

FACTORS ASSOCIATED WITH HIGH SCHOOL
COMPLETION AMONG FOSTER YOUTH
LEAVING CARE

by

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ABSTRACT

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This study explores factors associated with high school completion among foster youth leaving care. Educational outcomes for youth leaving care are examined based on an integrative model of ecological theory and attachment theory.

The study utilized a cross-sectional, non-experimental design for exploring factors associated with high school completion among foster youth leaving care. A survey instrument was utilized for extracting data from a child welfare agency database. The data was collected at one point in time comparing the differences between youth who completed high school to those who dropped out. Chi-square analyses were utilized for comparing differences between groups and logistic regression was utilized to determine predictor variables for high school completion. The study found two variables as best predictors of high school completion were 1) having contact with extended family and 2) completing Preparation for Adult Living training. Based on these findings, implications for social work practice, policy and future research are presented.

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CHAPTER 1

INTRODUCTION

Youth in foster care face many challenges as a result of abuse and neglect issues and subsequent removal from their home of origin. Youth who are unable to return home due to the lack of a stable and permanent home environment will more than likely remain in care until reaching the age of 18. Some of the challenges experienced by youth while in care pertain to issues of placement instability, school changes, mental health problems, and poor educational outcomes. Foster youth leaving care face additional challenges of unemployment, homelessness, teenage pregnancy, substance abuse, and criminal involvement. Despite multiple challenges, some foster youth leaving care have successful outcomes of completing high school. These youth increase their chances of living independently after leaving care by completing their high school education. This also increases their chances of obtaining a state college tuition waiver for pursuing post-secondary education.

In Texas, emancipation of foster youth includes those youth who leave Department of Family and Protective Services (“DFPS”) legal responsibility when turning 18 years old and the number of youth aging out of foster care seems to be increasing slightly each year. At the end of FY 2007, there were approximately 33,615 children in foster care and the number of youth emancipated was 1,411 or 4.1% (DFPS Data Book, 2007). In FY2008, there were approximately 31,058 children in foster care and the number of youth emancipated was 1,468 or 4.7% (DFPS Data Book, 2008). In FY2009, there were approximately 27,422 children in foster care and the number of youth emancipated was 1,453 or 5.2% (DFPS Data Book, 2009).

1.1 Purpose of the study

The purpose of this study is to explore the factors associated with high school completion among foster youth leaving care. The significance of this research is based on the notion that educational achievement predicts future success in adulthood which seems to be unattainable for a majority of foster youth leaving care. A better understanding of the factors influencing youth who complete high school will provide direction and guidance for improving educational outcomes and overall well being.

The limited research on the general outcomes of youth leaving care shows that foster youth are less successful than their peers in the general population making the transition to adulthood (Courtney, et al, 2001; Courtney & Dworsky, 2006). For youth leaving foster care, educational attainment is a significant factor for furthering their goal of permanence and stability but research indicates that foster youth leaving care have poor educational outcomes. Foster youth drop out at a much higher rate, have higher GED rates, and are less likely to attend and graduate from college than other youth (Blome, 1997; McMillan & Tucker, 1999; Courtney, et al, 2001; Pecora, Kessler, O'Brien, 2006).

In addition to issues of abuse and neglect, risk factors such as restrictive settings, placement instability, school changes, and the lack of advocacy and interagency collaborations are correlated with poor educational outcomes (Merdinger, et al 2005; Zetlin, et al, 2006a). Other research shows that the level of education, number of placements, and placement restrictiveness were related to more difficult functioning of youth after leaving care (Mech & Fung, 1999; Reilly, 2003).

The hypothetical formulation guiding the current study is that youth with more placement stability, social supports, and caring adults are more likely to complete high school. The research questions this study attempts to address are:

1. What are the factors associated with high school completion among foster youth leaving care?

2. What factors contributed the most to overall success of youth completing high school?

1.2 History of Foster Care and Transitional Services

Downs (2000) describes the history of foster care as being in many respects the same history of child welfare and depicts four major phases of child welfare reforms beginning with the White House Conference in 1909 through the 1960's. During this period, the main focus of child welfare services was stability of the foster family and there was less emphasis on reunification with the biological family. In the 1970's the focus of child welfare services shifted to adoption and permanency planning. In the 1980's, the focus shifted to the biological family and working toward family reunification. In the 1990's, the focus became family continuity and reforms included working with the child's extended family and supporting lifetime connections. A timeline of major child welfare reforms are shown in the following table 1.1.

Table 1.1

Child Welfare Reforms in the Twentieth Century

Phase	Time	Reform	Focus
One	1909-1970 White House Conference	Family Foster Care	Foster Family; children belong in a family rather than in institution
Two	1970's	Permanency Planning	Adoptive Family; children belong in a permanent family; no child is unadoptable
Three	1980's Adoption Assistance and Child Welfare Act	Family Preservation	Biological Parents; children belong with their biological parents; efforts to stay w/family
Four	1990's	Family Continuity	Extended Family; children belong in a family network that continues relations over time

Source: McFadden & Downs (as cited in Downs, et al, 2000)

In 1999, The Chafee Foster Care Independence Act expanded eligibility for independent living services to youth between the ages of 18-21. This legislation doubled the amount of federal funding and required a state match of 20% for Chafee funds. It also required states to provide written transitional plans for youth in order to receive funds but gave states the flexibility to decide what services to provide with the funding received. In 2001, The Promoting Safe and Stable Families Act authorized the Education and Training Voucher program to help pay for postsecondary education and training. In addition, States may allow youth to remain eligible until age 23 as long as they are enrolled in a training program and making satisfactory progress toward completion of a study program. This voucher can provide up to \$5,000.00 per year for each student (Gardner, 2008).

More recent reforms have focused on improving services such as permanency planning and transitional services for youth leaving care. As a result, several programs were implemented by the Department of Family and Protective Services in the last five years.

