youth, ages 17 to 20, who had aged out of foster care. High school grade point averages of the foster youth were significantly lower than first-time freshmen nationally.

The College Student Inventory, Form A, measured readiness for college of the former foster youth in Unrau et al.'s (2012) study with scales falling into four main categories: academic motivation, social motivation, receptivity to academic assistance, and general coping. These measures were compared to national averages for all first-time college freshmen. Academic performance was measured by university data on the foster youth compared to all first-time college freshmen at the same university at the same time.

The results of Unrau et al.'s (2012) study showed that the former foster youth were more academically motivated than first-time freshmen nationally. The foster youth sample scored significantly higher in desire to finish, intellectual interests, study habits, and attitude toward educators. The former foster youth did not score significantly differently than the national average in academic confidence. The former foster youth sample also scored higher than the national average of first-time college freshmen in social motivation in terms of leadership and self-reliance. In regard to receptivity to

student services, the former foster youth were more likely to use services dealing with academic assistance, personal counseling, and social enrichment, but less likely to use career counseling services. On the general coping scales, the former foster college freshmen scored significantly lower than the non-foster college freshmen on the family support scale. In regard to their academic performance during their first semester at the university, the performance of former foster youth was below that of their non-foster peers. While only 18% of nonfoster freshmen at the university withdrew from one or more courses within the first semester, 47% of the former foster youth freshmen did so. The average GPA of the foster youth freshmen after the first semester was also significantly lower than the average GPA of the non-foster freshmen (2.34 compared to 2.85).

Unrau et al. (2012) interpreted the results of their study as possibly indicating that foster youth's higher academic motivation, combined with lower family support, their average coping skills, and poorer academic results may tend to lead to academic failure and eventually dropping out of college. The researchers noted the need for professional outreach to assist former foster youth to transition to campus-based rather than child welfare services and to provide guidance through the challenges college students face.

Limitations of the Unrau et al. (2012) study include the survey methodology and the statistical design, which did not allow any conclusions of causality to be made. Therefore, the sample included only foster youth who had earned high enough test scores and GPAs to be admitted to a four-year college, and these individuals may have perceived themselves to be better prepared for college than other youth aging out of foster care. The former foster youth in the sample expected to enroll in a college support

program, which may have affected their survey responses. A final limitation mentioned by the researchers is that the survey asked for the foster youth's intentions rather than their actions.

A study conducted by Day, Dworsky, Fogarty, and Damashek (2011) investigated whether former foster youth enrolled in a four-year university were more or less likely to leave the university during their first year or before completing their degree compared to first-generation low-income students. The sample consisted of two groups of undergraduates who first entered the university over a nine-year period. The first group was composed of 444 former foster youth. The comparison group was 378 randomly chosen non-foster care youth who were first-generation college students. They must also have had a family income not more than 150% of the poverty level so that socioeconomic differences between the two groups would be less likely to explain any differences in the results. The independent variables for the study were having been in the foster care system, gender, and race.

Results of Day et al.'s (2011) study showed that a significantly higher percentage of former foster youth compared to non-foster youth dropped out of college by the first year's end (21% versus 13%). There were no significant differences between races or genders in percentage of former foster youth who dropped out the first year. The percentage of Whites in the foster group compared to the non-foster group who exited college by the end of the first year was significantly higher, but the percentage of African Americans and other race in the foster care group who dropped out during the first year of college was not significantly higher than for the non-foster care group. Females but not

males in the foster care group were significantly more likely to drop out than counterparts in the non-foster group.

Day et al. (2011) found that a significantly greater percentage of the foster youth dropped out before completing a degree than the non-foster youth (34% versus 18%) before completing a degree. White foster students were significantly more likely to exit college than White non-foster care students, but there was no difference between the two groups for African Americans or youth of other races. There was no significant difference between male and female foster care students in their exiting college before degree completion.

Day et al. (2011) suggested that one reason the foster care group had a higher probability of dropping out the first year and before degree completion was that they did not have substantial connections to supportive adults who could help them deal with stresses of college and life. To help compensate for this lack of informal support, the researchers suggested providing youth who age out of foster care with formal social support such as mentors. They also suggested creating campus programs to provide former foster care students with support and services through their college career.

A strength of Day et al.'s (2011) study mentioned by the researchers is that it was the first study that compared rates of college retention and graduation of former foster care students to non-foster care students with disadvantaged socioeconomic backgrounds. A limitation of the study was that it gathered data from students at only one university, which limits the generalizability of the results. Another limitation is that possible confounding variables such as prior academic results, history of placement in foster care,

and years between leaving foster care and enrolling in colleges could not be controlled because the information was not available.

A study by Day, Dworsky, and Feng (2013) used the same samples of former foster students and non-foster students as the study by Day et al. (2011). However, for the Day et al. (2013) study, the interest was in the students' graduation rate. Also, the researchers added another independent variable to their study, which was a student having a good academic standing. This was defined as having a grade point average of at least 2.0 the semester before.

The results of the Day et al. (2013) study showed a slower graduation rate for the former foster care students than for the non-foster care students (40% versus 74%) after the observation period. The foster care youth were also taking longer to graduate than the non-foster group (11 semesters versus 10 semesters median). The percentage that had left college was 33% for the foster care group and 18% for the non-foster care group, and the percentage still in college without a degree yet was 27.0% for the foster care group and 7% for the non-foster care group. The researchers also found that the difference in graduation rate for the two groups was concentrated among students with good academic standing. Day et al. (2013) concluded that graduation from college is a challenge to former foster care college students more than non-foster care students even if they achieve academically. The researchers suggested that students who were formerly in foster care may require additional academic guidance in planning coursework and in fulfilling all requirements for a degree. They suggested that more campus programs supporting former foster care students are needed.

In addition to limitations of their research that were mentioned by Day et al. (2011), the Day et al. (2013) researchers noted that their study was limited by not taking into account whether students had transferred from another college, which might affect speed of graduation. Also, the researchers did not take into account the ages of students. Finally, the researchers noted that their dependence on answers to a question on the Federal Application for Financial Aid about having been a ward of the court may have not accurately measured all the former foster care students.

A study by Thorne (2015) surveyed former foster youth enrolled at two state universities to determine their perceptions of factors that helped them enter higher education. The sample was 33 former foster youth who were in foster youth support programs at the two universities. These students were administered a 19-item questionnaire about three categories of factors related to academic success identified in the literature. These were social support, community participation, and noncognitive factors, especially academic perseverance.

Results of Thorne's (2015) study showed that 71% of the former foster students reported that social support was important for their college transition, with 27% identifying it as the most important factor. The most frequently cited source of adult support was educators, including teachers, counselors, and mentors. The next most frequently mentioned source was individuals in the foster system including social workers and foster family members. The third most frequently mentioned source of adult support was biological family members. The former foster youth cited informational and personal support as the most important kinds of support. About one-third of the participants did not mention an adult as having supported their college aspirations, and

those students generally indicated that personal strength was the most important factor in their transition. Although most of the students indicated that they had been involved in extracurricular activities in high school, few mentioned their involvement as being an important factor in their going to college. Several of the students mentioned their involvement in college readiness programs as being important. Personal strengths were cited as the most important factor for transitioning to college by 33% of the former foster youth.

Limitations of the study mentioned by Thorne (2015) include the restriction of the sample to two universities in a single state, the size of the sample, and the descriptive nature of the research, all which limited the study's generalizability. The researcher mentioned that by being restricted to former foster youth who graduated from high school and went to college, the sample was not representative of all former foster youth. Thorne (2015) also noted that there may have been both response bias and nonresponse bias in the data gathered in the survey. Finally, the study did not take into account variables that might be important factors in helping aging-out foster youth in their college transition. One important factor not measured may have been the extent of traumatic events that the former foster youth went through in childhood or adolescence.

Rios (2009) conducted a phenomenological study about the perceptions of former foster youth enrolled in a college concerning external and internal factors that influenced their graduating from high school and enrolling in college. The sample size was 24 students enrolled in Florida colleges. The researcher held semi-structured interviews to determine the students' perceptions about factors influencing their academic careers.

Qualitative analysis of the interviews held by Rios (2009) showed two emerging themes, which were academic barriers and academic support. The participants identified four types of academic barriers. These were barriers related to (a) school, (b) foster care, (c) peers, and (d) internal factors. School barriers included non-empathetic teachers and administrators and absence of academic rigor. Foster care barriers were poor foster placements and caseworkers who were not informative. Peer barriers amounted to other foster youth who were abusive and unsupportive of their academic efforts. Internal academic barriers included feelings of anger that had a negative effect on their academic progress and bad behavior, such as fighting, which slowed their progress by resulting in academic penalties such as suspension.

In regard to academic support for their academic progress, Rios (2009) identified four types of support. These were related to school, foster care, the community, and personal strengths. School-related academic support included teachers who cared, helpful counselors, and an academic environment that was challenging. Foster care supports included foster parents and caseworkers who emphasized the value of higher education. Community supports consisted of conscientious biological relatives such as aunts, uncles, and siblings, and education mentors. Personal strengths that were mentioned as supporting the foster alumni's academic progress included self-efficacy, resourcefulness, diligence, motivation, goal orientation, perseverance, and responsibility.

In conclusion, Rios (2009) emphasized the importance of educators being empathetic toward foster youth and their unique circumstances and supporting them in the pursuit of higher education with encouragement and information. Rios (2009) did not mention limitations of his study, but one limitation is that the sample size was not large.

Unfortunately, the participants were students of only Florida colleges. Both of these limitations decrease the generalizability of the study results.

Foster Care System Support and College Achievement

A key issue for foster youths is the support they receive from the foster care system (Courtney & Heuring, 2005). Because foster youths do not generally live with biological family members, they are more likely to have a less than supportive family. Foster youths may be required to change schools and foster homes, resulting in a lack of steady friendships. Because of such issues, it is important to create networks of support for foster youths (Courtney & Heuring, 2005). There should be efforts made at improving natural supports and building new communities of support. Where possible, foster youths should be put in contact with extended family members and efforts made to encourage relationships with extended family members to help establish a natural support system (Courtney & Heuring, 2005). Caseworkers should encourage such relationships since extended family can help provide the adolescent with adequate support for transitioning into adulthood.