In 2005, a CPS Reform Transitional Living Services Initiative (TSLI) workgroup comprised of young people formerly in foster care along with both internal and external stakeholders developed recommendations for improving youth transition planning. The various components of this program included developing a youth-driven Transition Plan, Circles of Support Meetings for identifying significant caring adults and support network, offering Extended Foster Care for youth completing Vocational/Technical Program up to age 21, and a Return to Foster Care component for youth wanting to return to foster care for completing high school or vocational program (DFPS, 2009).

In 2008, three significant federal laws were passed that impact the educational opportunities of youth in foster care – the Fostering Connections Act, the College Cost Reduction Acts, and the reauthorization of the Higher Education Act (Legal Center for Foster Care & Education, 2008). The Fostering Connections includes increased eligibility for funding for post-secondary education, an option for states to extend care to the age of 21, and

increased transition planning requirements. It also provides a legal mandate that a transition plan is developed at least 90 days before a youth is discharged from care at age 18 or older. The plan includes youth's educational plan and status and information about the supports and services needed to achieve those goals (NGA, 2007).

The College Cost Reduction Act clarifies that for purposes of financial aid, an independent student includes a youth who is an orphan or a ward of the court at any time when youth was 13 years of age or older. The Higher Education Opportunities Act reauthorizes the Higher Education Act and includes amendments to increase access to homeless and foster youth pursuing higher education (NGA, 2007).

One of the most important and necessary requirements for improving transitional services is the tracking and reporting of youth outcomes at discharge which was part of the 1999 Chafee Foster Care Independence Act. The National Youth in Transition Database ("NYTD") was created for collecting state data on various youth outcomes including educational attainment. The State of Texas will be required to start collecting data on October 1, 2010 and submit data no later than May 15, 2011 (DFPS, 2009). The data collection will consist of the following independent living services and transitional services:

1. Independent living needs assessment
2. Academic support
3. Post-secondary educational support
4. Career preparation
5. Employment program or vocational training
6. Housing education and home management training
7. Budget and financial management
8. Health education and risk prevention
9. Family support and healthy marriage education
10. Mentoring

11. Supervised independent living
12. Room and board financial assistance
13. Education financial assistance

In addition, a youth follow up survey will be conducted for youth aging out of care at different intervals (ages 17, 19, and 21) for gathering pertinent information on the following outcomes:

1. Financial self-sufficiency
2. Experience with homelessness
3. Educational attainment
4. Positive connections with adults
5. High-risk behavior
6. Access to health insurance

The tracking of these outcomes for youth aging out of care has been long overdue and it is a giant step for improving transitional services and helping youth transition into adulthood. This data will enable state leaders and researchers alike to make policy changes, improve programs and services, and conduct more thorough investigations to better serve this population of young adults.

1.3 Independent Living Services for Youth Aging out of Care

The State of Texas offers independent living services and transitional services to youth between the ages of 16-21 who are currently or formerly in foster care. Youth can also remain in extended foster care from age 18 up to age 22 if enrolled and regularly attending high school or vocational training (DFPS Annual Report, 2007). These programs are offered on a voluntary basis and youth need to be encouraged and supported in order to participate.

PAL Program

In Texas, the Preparation for Adult Living (“PAL”) Program is only one component of the larger Transitional Living Services program. The primary purpose of the PAL program is to prepare youth for adult life when leaving foster care (DFPS, 2009). The PAL program components are shown in the following Table 1.2.

Table 1.2

PAL Program Components

Components	Functions	Activities
Intake/Referral	To identify and recruit youth in foster care	Assigned PAL coordinator
PAL Training Curriculum	To assess knowledge of core elements prior to PAL training To improve knowledge of six core elements of PAL training To assess knowledge of core elements after completing PAL training	Pre life skills Assessment Courses offered in six core elements Post life skills Assessment
Coordinated Services	To assist in developing a transition plan To link with community resources after leaving care	Assigned Transition Specialist Assigned TRAC case mgr.
Program Support	To improve program delivery and support	Program development Staff development Funding

The PAL training curriculum includes six goals, desired outcomes and activities for helping youth transition into adulthood (DFPS, 2009). The six goals of PAL training include the following:

1. Job Readiness
2. Housing and Transportation
3. Health and Safety

4. Financial Management
5. Personal/Social Relationships
6. Life Decisions/Responsibilities

Transitional Services

Transitional services for youth include Circles of Support (“COS”) for transition planning, Extended Foster Care up to age 21, PAL training, Return to Foster Care Program, case management services after discharge, and financial supports for pursuing higher education as well as other services (DFPS Annual Report, 2008). An overview of the Transitional Living Services Program is shown in Table 1.3.

Table 1.3

TLS Program Components

Component	Function	Activity
Transition Plan	Individual Plan to help youth achieve their goals	Circle of Support Meeting
Caring Adult	To provide youth a life-long connection with a nurturing and caring adult	Transition Planning
Extended Foster Care	To allow youth to remain in care for purposes of finishing high school or vocational training	Referral by youth or caseworker
Return to Foster Care	To allow youth to return to care for purposes of finishing high school or vocational training	Referral by youth, community member, or other agency
Ansell Casey Assessment	To conduct initial assessment of youth’s readiness for independent living	PAL Coordinator
PAL Training	To provide education and training for independent living	PAL Training
Transitional Medicaid	To provide medical coverage for youth up to age 21	PAL Coordinator
Texas Workforce Agreement	To assist youth with employment related services	Inter-agency partnership

Table 1.3 - continued

Coordinated Services	To assist youth with disabilities in transition	Inter-agency partnership
Transition Center	To strengthen system of services and supports for transitioning youth	TRAC case manager

Source: DFPS Transitional Living Services, 2009

COS Transition Plan

A transition plan is developed for youth ages 16 and older through Circles of Support Meetings that involve a team approach to transition planning. The purpose of this meeting is to develop transition plans with youth and help establish a support network prior to aging out by connecting them with families, friends, and professionals to discuss their strengths, hopes, dreams, and goals, etc.

Educational Supports

Two programs currently available as educational supports include the College Tuition Waiver Program and Education Training Voucher. The college tuition waiver is a state sponsored program that waives college tuition and fees at any state supported university, college, and trade school. Foster youth may obtain a college tuition waiver upon graduation from high school or upon emancipating at age 18. The student must enroll in an institution of higher education not later than the student's 25th birthday. The Education and Training Voucher (ETV) is a federal program available for additional assistance with college expenses such as rent, computers, daycare, and transportation. Youth participating in the ETV program can remain eligible until 23 years of age as long as they are enrolled and making satisfactory progress toward completing their degree (DFPS, 2009).

In the State of Texas, the population of youth leaving foster care seems to be increasing slightly each year and it appears that utilization of these programs for pursuing higher education are also steadily rising. Approximately 1,689 foster youth received college tuition waivers in FY2007 (DFPS Annual Report, 2008) and 2,030 foster youth received college

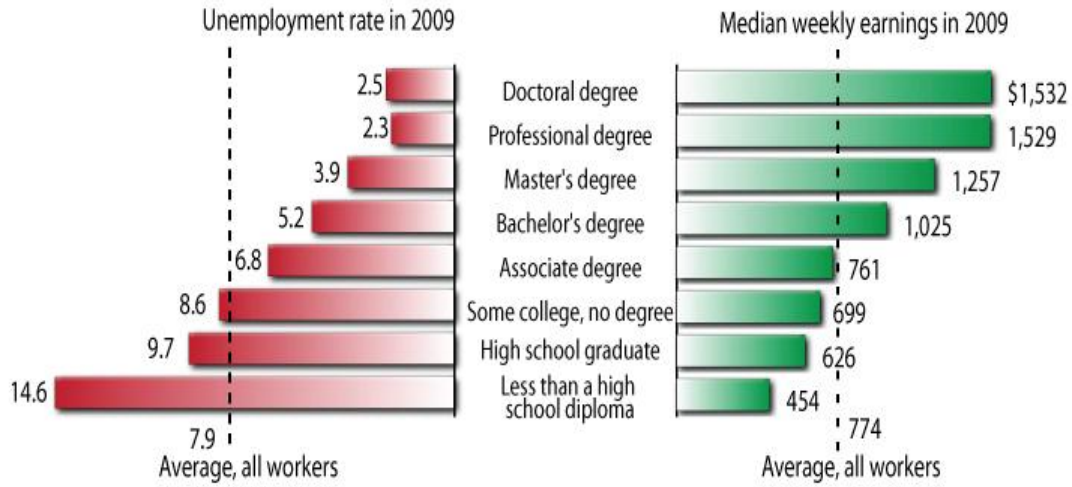
tuition waivers in FY2008 (DFPS Annual Report, 2009). Likewise, the ETV program serviced 610 youth with educational expenses in FY2007 (DFPS Annual Report, 2007) and this number increased to 641 youth in FY2008 (DFPS Annual Report, 2008) and 679 youth were serviced in FY2009 (DFPS Annual Report, 2009).

1.4 Educational Attainment as a predictor of success

Educational attainment of foster youth is one element that until recently has been given more attention due to poor outcomes of youth leaving care. According to figures nationwide, less than 70% of youth in foster care finish high school before aging out of care and only about 3% obtain a bachelor's degree within a few years of leaving care (National Foster Care Coalition, 2009).

The emphasis of this study on educational attainment as a predictor of success is based on the notion that education is a leading indicator of self-sufficiency in the general population and educational outcomes are good indicators of future well being for foster youth aging out of care (Pecora, Williams, & Kessler, 2006). Likewise, educational supports are essential for increasing graduation rates of foster youth from high school and post secondary schools (Gardner, 2008). The importance of improving educational opportunities for foster youth is viewed as a critical factor for future prosperity (Zetlin & Weinberg, 2004). According to the U.S. Department of Labor statistics, the education level achieved by an individual has a positive impact on earning power and employment rate. The higher the level of education achieved the higher potential earnings and lower unemployment rates (U.S. Department of Labor, 2010). The following Figure 1 shows average earnings and unemployment rate based on education level.

Education pays



Source: Bureau of Labor Statistics, Current Population Survey

Figure 1.1 2009 Average Earnings for Full Time Wage and Salary Workers Age 24 and Over

These statistics indicate that education is a leading predictor of success and that a higher level of education increases the chances of higher earnings. In a comparison of the median annual earnings by sex and educational attainment showed higher earnings for persons having at least a Bachelor's degree and even higher earnings for males versus females (NCES, 2010). The following Table 1.4 shows a comparison of annual earnings by sex and educational attainment.

Table 1.4

Median Annual Earnings of Full-Year Wage and Salary Workers Ages 25-34, By Sex and Educational Attainment: Selected Years 2005, 2008

Year	High School Diploma or GED	Bachelor's or Higher
Males		
2005	33,100	55,100
2008	32,000	55,000
Females		
2005	26,500	44,100
2008	25,000	45,000

Source: National Center for Education Statistics, 2010

As the numbers of youth exiting the foster care system continue on a steady rise, the need for transitional services and educational supports are critical to both foster youth and society as a whole. Providing these services up front for helping youth in transition is beneficial to everyone when considering the negative impact on society resulting from youth relying solely on public services for their survival after leaving care.

1.5 Importance to the Field of Social Work

The relevance of this study to social work is to build upon the existing body of knowledge for identifying and supporting efforts to improve educational outcomes of youth aging out of foster care which in turn, will help further their goal of achieving permanency and stability after leaving care. Improving educational outcomes means youth will be better equipped for surviving on their own and becoming stable and productive adults in society. Society also benefits in terms of reduced negative outcomes such as homelessness, unemployment, teenage pregnancy, criminal involvement, and substance abuse.

This study could provide insight to practitioners working with this population in helping youth to develop transition plans that include specific educational goals of the very least completing high school and beyond that, plans for going to college. This study could also provide insight to legislators when making policy decisions that directly impact transitional services for youth aging out of care. Finally, this study could help guide future research in the area of aftercare services for helping youth achieve their educational goals of going to college.