There is evidence that the social support or lack thereof that they receive from the foster care system affects the educational achievement of former foster youth. This is indicated by the results of several studies reviewed in the previous section. For example, findings of the study by Rios (2009) suggested that a main factor in the academic achievement of former foster youth who enroll in college consists of elements in the foster care system. Foster care alumni interviewed by Rios mentioned that the foster care system had provided both barriers and supports for their college endeavors. Barriers mentioned were poor foster care placements and caseworkers who were not informative.

Supports included those foster parents and caseworkers who promoted the benefits of college education.

Several other studies reviewed in the last section also had results that are relevant to the issue of the support that foster care alumni in college received from the foster care system. The study by Salazar (2011) reviewed earlier found that lack of sufficient support in developing academic skills and helping to decide on college direction were negative predictors of college success. Such support is something that can be provided by the foster care system in the form of caseworkers and caring foster care families.

Unrau et al. (2012) found that although former foster care college freshmen scored higher than non-foster college freshman on several scales of their survey, on the coping scales the former foster care students scored significantly lower than non-foster care students. This suggests that the former foster care students may not have received sufficient encouragement or other social support for attending college from the foster care system in the form of foster care families.

Thorne (2015) found that the second most frequently cited source of adult support for former foster care students enrolling in college was people in the foster system. These included foster family members and social workers. This finding indicates that for these students, the foster care system was a positive influence on their educational aspirations. However, a third of the former foster care youth did not mention any adult as having been supportive of their attending college, which suggests that for these individuals, the foster care system did not provide important support for their enrolling in college.

The results of these studies (Salazar, 2011; Thorne, 2015; Unrau et al., 2012) suggest that the foster care system including caseworkers and foster family members can

play an important role in supporting foster youth in entering college and doing well there. Support is important for aging-out foster youth, as it helps to ease the stress of transitioning (Brammer, 1992). Support from the foster care system, especially foster families, may take the form of providing useful information and encouragement for entering college to the foster youth. It may also take the form of tangible support by assisting with college demands (Courtney & Barth, 1996). This could include helping the youth through the process of preparing applications, financial statements, and transcript requests. It takes a lot of time to apply to college, with many enrollment forms and a long process of applying for financial aid, and college applications may include questions that are difficult for the adolescent to answer (Wald & Martinez, 2003). Finally, support may take the form of emotional, affectionate, and social support to create feelings of attachment to members of foster families. This last form of support may provide a firmer emotional basis to the foster youth for transitioning out of foster care and into higher education.

On the other hand, a lack of support from the foster care system can be damaging to foster youth. If the foster care system does not assist foster youths with the process of choosing and enrolling in a post-secondary institution, the lack of assistance may result in the foster youths being less likely than their peers to attend college or university. Foster youths may be disadvantaged when they enter school because they do not have early training to promote problem-solving skills. Foster youth's early slowdown in academic performance may increase in severity later, which may create a gap in academic performance between them and their peers (Hass & Graydon, 2009).

Very limited research has been done on how perceived support from the foster care system relates to foster youth's enrollment in colleges and universities and their academic performance after they enroll. One purpose of this quantitative study was to help fill this gap in research by determining whether there is a positive correlation between foster youth's perceived support from the foster care system and their enrollment in colleges and universities, and their academic performance if they do attend. The next section addresses research on possible gender differences in former foster youth's achievement in college, as such differences, if they exist, may be at least partly caused by gender differences in foster youth's perceptions of support from the foster care system.

Possible Gender Differences in College Achievement

The findings of a few studies suggest that there are gender differences in the success of foster youth who attend college. One such study reported on the Midwest Evaluation of the Adult Functioning of Former Foster Youth conducted by Chapin Hall Center for Children at the University of Chicago (Courtney et al., 2007). A sample of 732 foster youth from Illinois, Iowa, and Wisconsin were first interviewed at 17 and 18 years of age, with most of these youth being again interviewed one to two years later and then again two years from the second interview. At the third interview, 591 of the original 732 youth were interviewed, most being 21 years of age. Data for one of the individuals interviewed at the third interview was lost. This resulted in a final data set of 590 former foster youth.

One of the issues that Courtney et al. (2007) were interested in was the educational achievements of the foster alumni at age 21. The researchers found that a significantly higher percentage of the females than males had one or more years of

college but no degree (33.4% females versus 21.5% males). In addition, significantly more females than males were currently enrolled either fulltime or part-time in a two- or four-year college (27.7% versus 19.7%). Females were enrolled at about twice the rate of males in full-time programs (21.0% versus 10.6%), and enrolled females were enrolled in two-year colleges at a higher rate than enrolled males (61.6% versus 46.3%).

These results of the Courtney et al. (2007) study suggest that the academic achievements of female former foster youth were somewhat greater than the males' achievements. A possible factor accounting for this difference may be the difference between the genders in regard to their involvement in the criminal justice system. The researchers reported that the level of involvement with the criminal justice system was significantly higher for men than for women, with 44.6% of males and 16.4% of females having spent at least one night in a correctional facility since the second interview.

A strength of Courtney et al.'s (2007) study is that it followed the same group of foster youth for a period of over four years to learn what changes may have taken place for the group during that time. Another strength is that some of the results, including the education results, were divided by gender. A limitation of the study is that it did not attempt to investigate any causal factors to account for the reported results. Another limitation is that the researchers followed foster youth from only three states, and foster youth from other states with different foster care systems might show different results from the sample.

Courtney, Dworsky, Lee, and Raap (2010) followed up on Courtney et al.'s (2007) report on the Midwest Evaluation of the Adult Functioning of Former Foster Youth conducted by Chapin Hall Center for Children at the University of Chicago by

reporting the results of interviewing the former foster youth two years later. Courtney et al. (2010) found that at ages 23 and 24, females who had attended one or more years of college totaled 38%, while males who had one or more years of college totaled 28%. In addition, more females compared to males were currently enrolled (15.7% versus 10.4%). The researchers noted that this was a large drop for both genders from the rates two years before when 27.7% of foster alumni females and 19.7% foster alumni males were currently enrolled. Some of this decrease was apparently due to students having received a degree during the previous two years. However, the total graduation rates for the former foster care students were low, with percentage of females having a degree being significantly higher than for males (8.4% versus 4.7%).

The results of one study (Day et al., 2011) indicated no significant difference in educational achievement between male and female foster care alumni enrolled in higher education. This was the Day et al. (2011) study reported in the previous section. Researchers in that study examined whether there were differences in the former foster care group between males and females (260 females, 184 males) in whether they dropped out of college by the end of their first year or before degree completion. In each case, Day et al. (2011) found that female foster alumni students dropped out at a lesser percentage than male foster alumni students. However, the differences between males and females were not statistically significant in either case.

Using the same database as Day et al. (2011), Day et al. (2013) found that the percentage of females and males who had graduated from a four-year university by the end of the observation period was statistically the same, as was the percentages of males

and females who had dropped out and the percentages that were currently enrolled in the university.

Kirk et al. (2012) conducted a study that examined possible gender differences in college expectations and readiness in a sample of foster youth. Participants were 550 foster youth who were applying for a statewide college access program that was federally funded. The researchers surveyed these foster youth with a 20-item survey to measure college expectations, college preparation, college efficacy, and academic performance. Analysis of survey results showed that foster care females were more than twice as likely than foster care males to expect to earn a bachelor's or higher degree, and they were 2.65 times more likely to aspire to a higher degree. In addition, females were found to be significantly higher in academic performance. However, the two genders were not significantly different in regard to college preparation and college efficacy.

A follow-up survey was administered to 383 students in the Kirk et al. (2012) study after the foster youth had gone through the college access program to again measure college expectations. Analysis of results showed that significantly more of both males and females expected to attend college after the program than before. The percentage of females who expected to attend college was 94.8%, while the percentage of males expecting to attend was 86.5%. However, expectations of earning a higher degree were not significantly higher for either gender than before the program. In this final survey, 41.3% of females and 15.3% of males expected to attend graduate school. The researchers concluded that males in the foster system may be at greater risk for educational underachievement and may need special programming to help them increase their post-secondary educational achievements.

A limitation of their study reported by Kirk et al. (2012) is the fact that the participants were limited to individuals applying for and in a statewide college access program, so the results may not be generalizable to other groups of foster youth. In addition, confounding variables such as socioeconomic status, urban environment, teachers, and school climate may have changed the association of gender with the dependent variables. In addition, the results covered only two points of time, and a variable such as college expectations may be affected by many factors over time. Finally, the measures were self-reported, which is susceptible to social desirability bias. Although there may sometimes be social desirability or dishonesty problems for self-report surveys, these are typically very limited, and research shows that usually, the use of self-report surveys is the most valid way to measure participants' opinions, attitudes, beliefs, and feelings (Korb, 2011).

The reviewed studies comparing male and female former foster youth in regard to college achievement and college preparation have mixed results (Courtney et al., 2007, 2012; Day et al., 2011, 2013; Kirk et al., 2012). However, the results of most of the studies suggest that the achievements and aspirations of female foster alumni are significantly higher than those of male foster alumni (Courtney et al., 2007, 2012; Kirk et al., 2012). This result is relevant to the second purpose of the study, which was to determine whether male and female foster youths differ in their perceived support from the foster care system. If the two genders were found differ in their college achievement or their aspirations, as most of the studies reviewed above found, then this might be partly due to females and males having different perceptions about the support they received from the foster care system.

Summary and Conclusions

This chapter consisted of a review of literature relevant to the purposes of the research, which were to determine whether there is a relationship between foster youth's perceived support from the foster care system and their college enrollment and academic performance, and whether there are gender differences in the youth's perceived support from the foster care system. Following an introduction and overview of the literature search strategy, an explanation of the theoretical foundation of the study was given. This theoretical foundation was attachment theory, which informed the hypotheses. Bowlby's (1998) attachment theory asserts that in the absence, inconsistency, and unpredictability of a committed parent or caregiver, the infant develops one of two organized insecure patterns of attachment: ambivalent-resistant or avoidant. According to attachment theory, attachment with families and institutions alleviates the transition to adulthood (Cusick et al., 2010).

Following explanation of the study's theoretical framework, a review of literature specifically related to foster youth in higher education was presented. After defining the term "aging out" and discussing policy issues related to foster youth, the review was divided into four main sections. The first section reviewed literature relevant to the mental health of foster youth aging out of the system and gave evidence that mental health issues for these individuals are more prevalent than for young people in the general population (McMillen & Raghavan, 2009; Pecora et al., 2005). The second section reviewed studies related to the educational achievements of aging-out foster youth. This section presented evidence that the college achievement level of former foster youth is lower than the level for other college students. The third section presented evidence from

the studies reviewed in the second section that the support that former college youth believe they received from the foster care system has impacts, either negative or positive, on their post-secondary educational efforts. The fourth section reviewed literature suggesting that there is a gender difference in the higher education aspirations and achievements of foster care system alumni, with females aspiring and achieving at a significantly higher level than males. However, at least one study's results called this into question.