Research indicates that as many as 80% of foster youth aspire to go to college, however, only about 50% of foster youth complete high school compared to approximately 70% of their peers in the general population. Likewise, the rate at which foster youth attend postsecondary education (20%) is substantially lower compared to their peers (60%) in the general population (Wolanin, 2005) and foster youth who enter college are less than half as likely to complete postsecondary education (NASFAA, 2006). Improving the educational opportunities for foster youth can make the difference in their college aspirations becoming a

reality for them and this is vital for achieving self-sufficiency and improving their overall well being.

1.6 Challenges in accessing higher education

Youth who age out of foster care are more likely than their peers to lag behind in their education and experience negative outcomes such as homelessness, mental health issues, teenage pregnancy, substance abuse, and criminal involvement. These challenges further impede their ability to access and pursue higher education after leaving care (Redd, 2006).

Although foster youth leaving care may have the opportunity of entering postsecondary education with financial supports, they lack the support systems and other services to help them succeed academically (Davis, 2006). Research indicates that educational deficits carried over from earlier years are the more serious barriers that make it almost impossible for youth to be successful in college. For example, the college tuition waiver and ETV voucher are valuable educational benefits for youth but these benefits cannot assist youth with the educational challenges carried over from elementary and secondary level grades (Collins, 2004).

The estimated numbers of youth aging out of foster care seems to be a relatively small percentage compared to the total population of children in foster care; however, this gives a false impression that numbers do not reflect a true picture of the needed services for this population. In actuality, this population is easily identifiable and states can make the difference through determined yet cost-effective measures because ultimately, state child welfare agencies and the courts are responsible for the safety and well-being of youth transitioning out of care (National Governors Association, 2010).

Transitional services for youth vary across states and this raises the question of equitable distribution of resources nationwide. State and federal legislation does not provide an endless supply of monies for meeting the needs of this population and more research is needed for finding the best possible use of resources (Collins, 2004). The reality is that providing services for helping youth to become productive members of society totally outweigh the costs

of the negative consequences to society when youth are unable to sustain themselves as adults. A better understanding of these ecological factors will help provide guidance and future direction for improving educational outcomes of foster youth.

CHAPTER 2

LITERATURE REVIEW

The purpose of this section is to provide an overview of selected theories and their application to the current study and methodology used in conducting an empirical review of the literature. The theoretical review includes both an ecological and attachment perspective. The empirical review focused on recent studies on foster youth aging out of foster care and educational programs for accessing higher education. Several searches were conducted through Academic Search Complete and various other databases on the topics of interest by entering “foster youth and educational attainment” and “foster youth and higher education”. Additional searches consisted of “foster youth and educational programs for accessing higher education” and “educational supports for foster youth attending college”. The databases included Eric, Primary Search, Professional Development Collection, Psych Articles, Psychological and Behavioral Sciences Collection, Psych Info, Social Work Abstracts, Topic Search, and Vocational & Career Collection.

2.1 Theoretical Review

The body of literature regarding youth aging out of foster care and educational outcomes has only recently gained more attention. Stein (2006) argues that although there is a growing body of literature on young people aging out of care, very few studies have been informed by theoretical approaches.

This study will utilize an integrative model of ecological theory and attachment theory for an exploration of the factors associated with foster youth leaving care who complete high school. First, Bronfenbrenner’s ecological systems theory will be used to explore the factors in the environmental setting associated with foster youth leaving care that complete high school. Second, Bowlby’s theory of attachment provides a conceptual framework to explain the

importance of developing early childhood attachments for forming healthy attachments later in life and how this may influence educational attainment.

2.2 Ecological Systems Theory

Bronfenbrenner's (1979) ecological systems theory was used as an organizing framework for understanding the association of ecological factors on educational attainment of youth leaving foster care. From an ecological perspective, foster youth interact with their ecological environment which extends far beyond their immediate setting to interactions within settings and between settings. This includes interactions with biological family, foster family, peers, caseworkers, therapists, teachers, and interactions within and between agency settings such as child welfare, foster care agencies, schools, juvenile courts, and community.

2.2.1 Historical foundations

Ecological systems theory has its roots in developmental psychology research for understanding human behavior and the interdependence between people and their environment. Bronfenbrenner's (1979) work in developmental research and public policy were his attempts to develop public policies that could influence people's lives and were essential for progress in the scientific study of human development. His theoretical perspective of human development is defined as "a lasting change in the way in which a person perceives and deals with his environment." (p.3). For youth in transition, this interdependence between people and their environment plays a critical role on how youth perceive their environment and how this affects youth outcomes.

2.2.2 Key Assumptions

Bronfenbrenner (1992) argues that in order to understand human development, the entire ecological system in which growth occurs must also be considered. The key assumptions of this model are:

1. Human development takes place through reciprocal interaction between a person and its environment;
2. To be effective, the interaction must occur on a regular basis over an extended period of time;
3. The ecological environment is conceived as a set of interrelated structures moving from the innermost level to the outermost level;

Bronfenbrenner (1992) asserts that behavior evolves as a function of the interplay between the person and its environment. The ecological environment includes five interrelated systems of interaction between a person and their environment that include the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The micro system is defined as the face-to-face interactions that take place within the immediate setting of an individual. The mesosystem is defined as the interactions taking place between two or more settings in which the person actually participates. The exosystem is defined as the interactions between two or more settings in which a person may not even be present but events occurring in that setting have an influence on the person's immediate setting. The macrosystem is defined as the broader patterns of ideology and social institutions of a particular culture. The chronosystem extends beyond the environment which encompasses change or consistency over time in both the person and the environment over their life span.

2.2.3 *Application to Study*

According to Bronfenbrenner (1979), the most pervasive and potent primary settings in human societies are the family, the workplace, and the peer group. The ecological systems theory is appropriately linked to the current study of factors associated with youth leaving care that complete high school. From an ecological perspective, interactions of youth in their immediate setting and between systems influence youth outcomes when leaving care. In this study, ecological factors in the foster care setting such as number of placements, social supports, and relationships with caring adults will be explored to determine whether or not these factors may predict high school completion.

2.2.4 *Gaps presented by theory*

Ecological systems theory provides a framework for understanding the factors associated with high school completion among foster youth leaving care but it does not explain why some youth have successful outcomes regardless of unfavorable conditions within their environment. It seems likely that variation of the differences in youth outcomes at discharge could be attributed to something other than their environment. Due to this gap in knowledge, attachment theory is used to provide a theoretical explanation of successful outcomes for youth who have experienced adverse conditions within their environments.

2.3 Attachment Theory

Bowlby's (1982) attachment theory is appropriately linked to the study of factors associated with high school completion among foster youth leaving care. His research on attachment, separation and loss basically concludes that a child's deprivation of a strong attachment relationship during early childhood leads to problems in emotional development later in life. Youth experiences in foster care such as placement instability and low educational attainment are associated with negative outcomes and attachment theory provides a framework for understanding the influence of factors such as placement instability, school changes, sibling contact, family contact, and relationships with caring adults. For youth in care, their ability or inability to form attachments may influence their ability to achieve their full potential in terms of educational attainment.

2.3.1 *Historical Foundations*

Bowlby's attachment theory is embedded in a general theory of behavior and concept of a behavioral system. He asserts that the human species is equipped with various behavioral systems that have contributed to species survival in terms of reproducing, caring and protecting their young. Bowlby proposed that the biological function of the attachment system is protection from predators in the evolutionary sense. This system of attachment behavior supplements a

complementary behavioral system in the adult - maternal behavior – in which the biological function is protection and it is a reciprocal process (as cited in Ainsworth, 1978).

Bowlby's (1982) research on attachment provided a framework for understanding the effects of child-mother interactions in early childhood on a child's developing personality. He proposed that personality development occurs as a result of these early experiences which are the basis of forming relationships later in life. Basically, child-mother interactions that are encouraging and supportive provide an individual a secure base on which to build future relationships. This enables him to explore his environment with confidence and promotes his sense of competence. In this manner, an individual is capable of developing and maintaining secure attachments despite adverse conditions that may arise. Thereafter, how an individual's personality is developed influences how that person responds to adversity among which rejections, separations, and losses are some of the most important. This is especially important for foster youth transitioning out of care who have suffered significant losses at an early age and may or may not form secure attachments later in life.

Mary Ainsworth's (1978) contribution to attachment theory was in developing a means for assessing the quality of attachment. The "strange situation" experiment was used as a laboratory procedure for studying infant-mother attachment throughout the first year of life. Ainsworth (as cited in Neswald-McCalip, 2001) classified three main patterns of attachment based on the strange situation experiment. The first pattern of attachment is secure attachment and this is when securely attached individuals present a positive view of exploration, regularly seek out help when needed, and generally believe help will be forthcoming when requested. The second pattern of attachment, anxious/ambivalent, is when individuals display uncertainty about the availability or responsiveness of their attachment figures. They may experience anxiousness when faced with a challenge or the need to explore, are often labeled clingy, and may suffer from repeated crises. The third pattern of attachment is anxious/avoidant, and this is when individuals tend to display no confidence that help is forthcoming. They expect to be

ignored and therefore attempt to be emotionally self-sufficient. A fourth pattern of attachment, disorganized/disoriented, was later developed for dealing with unusual patterns of response to the strange situation procedure. This disorganized pattern was particularly associated with children in abusive situations (as cited in Atwool, 2006). This disorganized pattern is attributed to Main and Solomon's research (as cited in Rutter, 2009) that recognized a separate category to deal with patterns associated with children in adverse psychosocial environments. This category has been found to be more frequent in institutional settings and highly associated with psychopathology (Rutter, 2009). Michael Rutter's (1996) contribution to attachment theory has led to the emerging field of research now identified as developmental psychopathology. His focus on the biological, psychological, and social factors that influence the course of a person's adaptation and maladaptation has helped form an integration between genetic, social, and developmental research as applied to psychopathology.

From the start, Bowlby's (1982) main interest of his research was in understanding attachment processes for improving social policies especially for children. Even though attachment theory can be applied to the life span, most of the early research focused on the infant-parent relationship and there was very little about attachment research in the later phases of the life span. Both Bowlby and Ainsworth agreed that this concept is not only pertinent to an infant's relations with caregiver but one that is characteristic of humans from the cradle to the grave (Ainsworth, 1985). More recently, the growing literature on attachment theory has expanded to include attachment processes with respect to adolescence by Allen and Miga and with respect to old age by Cicirelli (as cited in Shaver & Mikulincer, 2010). There is a general consensus that attachment remains as important feature of human relationships across the life span and that loss of a love relationship is a major stressor for adults just as for children (Rutter, 2009).

2.3.2 *Key Assumptions*

The theory of attachment advanced by Bowlby (1982) is an attempt to explain both attachment behavior and the lasting attachments that children and older individuals make to particular figures. The key concept is that of a behavioral system to fulfill the individual's need for security or safety. Attachment behaviors become patterns of attachment when the individual consistently exhibits the behaviors in an attempt to achieve security or safety.

Bowlby (1982) identified four phases in the development of attachment as follows:

Phase 1: Orientation and signals with limited discrimination of figure – in this phase an infant behaves in certain ways towards people but his ability to discriminate one person from another is limited to stimuli of smell and voice.

Phase 2: Orientation and signals directed towards one or more discriminated figures – in this phase an infant behaves towards others in the same way but he does so in more marked fashion towards his mother than towards others.

Phase 3: Maintenance of proximity to a discriminated figure by means of locomotion as well as signals – an infant is increasingly discriminating and his attachment to his mother is evident for all to see.

Phase 4: Formation of a goal-corrected partnership – child is acquiring insight into his mother's feelings and motives and groundwork is laid for the pair to develop a much more complex relationship.

2.3.3 *Application to Study*

The importance of attachment theory for foster youth leaving care is that having reliable and close relationships increases the chances of achieving their full potential and finding committed relationships after leaving care. The application of attachment theory to the current study is based on the theory's premise that the quality of early experiences in relationships with caregivers shapes the quality of later relationships in life (Bowlby, 1982; Schofield & Beek, 2005).