This review of literature helps make clear that there are gaps in research about how former foster youth's achievements in higher education are related to their perceived support from the foster care system and about possible gender differences among former foster youth in college achievement. Which may be related to the perceived support the youth received from the foster care system. If they have attended an institution of higher education. In particular, the review shows that there have apparently been no previous studies that investigated whether there is a bivariate correlation between former foster youth's perceptions of the social support they received from the foster care system and their attending or not attending an institution of higher education. There have also apparently been no previous studies investigating whether there is a bivariate correlation between former foster youth's perceptions of the social support they received while in the foster care system and their academic achievement. Additionally, there are no previous studies that investigated whether there is a significant statistical difference between genders of former foster youth in their perceptions of the social support that was provided to them when they were in the foster care system. The next chapter will explain the study's methodology.

Chapter 3: Methodology

Introduction

This quantitative study had three purposes. The first goal was to determine whether there is a relationship between foster youth's perceived social support from the foster care system and their college and university enrollment. The second goal was to determine whether there is a relationship between foster youth's perceived social support from the foster care system and their academic performance in colleges and universities. The third goal was to determine whether there is a gender difference in foster youth's perceived social support from the foster system.

In this chapter, I explain the methods used to collect and analyze data for the study. The chapter includes three main sections following this introduction. The first section provides an overview of the study's research and design rationale. The second section details the methodology used, including population and sampling procedures; procedures for recruitment, participation, and data collection; and the instrumentation and operationalization of constructs, including the data analysis plan. The third section focuses on threats to internal and external validity and includes a discussion of ethical procedures. The three main sections are followed by a brief summary of the chapter. Next, I explain the research design and its rationale.

Research Design and Rationale

The study's research questions and their associated null hypotheses were the following:

RQ1: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their college and university enrollment?

*H*₀₁: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their college enrollment.

RQ2: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their academic performance in colleges and universities?

*H*₀₂: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their academic performance in college.

RQ3: Is there a difference between genders in foster youth's perceived support from the foster care system?

*H*₀₃: There is no statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

For RQ1 and RQ2, the independent variable was foster youth's perceived social support from the foster care system, and the two dependent variables were foster youth's college and university enrollment and their academic performance in colleges and universities if they had enrolled. For RQ3, the independent variable was foster youth's gender, and the dependent variable was their perceived social support from the foster care system.

Given the study's objectives and research questions, a quasi-experimental correlational and comparative design was appropriate. For the first two research questions, a correlational design was appropriate because the study's goals were to determine whether there were correlations between foster youth's perceived support from the foster care system and their (a) post-secondary institution enrollment, and (b)

academic performance in these institutions. Use of correlational methods enabled determination of any relationship between foster youth's perceived social support from the foster care system and their college and university enrollment and academic performance in colleges and universities. For the third objective and research question, a comparative design was appropriate because the aim was to compare foster youth males and females in regard to their perceived social support from the foster care system. This comparison was made by the two-tailed independent samples *t*-test procedure.

The design choice in this study is consistent with research designs that advance knowledge in the discipline (Salazar, 2011; Unrau et al., 2012). Correlational designs are especially appropriate when the objective is to determine whether two or more measures are statistically related (Creswell, 2014). The study included correlational and comparative methods because in the study I sought to determine whether there are statistically significant correlations between relevant variables and a statistically significant difference between males and females in regard to one variable.

I administered a descriptive survey to assess whether foster youth had attended college and their academic performance if they had attended college. The participants completed the MOS Social Support Survey (Sherbourne & Stewart, 1991), which has documented reliability and validity. There were no time and resource constraints consistent with the design choice.

This section addressed the design choice in this study in light of the three research questions that were investigated. In the next section, the methodology is addressed.

Methodology

This section consists of six subsections. The first two subsections focus on the population under investigation and the procedures for sampling the population. The third subsection explains the procedures used for recruitment, participation, and data collection. The focus of the fourth section is the study's instrumentation. I explain operationalization of variables in the fifth section. I present the plan for analyzing the data in the sixth section. The next section describes the population being examined.

Population

The target population under investigation was young adults aged 18 to 24 years who were former foster youths in the custody of the Georgia Child Welfare Department of Children but had since transitioned from foster care. The Circle Ranch organization (n.d.), a nonprofit organization dedicated to the well-being of Georgia foster youth, reported that more than 700 foster youth age out of the Georgia foster care system each year. The population of 18 to 24-year-old youths consisted of individuals who had transitioned out of the system during the past seven years. Therefore, the population of 18 to 24-year-old former foster youth who had transitioned from the foster care system was estimated to be 700 per year multiplied by seven years, or 4,900 individuals. The next subsection describes the sampling and the sampling procedures used for the study.

Sampling and Sampling Procedures

I utilized a convenience sample derived from the population of young adults aged 18 to 24 years who had transitioned from the Georgia Child Welfare Department of Children foster care program. Convenience sampling is a nonprobability sampling procedure that may be used when probability sampling is impossible (Creswell, 2014).

I conducted a power analysis to determine the minimum sample size required to detect possible relationships between variables for the three statistical procedures used, which were logistic regression, linear regression, and *t* test. For the logistic regression analysis, the G*Power statistical program (Faul, Erdfelder, Buchner, & Lang, 2009) showed that for a statistical significance level of .05, a statistical power of .80, and a medium-sized effect indicated by an odds ratio of 2.0, at least 113 foster youth were needed to detect a significant association between the independent and dependent variables. For the linear regression analysis, the G*Power statistical program (Faul et al., 2009) showed that for a statistical significance level of .05, a statistical power of .80, and a medium-sized effect indicated by $r = .30$, at least 102 foster youth were needed for the tests. For the two-tailed *t* test, using a statistical significance of .05, a statistical power of .80, and a medium-sized effect of .50, a minimum of 128 participants were needed, 64 for each gender (see Fritz, Morris, & Richler, 2012).

Because the sample size had to be large enough to provide adequate power for all of the statistical analyses, a minimum of 128 participants were needed. Given the estimated size of the population ($N = 4,900$) and an expected response rate of at least 10% for an external survey distributed to individuals outside an organization (Fryar, 2015), these minimum sample sizes were expected to be achieved. The next subsection describes procedures for recruiting participants and for data collection.

Procedures for Recruitment, Participation, and Data Collection

Potential participants were recruited with the assistance of three different organizations. The first of these organizations was Georgia Empowerment, a foster youth advocacy organization that is an initiative of the Multi-Agency Alliance for Children, Inc.

(MAAC), a collaborative of Georgia agencies dedicated to at-risk youth and families. The director of MAAC agreed to use its resources to publish an online invitation to former foster youth to take part in the study (Appendix D). The invitation included information about the study and a link to it for the convenience of former foster youth who wished to participate. Participants agreed to take part in the study by clicking on the link to the online survey.

The survey was left online for several weeks after the initial publication of information about the study in the MAAC newsletter and on MAAC's Facebook page. When it was determined that an insufficient number of former foster youth had completed the survey after several weeks, two other organizations were contacted to invite former foster youth to take part in the study. One of these organizations was Chris 180, an organization dedicated to the psychological well-being of children, youth, and families. The director of Chris 180 agreed to publicize the survey at the transitional living facilities operated by the organization by sending e-mails to the residents at the living facilities explaining that the study was for former foster youth 18 to 24 years of age (see Appendix E). The e-mail included a link to the online survey and informed former foster youth that they could take the study online on their private cell phone or personal computer.

The second additional organization that agreed to assist in enlisting participants was the Georgia Chapter of Foster Care Alumni of America (FCAA). The president of the chapter agreed to post an invitation to participate in the study to former foster youth on the FCAA website and FCAA social media sites (see Appendix F). The invitation included a link to the online survey,

After following the link to the online survey, participants were provided with an informed consent document with a Flesch-Kincaid reading level of 9.9 prior to entering the survey. The informed consent document emphasized the study's confidential and anonymous nature and its risks and benefits, advised participants that they could withdraw from the study at any time, informed them that they could receive a summary of the results of the study when it was completed by contacting the researcher via e-mail, and asked for the participant's agreement to take part in the study. Once participants submitted their agreement, they were taken to a demographic questionnaire that asked for gender, age, ethnicity, and number of years in the foster system (Appendix A). By clicking on a *Submit* button after completing the demographic questionnaire, participants were taken to the remaining parts of the survey. The survey was expected to take less than 10 minutes to complete. After completing the survey, participants clicked *Submit* and then exited.

Instrumentation

The MOS Social Support Survey (Sherbourne & Stewart, 1991) was utilized to determine perceived support from the foster care system. The MOS Social Support Survey (Appendix B) is a 19-item self-report questionnaire that measures the degree of social support that individuals perceive they receive from an agency or program. The instrument's items are divided into four main categories—emotional/informational support, tangible support, affectionate support, and positive social interaction—and include one additional uncategorized item. Responses are made on a five-point scale ranging from *None of the time* to *All of the time*. For each participant, the average

response to all items on the instrument was calculated. No items on the survey are intended to be reverse scored.

The instrument was obtained through the website <http://www.rand.org>, which contains a link to the MOS Social Support Survey (Sherbourne & Stewart, 1991). Permission was not needed to use the survey for academic research because it is publicly available on the Rand Organization website. The wording of the survey was slightly changed from present to past tense. The Flesch-Kincaid reading level of the MOS Social Support Survey (Sherbourne & Stewart, 1991) is 9.0. The instrument takes about 10 minutes to complete, so participation in the study was deemed to take about 15 minutes.

Sherbourne and Stewart (1991) developed the MOS Social Support Survey to examine four major aspects of support: tangible support, emotional/informational support, affectionate support, and positive social interaction. Participants were instructed to think particularly about the support they received while in foster care in responding to the items. The MOS Social Support Survey (Sherbourne & Stewart, 1991) uses a five-point Likert scale ranging from 1 to 5 (1 = None of the time, 2 = A little of the time, 3 = Some of the time, 4 = Most of the time, 5 = All of the time). The scale includes items such as: "Someone you can count on to listen to you when you need to talk," "Someone to give you information to help you understand a situation," "Someone to give you good advice about a crisis," "Someone to confide in or talk to about yourself or your problems."