For youth leaving care, attachment theory offers a useful explanation of the various factors influencing educational outcomes among youth leaving care. The limited research on adolescent attachment indicates that the relationship network expands dramatically during this stage. The development of secure versus insecure attachment in adolescence appears to be multi-faceted and environmentally driven. Secure attachment in adolescence is associated with a range of positive individual and social indicators of adjustment while insecure attachment is closely associated with internalizing disorders, externalizing disorders, personality disorders, and social problems (Shumaker, et al, 2009). This is especially critical due to the nature of growing up in an institutional setting or foster care system rather than in a permanent family setting and numerous studies have shown that children taken into care have an increased rate of psychopathology (Rutter, et al, 2001).

Bowlby (1982) acknowledged that during adolescence attachment is commonly directed not only towards persons outside the family but also towards groups and institutions. He further asserted that security of attachment promoted psychological well being (as cited in Stevenson-Hinde, 2007). In similar terms, Atwool (2006) explains the patterns of attachment with regard to adolescents with a history of secure attachment as being confident, out-going, and having the ability to access support when needed. The ability to form a secure attachment to at least one caring adult could make the difference in helping youth overcome adversity.

Atwool (2006) explains how the avoidant pattern develops in the context of an unresponsive and rejecting relationship with the attachment figure. She describes adolescents with a history of avoidant attachment as sullen and withdrawn with intermittent outbursts of rage. Their peer relationships tend to be superficial and aggressive behavior may be triggered in close relationships due to lack of trust. The ambivalent/resistant pattern develops in response to inconsistent, unreliable responses from the attachment figure. Adolescents with a history of ambivalent/resistant attachment are likely to be engaged in intense and explosive relationships with attachment figures. She further describes youth with a disorganized

attachment as being the most vulnerable due to their lack of strategy for managing relationships, feelings, or experiences.

2.3.4 *Gaps presented by theory*

An important challenge in the application of attachment theory to youth leaving care arises from the fact that the theory and research have focused traditionally on attachment formation in infancy and there is little research about adolescent attachment which is characterized by a rapid expansion in relationship networks (Shumaker, et al, 2009). More research is needed with regard to adolescent attachment expectations of caregivers for providing a secure base for older youth (Schofield & Beek, 2005) as well as attachment processes in social groups such as work organizations, schools, and societies (Shaver & Mikulincer, 2010). Youth in care may have also received therapeutic interventions such as individual counseling or therapy and this relationship may have been short term or longer term. In terms of therapeutic relationships, Bowlby himself wrote about the likelihood that clients come to view their therapists as attachment figures (as cited in Shaver & Mikulincer, 2010). As an important feature of human relationships across the life span, attachment needs to be assessed in love relationships and close friendships (Rutter, et al, 2009).

2.4 Empirical Review

Approximately twenty research studies were found related to topic of interest and sixteen studies were selected based on topic of interest, relevance of social work practice and current information within the last ten years (1999-2009). A total of twelve studies deal specifically with foster youth and outcomes at discharge including educational attainment and a total of four studies included former foster youth attending college.

In addition, multiple government, foundation, and child welfare websites were searched for literature resources and statistics that included the U.S. Department of Health & Human Services, Department of Family & Protective Services, National Association of Student Financial Aid Administrators, Research Division of National Association of Counties, Legal Center for

Foster Care & Education, National Governor's Association Center for Best Practices, National Center for Education Statistics, National Youth Development Information Center, and Child Welfare Information Gateway.

The overall purpose of the studies related to foster youth and assessing outcomes at discharge including educational attainment and factors related to academic success. The studies were reviewed and information was organized on a table chart by year, purpose of method, sample size, data collection, comparison group, statistical analysis, and findings.

2.4.1 *Methodological Concerns*

Research in the area of foster youth aging out of care has steadily increased over the years but it remains to be further explored especially with regard to educational outcomes. Most of the research has focused on general outcomes and only a few studies included educational achievement (McMillan & Tucker, 1999; Reilly, 2003; Pecora, Williams & Kessler, 2006; Pecora, Kessler & O'Brien, 2006). Three studies explored personal factors related to educational success including resilience (Hines, et al, 2005; Merdinger, et al, 2005; Daining & DePanfilis, 2007). One study investigated the relationship between placement restrictiveness and educational achievement (Mech & Fung, 1999).

Almost all of the studies utilized purposive sampling and only one study utilized a random sample of youth discharged from care (McMillan & Tucker, 1999). The data collection method for all of the studies was survey research including case record reviews and interviews. In one study, computer assisted self-administered interviews were utilized for data collection (Daining & DePanfilis, 2007).

The research design for most of the studies was cross-sectional except for four longitudinal studies (Mech & Fung, 1999; Courtney, et al, 2001; Courtney, et al, 2004; Engstrom & Tinto, 2008). The majority of studies did not utilize scales to measure variables and five studies utilized standardized scales (Mech & Fung, 1999; Reilly, 2003; Pecora, et al, 2006; Daining & DePanfilis, 2007; Engstrom & Tinto, 2008).

Most of the studies utilized descriptive analysis for key variables, bivariate and multivariate analysis. One study utilized descriptive, multivariate, and logistic regression (McMillan & Tucker, 1999). Another study utilized descriptive, bivariate, chi-square, and Anova (Merdinger, et al, 2005). Pecora, Williams & Kessler (2006) utilized logistic regression analysis to determine variables predicting high school completion. Pecora, Kessler, & O'Brien (2006) utilized descriptive analysis with regression statistical simulations. Engstrom & Tinto (2008) used multivariate regression and Hass & Graydon (2008) used effect size for their analysis.

The sample size of the research studies varied in range from 100 to 5,279 participants with the exception of three qualitative studies with samples less than 100 participants (Altshuler, 2003; Hines, et al, 2005; Zetlin, et al, 2006b).

2.4.2 *Methodological Challenges*

Research in the area of youth aging out of foster care and educational outcomes is limited and most research has focused on description of youth demographics and general outcomes. These outcomes are described across various elements of youth functioning such as history of maltreatment, foster care experience, social support, independent living services, education, employment, health status, mental health, and criminal involvement.