Sherbourne and Stewart (1991) used the MOS Social Support Survey in the assessment of 2,987 individuals and found a Cronbach's alpha value of .91, which is satisfactory by Nunnally's (1978) criterion of .70 for the Cronbach's alpha internal

reliability measure. Sherbourne and Stewart (1991) also provided evidence for construct and concurrent validity by finding that among the same sample of 2,987 adults, scores on the MOS Social Support Survey (Sherbourne & Stewart, 1991) were correlated at the $p < 0.01$ level with several health and well-being measures. These included having negative correlations with loneliness ($r = -0.67$) and emotional role limitations ($r = -0.29$) and positive correlations with mental health ($r = 0.45$), marital functioning ($r = 0.56$), and family functioning ($r = 0.53$). The MOS Social Support Survey (Sherbourne & Stewart, 1991; Appendix B) was appropriate for the study because a main objective of the study was to measure foster youth's perceptions of the social-emotional support they received from the foster care system.

Three further questions were asked of foster youths. First, they were asked whether they had attended college, university, or some other post-secondary school. Their answers to this question were used to determine the enrollment of the participants at an institution of higher education. Participants who responded that they had been enrolled were asked to report how many credit hours they had earned at such institutions and their cumulative grade point average (CGPA) in earning those hours. These are two measures used by the U.S. Department of Education to help determine whether higher education students are making satisfactory academic progress (U.S. Department of Education, 2016). For this study, the number of credit hours earned by a student were multiplied by their CGPA to give a measure of their academic achievement while enrolled at an institution of higher education. The next subsection explains the operationalization of the variables.

Operationalization

The continuous independent variable for the study's first two research questions was foster youth's perceptions of the support they received from the foster care system. The dependent variables for the research questions were foster youth's college and university enrollment and their academic achievement in colleges and universities if they had attended.

The independent variable of foster youth's perceived support from the foster care system was defined as participants' perception of the social-emotional support they received from the foster care system, such as provision of community-based resources and education and any other support they received from the foster system. The MOS Social Support Survey (Sherbourne & Stewart, 1991; Appendix B) was utilized to determine foster youth's perceptions of their overall support from the foster care system. Participants' perceptions of the social support they received from the foster system was determined by their responses to items on the instrument. An example of one of the items is an item that asked participants to report how often they received support in the form of "Someone who gave you good advice about a crisis." The response scale for each item ranged from 1 (None of the time) to 5 (All of the time). For each participant, the average score on the 19 items of the MOS Social Support Survey (Sherbourne & Stewart, 1991) provided a total average score (Rand Health, 2016).

The dependent variable consisting of foster youth's post-secondary school enrollment was defined as whether or not they had enrolled in an institution of higher education. Foster youth's college and university enrollment was assessed by asking participants the following question: "Have you attended, or are you currently attending, a

college, university, technical school, or other post-secondary school since leaving the foster care system?” Participants answered indicating either “No” or “Yes.” The dependent variable of school enrollment was thus a dichotomous categorical variable that could take either of the two values of No or Yes. An appropriate statistical procedure to use when the dependent variable can take only two values is logistic regression (Burns & Burns, 2008). Therefore, logistic regression was conducted to determine whether there was a statistically significant association between the independent variable of participants’ perceived social support from the foster care system and their having attended an institution of higher learning.

For foster youths who indicated that they had attended college or university, the continuous dependent variable of academic performance in colleges, universities, and technical schools was defined as their academic performance in all higher education institutions they had attended as indicated by their completed credit hours multiplied by their cumulative grade point average (CGPA). Foster youth’s academic performance in attended institutions was assessed by asking them to report what was the number of credit hours they had completed and their CGPA for all post-secondary schools they had attended. Linear regression analysis was performed to determine whether there was a statistically significant relationship between the continuous independent variable of participants’ perceived support from the foster care system and the continuous dependent variable of their academic performance.

For the third research question, the independent variable was participant gender. This was determined by a question on a brief demographic questionnaire asking participants to report their gender (Appendix A). The dependent variable for this research

question was the same continuous variable that served as the independent variable for the first and second research questions. That is, the variable was determined by participants' overall evaluation of the social support they received from the foster care system as indicated by the average of their responses to the 19 items on the MOS Social Support Survey (Sherbourne & Stewart, 1991). A two-tailed independent samples *t*-test was used to determine whether there was a significant statistical difference between males and females in regard to their perceived social support from the foster care system, which provided an answer to the study's third research question. The next subsection explains the data analysis plan.

Data Analysis Plan

SPSS version 24 was used for the study. Logistical regression, linear regression, and two-tailed independent samples *t*-test procedures were performed to test the hypotheses. If there were missing responses to an item on one of the subscales of the MOS Social Support Survey (Sherbourne & Stewart, 1991), the missing responses were replaced by the average over the non-missing items on that subscale. Mean data replacement is recommended by Hair, Hult, Ringle, and Sarstedt (2014) if missing data is less than 5% of responses on an item. If missing data was more than 5% on an item, mean replacement was based on the item mean for the participant's demographic subgroup and the mean of other items on the construct as suggested by Hair et al. (2014). If the missing response was to the uncategorized item on the MOS Social Support Scale (Sherbourne & Stewart, 1991), the missing response was replaced by the average of all non-missing items on the MOS Social Support Scale (Sherbourne & Stewart, 1991). The procedure for handling missing responses was followed by determining any outliers. This was done by

using the method of Sunith, BalRaju, Sasikiran, and Ramana (2014), which is to multiply the difference between the third and first quartiles of the dataset by 1.5 and then add this result to the third quartile, with anything above that value being an outlier. Followed by subtracting 1.5 times the result from the first quartile, with anything below that value being an outlier (Sunith et al., 2014). Any outlier responses were to be discarded.

After determining any outliers, Cronbach's alpha was calculated on participants' responses to determine the internal reliability of the MOS Social Support Survey (Sherbourne & Stewart, 1991). Participants' average scores on the 19 items of the MOS Social Support Survey (Sherbourne & Stewart, 1991) were used to measure the independent variable of participants' overall perceptions of support from the foster care system.

The research questions and hypotheses for the study were the following:

RQ1: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their college and university enrollment?

H₀1: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their college enrollment.

H_a1: There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their college and university enrollment.

RQ2: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their academic performance in colleges and universities?

H₀₂: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their academic performance in college.

H_{a2}: There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their academic performance in colleges and universities.

RQ3: Is there a difference between genders in foster youth's perceived support from the foster care system?

H₀₃: There is no statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

H_{a3}: There is a statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

To address Research Question 1, logistic regression was conducted to measure the relationship between the independent variable of foster youth's overall perceived support from the foster care system and the dependent variable of their college and university enrollment. The logistic regression revealed any statistically significant relationship between the independent and dependent variables. The .05 probability level indicated statistical significance.

To address Research Question 2, a linear regression procedure was conducted to measure the relationship between the independent variable of foster youth's overall perceived support from the foster care system and the dependent variable of their academic performance in colleges and universities if they had attended. The regression revealed any statistically significant relationship between foster youth's overall perceived

support from the foster care system and their achievement in college or university. The .05 probability level was chosen to indicate statistical significance.

To address Research Question 3, a two-tailed *t*-test for independent samples was performed to determine whether there was a statistically significant mean difference between males and females in regard to the dependent variable of the foster youth's overall perceived social support from the foster care system. For this test, the .05 probability level indicated statistical significance.

Threats to Validity

This section consists of three subsections. The first subsection describes threats to external validity, while the second describes threats to internal validity. The third subsection describes threats to construct validity.

Threats to External Validity

A convenience sample of young adults who had transitioned from the foster care program of the Georgia Child Welfare Department of Children was used. The participants included men and women in the age range from 18 to 24 years. Upon notification of the study, some foster youths self-selected themselves to take part in the study. Because the sample was not randomly selected and participants self-selected, it cannot be assumed that the sample was representative of the population of individuals 18-24 who have transitioned out of the Georgia state foster care program. Therefore, the results for the sample are only suggestive for that population (Heckman, 2010).

Threats to Internal Validity

There were several threats to internal validity. First, due to the self-selection nature of the sample, selection bias may have occurred, with there being a relevant

difference between 18-24 years old foster youth who participate in the study and those who do not. Furthermore, events may have occurred to participants during the study that influenced results but had no relationship to the independent variable (Campbell & Stanley, 1963).

Threats to Construct Validity

Threats to construct validity included possibilities that an instrument did not measure the construct it was intended to measure. In the case of the MOS Social Support Survey (Sherbourne & Stewart, 1991), the survey was intended to measure the degree of social support that former foster youth perceive they received from the Georgia State foster care system. A particular threat to construct validity was the possibility that situational variables (McLeod, 2018) might have influenced the responses that participants provided to items on the MOS Social Support Survey (Sherbourne & Stewart, 1991). For example, the youth's mood at the time of taking the survey might have influenced the way in which he or she answered the items. In addition, it was possible that social desirability bias might have affected participants' responses, leading them to respond to items in the way they thought would be most socially desirable (King & Bruner, 2000). In each case, the participant's perceptions of the support received from the foster care system may have been affected by something more than the actual social support he or she received.

Ethical Procedures

The present study conformed to the ethical guidelines for the Protection of Human Subjects set forth by the American Psychological Association (Smith, 2003) and federal laws (45CFR, Part 46.102;46.103[c]). In addition, any agreements needed to gain access

to participants or data were obtained in the form of dated signatures. Institutional permissions including Institutional Review Board approvals were obtained (Walden Institutional Review Board approval no. 08-08-17-0201969).

Participants were given an informed consent agreement form that explained how the researcher got access to the Georgia Empowerment newsletter and Facebook page and explained the anonymity and confidentiality of the study and the participants' rights. Participants were given the right to withdraw from the study without prejudice. Furthermore, participants were informed that the risks associated with participation would not surpass those of daily professional activities. No names or identifying information were recorded on the surveys. To protect further the anonymity of the participants, a third-party contractor, Survey Monkey, collected data.

A random identification number assigned by the third-party contractor identified each participant. The researcher had access to the data and protected all data collected, securing it in computer files in her password-protected computer. All data will be destroyed after five years from completion of the study.