One longitudinal study tracked youth outcomes during transition at three separate intervals (Courtney, et al, 2004) and another longitudinal study tracked youth outcomes after leaving care (Courtney, et al, 2001). Four studies included qualitative research methods (Altshuler, 2003; Hines, et al, 2005; Zetlin, et al, 2006b; Scannapieco, 2007). These study findings related more specific information than other studies as to the challenges and best supports for helping youth succeed. Only four studies selected a study sample of former foster youth attending college at a state university (Hines, et al, 2005; Merdinger, et al, 2005; Engstrom & Tinto, 2008; Hass & Graydon, 2008) and only five studies utilized a comparison group (Courtney, et al, 2004; Merdinger, et al, 2005; Zetlin, et al, 2006(a); Pecora, Williams & Kessler, 2006; Engstrom & Tinto, 2008).

2.4.3 *Results*

The findings are quite broad but contain a fair amount of consistency in factors influencing educational achievement. Factors contributing to academic success included stable school attendance, challenging high school curriculum, social support, extracurricular activities, and training (Merdinger, et al, 2005; Pecora, et al, 2006). The level of education, number of foster care placements, receiving services and training before leaving care, social support networks, and job experience in care increased the likelihood of successful outcomes (Reilly, 2003). Even when foster youth complete high school, they are more likely to participate in vocational training programs versus post-secondary education programs (Blome, 1997). Youth who had fewer placements or completed school also had higher odds of being employed at exit status (McMillen & Tucker, 1999).

Only two studies included former foster youth from three public child welfare agencies that included educational outcomes. The Midwest Evaluation Study is one of the largest studies following 732 youth leaving foster care in Iowa, Wisconsin, and Illinois. In this study, over 33% of study participants had not received a high school diploma or GED compared to 10% in the national sample comparison group. Also, participants who remained in care were twice as likely to be enrolled in an educational program as those who were discharged from care (Courtney, et al, 2004). In the Northwest Alumni Study, approximately 659 foster care alumni from three public child welfare agencies in Washington and Oregon were included in the study. Results showed that over 85% of alumni had completed high school with 28% obtaining a GED. The rate of participants completing a bachelors' degree or higher was approximately 2% compared with a national rate of 24% (Pecora, Kessler, & O'Brien, 2006).

Overall, the educational outcomes of foster youth who remained in care were much better than those who had left care (Courtney & Dworsky, 2006; Courtney, et al, 2007). The research further indicates that youth have aspirations of attending college and staying longer in care increases their chances for improving educational outcomes.

2.5 Conclusion of Review

The research indicates that foster youth continue being at a disadvantage in all areas of functioning and need supports to help them overcome these challenges. For youth aging out of care, receiving training and services while in care increases the likelihood of successful outcomes. Factors such as fewer placement changes, participation in extracurricular activities and independent living services reduced poor outcomes. For youth pursuing higher education, the most notable factors to help them achieve success were receiving support services, having relationships with caring adults, and wanting to help others.

For youth in general, the family plays a major role for supporting and instilling the value of an education and helping youth achieve their goals. There is a natural support system in planning for their future which includes finishing high school and going to college. Youth in foster care do not have a family system for helping them achieve their goals and it is up to everyone involved in working with them to help them prepare for their future. Educational planning for this population needs to happen prior to entering high school to support and educate youth about their educational options, career aspirations, and educational benefits. The improvement of educational outcomes of foster youth depends on the collaboration of everyone involved in working this population. Collaborations and support networks need to be provided for youth while in care and after leaving care for increasing graduation rates of high school and college attendance.

The research shows that improving transitional services beyond the provision of financial supports will help improve educational outcomes and this is long overdue for youth in transition. Collaborative efforts among agencies are necessary for helping youth succeed and become productive members of society. Evidence based research is also needed for determining the best use of limited resources as well as evaluating existing programs, developing policies and best practices for helping youth complete high school and attend college.

2.6 Strengths and Limitations of Review

The study samples for thirteen of the studies were selected from a public child welfare agency and comparison groups were utilized in four studies. Merdinger, et al, (2005) compared their study sample to two groups – low income students and former foster youth not attending college. Courtney, et al (2004) compared their study sample with a representative sample of youth who participated in a National Longitudinal Study of Adolescent Health. Zetlin, et al (2006a) compared their study sample with a matched group of students not receiving support services and Engstrom & Tinto (2008) compared their study sample with a comparable group of college students. Four studies utilized longitudinal research which allows researchers to look at changes over time and this is especially useful for evaluating transitional services.

Most of the studies utilized a cross sectional design which prohibits causal inferences of study findings and only six of the studies utilized standardized scale instruments for measurement of variables (Courtney, et al, 2001; Reilly, 2003; Courtney, et al, 2004; Courtney & Dworsky, 2006; Pecora, Williams, & Kessler, 2006; Daining & DePanfilis, 2007).

McMillan & Tucker (1999) assessed the exit status of youth leaving care and utilized case extraction for data collection. A significant limitation in this study was measurement due to case extraction and no information on reliability and validity.

In two qualitative studies, a significant limitation was sample size although information was insightful and may be a useful resource in planning research (Morris, 2007; Hines, et al, 2005). In this research study, the focus was on research and theory development in the area of risk and resiliency and exploration of factors related to academic success.

2.7 Gaps in the Literature

The most obvious gap in research is the lack of studies for assessing outcomes that include specific educational supports and services. In addition to completing high school, there are even fewer studies of former foster youth attending college. Only three studies included a sample entirely of former foster youth attending college. More research in this area would help

to further our knowledge and understanding of factors contributing to their educational success in college. Factors contributing to their educational success could help improve program areas and services for increasing the likelihood of foster youth finishing high school and going to college.

Additional research is also needed to better understand the factors related to educational attainment and the interrelationship of these factors. Only one research study described an education initiative model related to academic success of foster youth and more research is needed for assessing the effectiveness of specific programs and interventions. The research indicates that youth have a desire to pursue higher education but lack the necessary support, training, and resources for helping them achieve their educational goals.