Summary

The study used a correlational and comparative research design. The study sought a convenience sample of a minimum of 128 young adults aged 18 to 24 years who were in the foster care program of the Georgia Child Welfare Department of Children and who had since transitioned from foster care. Participants were asked to complete an online survey consisting of five demographic questions (Appendix A), the MOS Social Support Survey (Sherbourne & Stewart, 1991; Appendix B), and two questions asking them

whether they had attended an institution of higher education and, if so, what was their most recent cumulative GPA (Appendix C).

Logistic regression and linear regression analyses were used to address the study's first two research questions. Participants' perceptions of the overall support they received from the foster care system were compared to their responses to the two questions asking whether they had attended college or university and, if so, what was their cumulative GPA. Based on these analyses, the study's first two research questions were answered and the hypotheses were evaluated.

The study's third research question was addressed by performing a two-tailed independent samples *t*-test to compare the two genders in regard to their overall perceived social support from the foster care system. Based on this analysis, the study's third research question was answered and its hypotheses were evaluated. Chapter Four reports the results of the study.

Chapter 4: Results

Introduction

The purpose of this study was twofold. The first purpose was to determine whether there are relationships between former foster youth's perceived support from the foster care system and their (a) college and university enrollment, and (b) academic performance in colleges and universities. The second purpose was to determine whether there is a difference between male and female foster youth in their perceived support from the foster care system.

The study had three research questions along with their associated hypotheses. The research questions and hypotheses were as follow:

RQ1: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their college and university enrollment?

H_01 : There is no statistically significant relationship between foster youth's perceived support from the foster care system and their college enrollment.

H_{a1} : There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their college and university enrollment.

RQ2: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their academic performance in colleges and universities?

H_02 : There is no statistically significant relationship between foster youth's perceived support from the foster care system and their reported academic performance in colleges and universities.

H_{a2} : There is a statistically significant positive relationship between foster youth's perceived support from the foster care system and their reported academic performance in colleges and universities.

Research Question 3: Is there a difference between genders in foster youth's perceived support from the foster care system?

H_{03} : There is no statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

H_{a3} : There is a statistically significant mean difference between genders in foster youth's perceived support from the foster care system.

This chapter reports the results of the study and is divided into three sections following this introduction. The first section provides a summary of the data that were collected and explains the process of examining and cleaning the data, which resulted in construction of the final dataset that was used for statistical analyses to answer the study's three research questions. The second section reports the study results. The section is divided into two main subsections. The first subsection presents descriptive statistics for the final dataset. The second subsection reports the results of the inferential statistical analyses that were conducted to answer the three research questions. The chapter ends with a summary.

Data Collection

I gathered data for the study from August 25, 2017, until August 15, 2018. As reported in Chapter 3, I used three organizations that deal with former foster youth in Georgia to locate and enlist participants for the study over several months. Despite these various efforts, fewer participants chose to take part in the study than had been

anticipated. Invitations to take part in the study eventually yielded a total of 97 respondents.

I downloaded data for the 97 respondents, entered it into the SPSS statistical program, and examined it for completeness. Examination of this initial dataset revealed that a number of the participants who took the survey were demographically ineligible to participate in the study. Although potential participants had been informed that the survey was only for former foster youth aged 18 to 24 who had been in the Georgia State foster care system, a total of 33 of the survey respondents reported being either younger or older than the 18-24 age range required for the study. An additional 14 survey respondents reported that they had not been in the Georgia State foster care system. Therefore, 47 survey respondents were removed from the dataset because they did not meet the stated requirements for taking the survey, leaving 50 participants who met the requirements for age and having been in the Georgia State foster care system.

Of these 50, another four respondents did not complete the MOS Social Support Survey (Sherbourne & Stewart, 1991), leaving over 50% of the 19 survey items unanswered. In addition, one remaining respondent did not answer the question asking whether he or she had attended a postsecondary educational institution. Because knowing the respondents' MOS Social Support Survey (Sherbourne & Stewart, 1991) scores and whether they had previously attended or were currently attending a college, university, or other postsecondary institution were necessary to conduct the statistical analyses to answer the research questions, these five respondents were also removed from the dataset. In addition, one participant neglected to respond to one item on the Affectionate Support subscale of the MOS Social Support Survey (Sherbourne & Stewart, 1991). To

deal with the missing response, the mean value of the participant's responses to the other three items on the Affectionate Support subscale was inserted in place of the missing response as suggested by Hair et al. (2014).

The final dataset therefore consisted of the survey responses of 45 participants. I conducted statistical analyses in the form of logistic regression and a two-tailed t test on the responses of these 45 participants in order to answer Research Questions 1 and 3.

A further reduction of participants was required to answer Research Question 2. This reduction was necessary because the research question applied only to survey takers who reported having attended or were presently attending a postsecondary institution and also reported their completed semester or quarter hours and cumulative grade point average (CGPA). A total of 23 of the 45 final participants reported having attended a postsecondary institution, and of those 23, 15 reported enough information to calculate their completed semester hours or quarter hours multiplied by their CGPA. Therefore, to conduct the linear regression to answer Research Question 2, I used the results of 15 of the 45 participants.

The final dataset of 45 participants was considerably lower than the number that was expected based on the power analysis, which indicated that 102, 113, and 128 participants were needed for the linear regression, logistic regression, and t test, respectively. This reduced number was partly a result of fewer individuals responding to the survey despite the use of several methods and the assistance of organizations to gain participants. It was also the result of a number of survey responders having to be eliminated from the study due to their not following the survey instructions. Based on the report by The Circle Ranch organization (n.d.) nearly 700 18-year-old foster youth

graduate from the Georgia State foster care system annually, there are an estimated 2,800 former foster youth ages 18-24 who are graduates of the Georgia foster care system. The 45 participants remaining in the final dataset represent 1.6% of this estimated total. Because of this low number, it is not clear to what degree the sample is representative of the overall population due to the nonrandom selection methods and the numerous survey takers whose responses could not be included in the study. However, the statistical analysis of participant responses may help provide information that can be of value in understanding former foster youth's perceptions of the Georgia State foster care system, the degree to which former foster youth enroll in postsecondary education, and the achievements of those who do enroll in a college, university, or other postsecondary institution.

In summary, data for 97 participants were downloaded for analysis; however, inspection of the data resulted in the elimination of over half the sample for various reasons. This resulted in a final dataset of 45 participants relevant to answering Research Questions 1 and 3, and 15 participants relevant for answering Research Question 2. The next section reports results of the statistical analyses based on these datasets.

Results

Study results are reported in two sections. The first section provides descriptive results. The second section reports inferential statistics and is divided into several subsections.

Descriptive Statistics

I report descriptive statistics for the 45 participants in the final dataset in this subsection. These statistics include several demographic characteristics of the

participants, including their gender, age, ethnicity, and length of time in the Georgia State foster care system. Descriptive statistics also include the reports of those participants who indicated they had attended a postsecondary institution and the summary results for participants' responses to the MOS Social Support Survey (Sherbourne & Stewart, 1991).

With regard to demographic characteristics, the 45 participants included 11 (24.4%) males and 34 (75.6%) females. Participant age ranged from 18 to 24 years, with a mean age of 20.58 years. With regard to ethnicity, 34 (75.6%) participants were African American, five (11.1%) were European American, three (6.7%) were Hispanic, and three (6.7%) reported being of another ethnicity. All 45 participants reported having been in the Georgia State foster care system for at least 1 year. The amount of time spent in the state's foster care system ranged from a minimum of 1 to 2 years to a maximum of over 10 years. More than half ($n = 23$) of participants reported having been in the system for either 2 to 4 years ($n = 10$) or 4 to 6 years ($n = 13$). Mean time spent in the foster care system was 4 to 6 years. Table 1 summarizes participant demographic information.

In addition to demographic questions, participants indicated whether they had attended any postsecondary institutions since leaving foster care. If they reported they had, they were asked to name the institution, the number of semester or quarter hours they had completed, and their CGPA. They were also asked whether they were currently enrolled in an institution, planned to continue their higher education, and had earned a certificate or degree from a postsecondary institution. One participant indicated having attended college but reported an impossible CGPA and an unlikely number of semester and quarter hours completed and so was not included in the group of participants with postsecondary education. Of the 44 remaining participants, 23 (52.3%) indicated they had

Table 1

*Demographic Results for 45 Participants**Gender (n = 45)*

Male	11
Female	34

Age (n = 45)

18	7
19	11
20	8
21	5
22	4
23	4
24	6

\bar{x} = 20.58 years; SD = 2.02 years

Ethnicity (n = 45)

African American	34
White	5
Hispanic	3
Other	3

Time in Foster Care System (n = 45)

Less than 1 year	0
1 to 2 years	4
2 to 4 years	10
4 to 6 years	13
6 to 8 years	5
8 to 10 years	5
Over 10 years	8

\bar{x} = 4 to 6 years

attended or were attending a postsecondary institution. Sixteen of those who had attended a postsecondary institution were currently enrolled and all but one of these indicated that they planned to continue. Of the seven who indicated they were not currently enrolled, six planned to continue their higher education. Thus, a total of 21 (91.3%) of the 23 participants who indicated they had attended or were currently attending a postsecondary institution reported that they planned to continue their postsecondary education. The 23 participants who reported attending a postsecondary institution named 13 colleges or universities they had attended. Participants' CGPAs ranged from 1.4 for 15 semester hours completed to 3.81 for 45 semester hours completed. Of the 18 participants who reported their CGPA, the mean CGPA was 2.68.

Two participants (8.7%) reported having earned a bachelor's degree, one in criminal justice and the other in social work. Table 2 provides a summary of the 23 participants' responses to several questions about postsecondary education. Information about participants who did not indicate how many semester or quarter hours they had completed is shown if they reported how many years they attended a postsecondary institution.

The 19 items on the MOS Social Support Survey (Sherbourne & Stewart, 1991) asked participants to report their perceptions of how much of the time they had received various kinds of support while in the foster care system. The survey included four subscales: eight items asking about perceived emotional/informational support, four items asking about perceived tangible support, and three items asking about perceived affectionate support and perceived positive social interaction. One additional item asked

Table 2

Self-reported Postsecondary Education of 23 Participants

Institution	Semester/Quarter Hours Completed	CGPA	Attending Now	Plan to Continue
Albany (GA) State University	60 sem	2.45	No	Yes
Albany (GA) State University	15 sem	3.4	No	Yes
Atlanta Technical College	20 sem	No report	Yes	Yes
Atlanta Metropolitan State College	1 year	No report	No	Yes
Atlanta Metropolitan State College	7 sem	No report	Yes	Yes
Brandeis University	16 sem, 3 qtr	2.3	No	Yes
Fort Valley State University	106 sem	2	Yes	Yes
Gordon University	30 sem	2.1	Yes	Yes
Georgia Gwinnett College	12 sem	3.3	Yes	Yes
Georgia Piedmont Tech College	15 sem	3	Yes	Yes
Georgia Piedmont Tech College	12 sem	No report	Yes	Yes
Georgia State Univ	1 year	2.4	Yes	Yes
Georgia State Univ	24 sem	3.5	No	Yes
Georgia State Univ	45 sem	3.81	Yes	No
Perimeter Coll, Georgia State U	2 years	2	No	Yes
Perimeter Coll, Georgia State U	15 sem	1.4	Yes	Yes
Perimeter Coll, Georgia State U	1 year	No report	Yes	Yes
Herzing University	Now	2	Yes	Yes
Kennesaw State University	127 sem	3.3	Yes	Yes
Valdosta State University	89 sem	2.08	Yes	Yes
Unnamed college	65 sem, 24 qtr	2.9	No	No
Unnamed college	110 sem	2.75	Yes	Yes
Unnamed college	36 qtr	3.5	Yes	Yes

Note. $n = 23$

how much of the time the participants perceived that they had someone to do things with to take their mind off things.

Participants' responses to the social support items ranged from 1 (none of the time) to 5 (all of the time). The mean response to 18 out of 19 items was between 3 (some of the time) and 4 (most of the time). The single exception was the mean response to the survey item asking how much of the time participants perceived they had someone to share their most private worries and fears with while in the foster care system.

Participants' mean response for one item was between 2 (a little of the time) and 3 (some of the time) at 2.60. The lowest mean score for the subscales was for perceived emotional/informational support, at $\bar{x} = 3.11$. The highest overall mean score for a subscale was for perceived tangible support at $\bar{x} = 3.60$. The grand mean for all 19 items was $\bar{x} = 3.31$. Table 3 provides a summary of participants' mean responses for the items and subscales of the MOS Social Support Survey (Sherbourne & Stewart, 1991).

Inferential Statistics

Inferential statistics are reported in four sections. The first section reports the survey's internal reliability. The next three sections report results of the logistic regression, the linear regression, and the *t* test.

Internal reliability of the survey. Statistical analysis of the data began with determining the internal reliability of the MOS Social Support Survey (Sherbourne & Stewart, 1991). Reliability was measured by Cronbach's α score for the participants' responses to the entire survey as well as for their responses for items in each of the survey's four subscales. To evaluate α scores, Nunnally's (1978) criterion was used. The criterion is that α being equal to at least .7 is adequate for many studies.

Table 3

Mean Scores for MOS Social Support Survey (Sherbourne & Stewart, 1991) Items

Subscale and item	Mean score
<i>Emotional/informational support</i>	
Someone ...	
to listen to you when you needed to talk	3.49
who gave you information to help you understand a situation	3.51
who gave you good advice about a crisis	3.38
to confide in or talk to about yourself or your problems	3.27
whose advice you really wanted	3.31
to share your most private worries and fears with	2.60
to turn to for suggestions about how to deal with a personal problem	3.09
who understood your problems	3.11
Overall mean for subscale	3.22
<i>Tangible support</i>	
Someone ...	
to help you if you were confined to bed	3.13
to take you to the doctor if you needed it	3.89
to help with daily chores if you were sick	3.78
Overall mean for subscale	3.60
<i>Affectionate support</i>	
Someone ...	
who showed you love and affection	3.22
to love and make you feel wanted	3.36
who hugged you	3.49
Overall mean for subscale	3.36
<i>Positive social interaction</i>	
Someone ...	
to have a good time with	3.27
to get together with for relaxation	3.14
to do something enjoyable with	3.36
Overall mean for subscale	3.26
<i>Additional item:</i> Someone to do things with to help you get your mind off things	3.24

According to Nunnally's (1978) criterion for reliability, all α values for the MOS Social Support Survey (Sherbourne & Stewart, 1991) and its various subscales were acceptable. The Cronbach's α score for the survey as a whole was found to be $\alpha = .967$. The internal reliability for each of the four subscales of the survey was also adequate. For the emotional/informational support subscale, $\alpha = .946$. For the survey's tangible support subscale, $\alpha = .860$. For the affectionate support subscale, $\alpha = .940$. For the positive social interaction subscale, $\alpha = .937$. Table 4 provides a summary of these reliability calculations.

Table 4

Internal Reliability of the MOS Social Support Survey (Sherbourne & Stewart, 1991)

Scales and survey	Cronbach's α
Emotional/informational support	.946
Tangible support	.860
Affectionate support	.940
Positive social interaction	.937
Entire survey	.967

Logistic regression for Research Question 1. Research Question 1 was: Is there a relationship between foster youth's perceived support from the Georgia State foster care system and their college and university enrollment? It was hypothesized that there would be no relationship between the foster youth's perceived support from the foster care system and their enrollment in a higher education institution. A logistic regression was

conducted to determine any statistically significant relationship when participants' overall scores on the MOS Social Support Survey (Sherbourne & Stewart, 1991) were compared to whether they reported they had attended or were presently attending a postsecondary institution. Responses of all 45 final participants were included in the logistic regression. The .05 level was chosen to indicate statistical significance.

Table 5 summarizes the results of the logistic regression. As indicated in the table, participant-reported postsecondary education was unrelated to whether they reported they had attended or were attending a postsecondary education institution ($p = .336$). Therefore, there was insufficient evidence to reject the null hypothesis for the first research question: There was no statistically significant relationship between foster youth's perceived support from the foster care system and their enrollment in a postsecondary institution.

Table 5

Results of the Logistic Regression

Model	B	S.E.	df	Significance	Exp(B)
AvgSupport	-.286	.297	1	.336	.752
Constant	.806	1.019	1	.429	2.240

Linear regression for Research Question 2. Research Question 2 was: Is there a relationship between foster youth's perceived support from the Georgia state foster care system and their academic performance in colleges and universities? To answer this

research question, a linear regression was conducted to determine whether there was a statistically significant relationship when the participants' overall scores on the MOS Social Support Survey (Sherbourne & Stewart, 1991) were compared to their reported academic performance in any postsecondary institution they had attended or were attending. As explained in the section on Data Collection, the analysis included only those participants who reported having attended a postsecondary institution and who also reported how many semester or quarter hours they had completed and their CGPA. These requirements resulted in using the responses of only 15 participants for the linear regression. In the analysis, participants' reported semester hours were converted to quarter hours by being multiplied by 1.5. Achievement in postsecondary education was calculated as being the product of quarter hours completed by a participant multiplied by his or her CGPA.

The results of the linear regression analysis are reported in Table 6. As is indicated in the table, the relationship between the participants' achievement in postsecondary education institutions and their overall scores on the MOS Social Support Survey (Sherbourne & Stewart, 1991) was found to have a significance of .867, which was not statistically significant at the .05 level. Therefore, there was insufficient evidence to reject the null hypothesis for the second research question: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their academic performance in postsecondary institutions.

Table 6

Results of the Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients		Significance
	B	Std. Error	Beta	t	
(Constant)	184.689	156.170	.047	1.183	.258
AvgSupport	7.913	46.449	.047	.170	.867

Research Question 3 t test. Research Question 3 was: Is there a difference between genders in foster youth's perceived support from the foster care system? To answer this research question, an independent samples two-tailed t-test was conducted to determine any statistically significant difference in the responses to the MOS Social Support Survey (Sherbourne & Stewart, 1991) between males and females. The responses of all 45 final participants were included in the t-test. The .05 level was chosen to indicate statistical significance.

Results of the t-test are shown in Tables 7 and 8. Table 7 shows the overall mean values and standard deviations of the MOS Social Support Survey (Sherbourne & Stewart, 1991) responses for male and female participants. As shown in the table, the mean score on the MOS Social Support Survey (Sherbourne & Stewart, 1991) was higher for males (3.67) than females (3.18). Table 8 shows that the significance in the difference between the genders was .182 with, and .148 without, equal variances assumed. These

Table 7

Group Statistics for Male and Female MOS Social Support Survey (Sherbourne & Stewart, 1991) Overall Scores

Gender	N	Mean	Standard deviation	Standard error mean
Male	11	3.6699	.88104	.26564
Female	34	3.1834	1.07556	.18446

Table 8

t test Comparing Genders on Medical Outcomes Study Social Support Survey Scores

Equal variances	t	df	Significance (two-tailed)	Mean difference	Standard error difference
Assumed	1.357	43	.182	.48642	.35853
Not assumed	1.504	20.522	.148*	.48642	.32340

*Significant at the .15 alpha level.

results were not significant at the .05 level. However, for studies with a small sample, Cohen (1982) suggested the possibility of raising the significance level to .10 or above. In this study, at the significance level at .15, the result of .148 is statistically significant, though using the .15 level increases the possibility of a Type I error. Therefore, there was insufficient evidence to reject the null hypothesis that foster youth genders do not differ

in their perceived support from the foster care system at the significance level of .05, but the null hypothesis was rejected at the significance level of .15.

Summary

The results of the study were used to answer three research questions. Research Question 1 asked whether there is a significant relationship between foster youth's perceived support from the foster care system and their enrollment in a postsecondary institution. The results of logistic regression analysis showed no statistically significant relationship. Therefore, for Research Question 1, there was insufficient evidence to reject the null hypothesis: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their enrollment in a postsecondary institution.

Research Question 2 asked whether there is a significant relationship between foster youth's perceived support from the foster care system and the postsecondary achievement of foster youth who attended a postsecondary education institution. The results of linear regression analysis showed no such relationship. Therefore, for Research Question 2, there was insufficient evidence to reject the null hypothesis: There is no statistically significant relationship between foster youth's perceived support from the foster care system and their academic performance in postsecondary institutions.

Research Question 3 asked whether there is a statistically significant mean difference between genders in the youth's perceived support from the foster care system. The results of a two-tailed independent samples t-test showed no statistically significant difference between genders in perceived support at the .05 significance level but showed a significant difference at the .15 significance level. Therefore, for Research Question 3,

there was insufficient evidence to reject the null hypothesis that there is no statistically significant mean difference between genders in participants' perceived support from the foster care system; however, the null hypothesis was rejected at the .15 significance level.

In the next chapter, I discuss the results of the study. I provide an interpretation of the study's findings and reviews its limitations. In addition, recommendations are made, implications are discussed, and conclusions are drawn.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to determine whether there were any relationships between former foster youth's perceived support from the foster care system and their college and university enrollment and academic performance, and to determine whether male and female former foster youth differ in their perceived support from the foster care system. The study was conducted to help fill gaps in research about how educational outcomes for former foster youth may be related to their perceptions of the foster care system. The study was also conducted because it could potentially provide information to help foster care programs improve their support of foster youth as they make the difficult transition from foster care to independent living as an adult.

The study was quantitative in nature as I sought to determine whether there is a relationship between former foster youth's perceptions of support from the foster care system and their college and university enrollment and academic performance. With the study I also examined whether male and female former foster youths differ in their perceptions of support from the foster care system. Former foster youth aged 18-24 years who had transitioned from the Georgia Child Welfare Department of Children completed the MOS Social Support Survey (Sherbourne & Stewart, 1991). They also indicated whether they had attended an institution of higher education since transitioning and, if so, their cumulative grade point average. I used logistic regression, linear regression, and an independent samples *t* test to analyze the data to determine if there were any statistically significant relationships between variables.

Analysis of data showed no significant relationships between former foster youth's perceptions of support from the foster care system and their college or university attendance or performance. In each case, there was insufficient evidence to reject the null hypothesis. Analysis also showed no significant difference at the .05 significance level between male and female former foster youth in their perceptions of the support they had received from the foster care system. In this case, too, there was insufficient evidence to reject the null hypothesis. However, following a suggestion of Cohen (1982) concerning dealing with small samples, the difference between genders in their perceptions of support from the foster care system was also evaluated at the .15 significance level. The difference was found to be significant at that level, with males scoring almost half a point (.49) higher than females in their perception of the support they had received from the foster care system. Thus, the null hypothesis that there was no statistically significant difference between the genders in their perception of foster system support was rejected at the .15 significance level.

Interpretation of the Findings

In this study, no statistically significant associations at the .05 level were found between former foster youth's perceptions of the social support they received in the foster care system and their postsecondary attendance or performance, or between genders in regard to perceptions of social support. However, examination of the data reveals several notable observations. To better understand the importance of these observations, it is helpful to briefly review the factors that warranted the study.

The problem motivating the study was that research suggests that only a relatively small percentage of foster youth earn a college degree compared to the general

population. One study (Stuart Foundation, 2009) found that only 5% of former foster youth complete a college education. Another study (Pecora et al., 2006) found that the postsecondary completion rate for former foster youth may be as low as 2.7%. These differences in the postsecondary achievement of foster youth compared to other youth do not seem to be the result of lack of motivation, as Unrau et al. (2012) found former foster youth freshmen were more academically motivated than first-time freshmen nationally. Foster youth also scored significantly higher in desire to finish, intellectual interests, study habits, attitude toward educators, and social motivation in terms of leadership and self-reliance. Furthermore, the former foster youth were not significantly different in academic confidence from the national average. Yet, Unrau et al. (2012) found that the first-semester academic performance of foster youth freshmen was lower than that of non-foster youth, and 47% of foster youth withdrew from one or more courses during the first semester compared to only 18% of non-foster freshmen.

These contrary results of the Unrau et al. (2012) study may be partly explained by reduced postsecondary coping skills among former foster youth due to a transition out of the foster care system that leaves them ill prepared for independence and at greater risk for decreased educational opportunities and achievement (Krinsky & Liebmann, 2011; Mendes & Moslehuddin, 2009). Lack of educational success for former foster youth may then contribute to failure in other domains, helping lead to outcomes such as unemployment, homelessness, and incarceration, any of which may further hinder pursuing or continuing with available postsecondary educational opportunities (White & Gallay, 2005).

There is evidence that an important factor resulting in reduced coping skills for transitioning foster youth may be a lack of close relationships to significant others. In their study, Unrau et al. (2012) found that foster youth freshmen scored significantly lower than non-foster freshmen on general coping scales in regard to family support. This finding suggests that though former foster youth entering postsecondary education may be motivated and confident as they begin, their ability to cope with the challenges they encounter may be limited partly due to their lack of close family ties, resulting in decreased postsecondary achievement.

The possibility that foster youth underperformance in postsecondary education is partly due to diminished coping skills associated with a lack of family ties and support can be understood in terms of Bowlby's (1998) attachment theory, which formed the theoretical framework for this study. Bowlby suggested that trusted and secure emotional attachments to parents or parental surrogates are crucial for an individual's social-emotional development. However, foster youth are typically faced with a situation in which attachment to biological parents is decreased or wholly lacking and must depend on the foster care system for a sense of attachment. Yet foster parents may not serve very well as an attachment substitute for a child (Atkinson, 2008). A reduced sense of attachment to others experienced by the foster child may then continue into the transition stage that is so important for personal growth and academic success (Walters et al., 2010).

These considerations suggest that an important factor related to former foster youth's ability to cope academically, and thus their postsecondary success, may be their perceptions of the social support they received from the foster care system. While I

located no prior studies directly investigating that possibility, previous research does suggest that perceptions of support from the foster care system may be relevant to postsecondary attendance and success. In particular, Thorne (2015) found that 71% of former foster youth at two state universities reported that social support was important for their transition to college. For these youth, the second most cited source of social support during transition, after teachers, mentors, and counselors, was individuals in the foster care system, including social workers and foster family members. This finding suggests that for many students, the foster care system can be a positive influence on their postsecondary education. However, Thorne's (2015) finding that one-third of the former foster care youth did not mention any adult as having been supportive of their attending college suggests that many former foster youth do not perceive the foster care system as having provided substantial support for their enrolling in and attending a postsecondary education institution.

Given the above considerations, it was unexpected that in this study, former foster youth's perceptions of the support they received from the foster care system were not found to be related to their postsecondary attendance or achievement, with these findings resulting in there being insufficient evidence to reject the null hypotheses for the two comparisons. However, the fact that it was necessary to eliminate a number of initial participants in the study due to their being outside the age-limit restrictions, not completing the survey, or otherwise not following instructions led to an inadequate number of participants for statistically analyzing the data at the .05 significance level.

There were, however, several notable results of the study that are relevant to the general issue of former foster youth's postsecondary attendance and achievement. One

such result is that among the 45 participants who were retained for the final dataset, a considerable number had attended, were attending, and planned to continue to attend a postsecondary institution. Specifically, of the 45 participants in the final dataset, 23 (51.1%) indicated they had attended or were attending a postsecondary institution. Of those 23, 16 (69.6%) were currently attending, and 21 (91.3%) reported that they would continue their postsecondary education. Of the seven who indicated they had attended but were not currently enrolled, six (85.7%) reported that they planned to continue their higher education. These results are encouraging because they suggest that a sizable number of the former foster youth in the study's final sample were actively engaged in seeking a postsecondary education.

Research suggests that college-qualified foster youth are at risk of not completing a college degree program (Unrau, 2011). Unrau (2011) found that college-qualified foster youth represent 20% college enrollment rate with only a 5% degree completion rate. In comparison, the general population of youth have an estimated 60% enrollment rate with a 24% degree-completion rate (Unrau, 2011). It is notable that in this study, while only two (4.4%) of the 45 participants reported having earned a postsecondary degree or certificate, this rate exceeds the 2.7% college completion rate for former foster youth suggested by Pecora et al. (2006). Also, it should be emphasized that the mean age of the present study's sample was only 20.6 years and that there had been insufficient time for a number of the youth in the sample to complete a college education following their transition to independence at age 18. In addition, the findings that so many former foster youth were still enrolled and planned on continuing their education and that seven former foster youth had earned over 45 semester hours and three of those had earned over 100

semester hours, suggest that the sample included other former foster youth who will eventually obtain a postsecondary degree or certificate. If so, the educational achievement of the sample in regard to receiving a postsecondary credential would exceed not only the 2.7% college completion rate for former foster youth reported by Pecora et al. (2006) but the 5% reported by the Stuart Foundation (2009).

Another encouraging finding of the study concerns the grade point averages reported by a number of the participants. The overall CGPA reported by 18 participants was 2.68. Though some of the CGPAs were low, seven (38.9%) of the 18 reporting had CGPAs of 3.0 or above, with two at 3.5 and one at 3.81. These relatively high averages suggest that among former foster youth in the final sample, some had experienced a considerable degree of success in their postsecondary classes. This is in contrast to Watt, Faulkner, Bustillos, and Madden (2018) who found that the foster youth in their sample who entered college had lower GPAs and were less likely to graduate than non-foster youth. Likewise, data collected from 31 campuses in the California College Pathways initiative showed that foster youth were more likely than their peers to have a GPA below 2.0, and were less likely to have a 3.0 GPA or higher. The data showed that in 2012-13 and 2013-14, a little under half of foster youth earned a 2.0 GPA or higher for the academic year, compared with close to three-quarters of non-foster youth (Charting the Course, 2015). A larger sample and school verification would be needed to determine whether other foster youth in Georgia who have attended or are currently attending a college or university will have a CGPA of 3.0 or above.

A second main purpose of this study was to examine whether there was a difference between genders in their perceptions of support from the foster care system.

The results of several studies suggest that among former foster youth, females have higher educational aspirations and achievements than males (Courtney et al., 2007, 2010; Kirk et al., 2012). Due to those findings and the possibility that foster youth's perceptions of the support they received in the foster care system may be related to postsecondary attendance and achievement, it was thought that differences in achievement might be partly due to females and males having different perceptions about the support they received from the foster care system. I expected that if the analysis showed any such difference, the difference would amount to females having a more positive perception than males of foster care system support.

No significant difference was found between females and males in regard to their perceptions of the support provided by the foster care system when analyzed at the .05 significance level. However, there was a significant difference between genders at the .15 level when the significance level was increased following a suggestion by Cohen (1982) in regard to dealing with small samples. Contrary to expectation, the comparison showed that males had the more positive perceptions of support from the foster care system. The overall mean for males on the MOS Social Support Survey (Sherbourne & Stewart, 1991) was almost half a point higher than for females on a five-point scale. A larger sample would be needed to determine whether this unexpected difference between genders continues to be found among other former foster youth and, if so, whether the difference might prove to be significant at the .05 or a lower significance level.

Limitations of the Study

The study was limited in several ways. One such limitation was the non-random selection of the sample. Potential participants were selected by a convenience sampling

of former foster youth, with the inclusion criteria being that the youth were ages from 18 to 24 years and had transitioned from the Georgia Child Welfare Department of Children foster care program. The use of this non-random sampling method resulted in limiting the generalizability of any results found (Creswell, 2014).

The study was also limited by the self-selection method used, as there may have been a relevant difference between foster youth who chose to participate in the study and those who did not. Also, it was possible that while participating in the study, events occurred that influenced responses of participants but were unrelated to the independent variable (Campbell & Stanley, 1963). Such events might include the moods or transient attitudes participants may have experienced while taking the survey. They also may have included a participant experiencing an illness while taking the survey that led to him or her not carefully attending to answering the items. In addition, it was possible that social desirability bias might have led some participants to respond to survey items in ways they believed were most socially desirable (King & Bruner, 2000). The study was also limited by the fact that postsecondary attendance and CGPAs were self-reported by participants and may not have been accurate.

Finally, the small number of participants who were in the final dataset limited the statistical power of statistical hypothesis tests performed in the study. After a number of attempts to enlist former foster youth in the study, aided by the efforts of several organizations, 97 participants accessed the online survey. However, this number had to be reduced due to several factors, including the fact that some potential participants were outside the 18 to 24 age range. In addition, participants who did not complete the MOS Social Support Survey (Sherbourne & Stewart, 1991) or who did not provide other

needed information had to be excluded, thereby further limiting the number of former foster youth in the final dataset. These reductions affected the statistical analyses of survey responses by reducing the sample below the number recommended for the statistical tests that were conducted.

The difficulty in locating former foster youth who were in the Georgia foster care system and were willing to participate in and complete the study was especially notable given the assistance that was provided by several organizations who deal with this population: the Multi-Agency Alliance for Children (MAAC), Foster Care Alumni of America (FCAA), and Chris180. The difficulty suggests the possibility that a substantial number of former foster youth in Georgia are not affiliated with any of these organizations. Some of these former foster youth may be living relatively isolated lives, without the support of organizations dedicated to promoting their well-being. This possibility is concerning because of the unique challenges often faced by former foster youth, challenges that may adversely affect whether they choose to enroll in a postsecondary school and their academic success if they do enroll. The agencies dedicated to the well-being of former foster youth are to be congratulated for their efforts; however, there may be former foster youth who are not associated with any such organization though their need for social support may be substantial.

Recommendations

Several recommendations for future research and action can be made based on this study. The first recommendation is that studies on the relation of former foster youth's perceptions of the support they received in the foster care system and their college attendance and achievement be conducted in different states. Though there were

no statistically significant results in this study other than the t-test at the .15 significance level, those findings may have been due to the limitation on the number of participants surveyed. The concerns and considerations that motivated the present study remain, as well as a lack of previous studies examining the relation of former foster youth's perceived social support received from the foster care system and their postsecondary attendance and achievement. These concerns and considerations suggest that similar studies should be conducted to examine possible relationships between relevant variables.

The second recommendation is that future researchers pay special attention to using every legitimate method they can devise to secure participants and ensure that they follow instructions and complete all items and parts of the survey. One way to help gain participation from a sufficient number of individuals may be to conduct a study of former foster youth from several states at a time, or from some other wider geographic region. It is especially important to ensure that potential participants clearly understand the study's inclusion criteria. Efforts should also be made to reach former foster youth who are not aligned with any organization.

The third recommendation is that future research be conducted on whether there is a difference between female and male former foster youth in their perceptions of the support they received from the foster care system. In regard to this question the considerations that motivated this study remain. These considerations suggest that there may be such a difference with females having more positive perceptions. However, the present study obtained results indicating that males in the sample had more positive perceptions of the support provided by the foster care system than females, although the difference was found to be statistically significant only at the .15 level. The question of

whether there is a gender difference remains unanswered by the present study and there appear to have been no previous studies focusing on this question. Therefore, further research is needed addressing the issue.

The fourth recommendation is a for research concerning the number of placement disruptions foster youth experience while in care. This may affect how foster youth perceived support while in care and transitioning into higher education. Although some may argue that foster youth often enter the system with low academic ability, Clemens, Klopfensteinb, Lalonde, and Tis (2018) found that placement changes have a greater negative effect on academic growth than school moves. Unfortunately, each time a transition co-occurs with a school change academic growth may be reduced, which in turn may reduce future academic growth and achievement (Clemens et al., 2018). This lack of academic growth due to placement disruption will then continue into foster youths' transition into higher education enrollment and academic performance. Future research should address whether the number of foster placements are related to the way foster youth achieve in higher education and how it relates to their perceived social support of care while in the foster care system.

The last recommendation is for practice. The recommendation is related to the need for organizational leaders in foster care systems to pay special attention to transitioning foster youth in preparing for the challenges of postsecondary education. One way this might be done is by developing and distributing to foster parents lists of activities they might undertake to help prepare their teenage foster children for postsecondary education. These activities could include helping foster youth become aware of postsecondary opportunities, assisting them in choosing a postsecondary

institution, and helping them in the application process. Caseworkers may also be able to provide assistance to foster youth about to transition to independence by discussing with them the importance of postsecondary education, distributing printed informational brochures from institutions, providing online links to institutions, and providing information about financing options.

Implications

The results of this study showed no significant relation between former foster youth's perceptions of the support they received from the foster care system and their postsecondary education and achievement. The results also showed no significant difference at the .05 significance level between female and male former foster youth in their perceptions of the support they received from the foster care system. Although, there was a difference at the .15 level when the data were analyzed using a suggestion of Cohen (1982) to raise significance level to .10 or above as a method of dealing with small samples. Overall, the results suggest that there are no relationships at the .05 level between the examined variables. However, all of these results must be tempered by the realization that the final dataset used for conducting statistical analyses included fewer participants than had been recommended and anticipated. Thus, the statistical analyses cannot be relied on to have provided definitive answers to the research questions and it must be concluded that all three of the research questions that guided this study remain unanswered. Therefore, one evident implication of this study is that further research focused on answering the research questions needs to be conducted.

A second implication of the results of this study is that the former foster youth who were surveyed show evidence of greater engagement and achievement in

postsecondary education settings than the results of other studies may suggest. In particular, findings include the following:

- Even though the mean age of the former foster youth in the final sample was only 20.6 years, over 50% of the sample had attended or were attending a postsecondary institution.
- Most of the former foster youth who had or were attending a postsecondary institution were also planning to continue their postsecondary education.
- Two of the foster youth in the final sample had already received a postsecondary degree or certificate.
- Several foster youth in the final sample had accumulated a substantial number of educational credits, and several had high CGPAs of 3.5 or above.

These are encouraging findings that imply that a number of the former foster youth in the final sample were serious about pursuing higher education opportunities. This is encouraging because postsecondary education is widely believed to be an important means of preparing an individual for independent and productive living. The finding that a number of the former foster youth had been and were actively engaged in postsecondary institutions suggests that despite the unique challenges they faced as foster children and the challenges they encountered when transitioning out of the foster care system, some of these individuals were overcoming those challenges in regard to higher education enrollment and achievement.

Conclusion

Former foster youth are a unique population whose members share the experience of having to be parented by surrogates who are not their biological parents. This common

experience often impairs foster youth's sense of attachment to caring adults and results in difficulty adjusting to independence after transitioning from the foster care system. Research suggests that one such difficulty is reduced postsecondary attendance and achievement. Research also suggests that one factor that may be associated with former foster youth's postsecondary attendance and achievement is their perception of the support they received while in the foster care system. The results of this study suggested that there is no such association; however, the results were weakened by a reduced sample. Thus, the question of whether there is such a relationship, as well as the additional question of whether there is a gender difference in former foster youth's perceptions of the support they received from the foster care system remain to be determined.

Yet, this study did provide some evidence that the percentage of former foster youth who successfully attend postsecondary institutions may be larger than previously reported. This result is encouraging because it suggests that a number of foster youth are overcoming the unique challenges that they face after transitioning from the foster care system and that might hinder their postsecondary attendance and success. It is also encouraging because of the great importance in today's society of obtaining a postsecondary degree or certificate.

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Appendix B: Medical Outcomes Study Social Support Survey

(Sherbourne & Stewart, 1991)

Instructions: Thinking about your experiences *in the foster care system*, how often was each of the following kinds of support available to you if you needed it? Circle one number on each line.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Emotional/informational support					
Someone you could count on to listen to you when you needed to talk	1	2	3	4	5
Someone who gave you information to help you understand a situation	1	2	3	4	5
Someone who gave you good advice about a crisis	1	2	3	4	5
Someone to confide in or talk to about yourself or your problems	1	2	3	4	5
Someone whose advice you really wanted	1	2	3	4	5
Someone to share your most private worries and fears with	1	2	3	4	5
Someone to turn to for suggestions about how to deal with a personal problem	1	2	3	4	5
Someone who understood your problems	1	2	3	4	5

Tangible support

Someone to help you if you were confined to bed	1	2	3	4	5
Someone to take you to the doctor if you needed it	1	2	3	4	5
Someone to prepare your meals if you were unable to do it yourself	1	2	3	4	5
Someone to help with daily chores if you were sick	1	2	3	4	5

Affectionate support

Someone who showed you love and affection	1	2	3	4	5
Someone to love and make you feel wanted	1	2	3	4	5
Someone who hugged you	1	2	3	4	5

Positive social interaction

Someone to have a good time with	1	2	3	4	5
Someone to get together with for relaxation	1	2	3	4	5
Someone to do something enjoyable with	1	2	3	4	5

Additional item

Someone to do things with to help you get your mind off things	1	2	3	4	5
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Appendix C: Education Questions

1. Have you attended, or are you currently attending, a college, university, technical school, or other post-secondary school since leaving the foster care system?

(Please place an "X" on one of following answers.) _____ Yes

_____ No

If you answered Yes to Question 1, then please answer the following questions by placing an "X" on Yes/No questions and providing requested information in other spaces:

2. What post-secondary school(s) were you (or are you) enrolled in?

3. How long were you (or have you been) enrolled? _____

4. How many total semester-hours OR quarter-hours have you earned?

_____ Semester Hours OR _____ Quarter Hours

5. What is your most recent cumulative grade point average for all post-secondary schools attended? _____

6. Have you earned a degree or certificate at a post-secondary school?

No _____ Yes, I earned _____
(name of degree or certificate)

7. Are you still enrolled at a post-secondary school? Yes _____ No _____

8. Do you plan to continue your higher education? Yes _____ No _____