Further research is needed for assessing outcomes of youth leaving foster care in light of recent programs initiated for improving independent living programs and transitional services. These services include the addition of transition specialists and education specialists for improving educational outcomes. Education specialists act as liaisons between the state child welfare agency and the school districts for resolving educational issues affecting children and youth. They provide case consultation, technical assistance, and trainings and participate in transition planning. How effectively these resources are being utilized by child welfare agencies could make the difference for improving education outcomes. A program evaluation for assessing the effectiveness of programs and services is necessary for purposes of program improvement and making policy changes in child welfare agencies.

In Texas, youth can remain in extended foster care up to the age 22 for purposes of completing high school or vocational training and research is needed for assessing outcomes of this population. This includes using evidence based research, adequate sized samples, and inclusion of youth in post secondary programs. Further research of this population would help to gain a better understanding of factors related to educational achievement and more successful outcomes of youth leaving care.

CHAPTER 3

METHODOLOGY

The purpose of this study is to examine the factors associated with high school completion among foster youth leaving care. Youth in foster care face many challenges that negatively impact their ability to complete high school and to pursue higher education. Nevertheless, some foster youth are successful in achieving their goal of completing high school. The hypothetical formulation guiding the current study is that youth with higher placement stability, social supports, and participation in independent living services are more likely to finish high school than those who drop out. Youth who complete high school are also more likely to obtain a state college tuition waiver.

3.1 Agency Information

The Department of Family and Protective Services is an agency of the Texas Health and Human Services System. This is the child welfare agency designated to investigate reports of child abuse and neglect. In addition, this agency provides services to children and their families which include placing children in foster care, placing children in adoptive homes, and helping foster youth make the transition to adulthood (DFPS, 2009). This agency has a state office and various regional and local offices statewide that serve families and youth between the ages of 0-17. This study will focus on foster youth leaving care in Region 3 which consists of the Dallas and Fort Worth area. The data set for this study is from the Department of Family and Protective Services for Region 3. The participants in this study included foster youth leaving care during fiscal year starting September 1, 2008 and ending August 31, 2009.

3.2 Research Design

The research design is a cross-sectional, non-experimental, retrospective design using a survey instrument for extracting data from an agency database. This study utilized a non-probability sample and units of analysis are foster youth leaving care during fiscal year starting September 1, 2008 and ending August 31, 2009. The data is collected at one point in time comparing the differences between youth who completed high school to those who dropped out. Survey research is utilized as being appropriate for exploratory and explanatory purposes and for analyzing multiple variables simultaneously despite the uncertainty to causality (Rubin & Babbie, 2008).

3.2.1 Sampling Plan

The current study utilized a non-random, convenient sampling plan. A regional listing of foster care leaving care during fiscal year starting September 1, 2008 and ending August 31, 2009 was obtained from the Texas Department of Family and Protective Services in Region 3 (Dallas-Fort Worth). The selection criteria are youth leaving care that completed high school or dropped out of school. The 270 cases reviewed consisted of a regional listing of foster youth leaving care for fiscal year ending August 31, 2009. The study sample is comprised of two groups: youth who completed high school and youth who dropped out.

A statistical power analysis was conducted by utilizing Cohen's statistical power tables as a reference guide (Rubin & Babbie, 2008). The sample size of 211 was found to be an appropriate sample size based on level of significance at .05 and medium effect size ($r=.30$).

3.2.2 Data Collection

Case records were reviewed for 270 foster youth leaving care at the end of fiscal year of August 31, 2009. The selection criteria included foster youth that completed high school or dropped out. A survey instrument was utilized for extracting data from an existing agency database. The data was collected at the Regional Office for the Department of Family and Protective Services in Region 3 (Dallas-Fort Worth). A total of 211 foster youth met the

selection criteria as follows: 85 youth who completed high school and 126 youth who dropped out.

In order to accurately assess the strength of the relationship between factors and educational outcomes the current study analyzes and controls for a number of variables.

3.2.3 *Control Variables*

For this study, general demographic information was utilized for examination of subgroups based on age, gender, race/ethnicity, religion, and family type. Other control variables included length of time in care, number of caseworkers, employment experience, teenage parenting, living arrangement at discharge, mental health diagnosis, substance abuse, and juvenile detention.

3.2.4 *Predictor Variables*

The current study will attempt to identify a number of key predictor variables based upon the theoretical framework of Bronfenbrenner's ecological systems theory. The predictor variables include placement stability, social supports, and relationships with caring adults. According to Bronfenbrenner's ecological systems theory, youth who have experienced more placement stability and social supports will have more positive outcomes at discharge including more successful educational outcomes. According to Bowlby's attachment theory, youth with more caring adult relationships will also have more successful outcomes at discharge. The predictor variables will be operationalized in this manner:

Placement stability

1. Number of placements in foster care
 - a. Low (1-10)
 - b. Medium (11-19)
 - c. High (20 or More)

Social Supports

1. Extracurricular Activities
Yes or No

2. Volunteer work
Yes or No
3. Hobbies/Interests
Yes or No

Significant Relationships with Caring Adults

- a. 1 person
- b. 2-3 persons
- c. More than 3
- d. None

3.2.5 *Criterion Variables*

The criterion variable in this current study is youth leaving care that completed high school. Finishing high school determines the path for youth in terms of increasing their chances of going to college. The tuition waiver is probably the most significant educational benefit youth may obtain if they remain in care until reaching 18 years of age and finishing high school. This educational benefit allows youth to attend any state supported college or university within the State of Texas and having their tuition fees waived.

3.2.6 *Measurement Tool*

A survey instrument consisting of 40 questions was utilized for gathering data including demographics such as gender, age, race, religion, and family type. A small pilot study was conducted by researcher during the Summer of 2010 in order to test the survey instrument on the desired population. This pilot study of 50 cases helped to determine the arrangement of questions and what questions needed to be eliminated, added or modified. The survey instrument is attached as Appendix A.

3.2.7 *Hypothesis*

The overarching hypothesis of the current study is that youth with more placement stability, social supports, and relationships with caring adults, will be more successful in completing high school. Youth who complete high school, in turn, are also more likely to obtain

a college tuition waiver for attending college. In addition, this study will assess the level of association between chosen variables.

Hypothesis 1: Foster youth who complete high school have more placement stability than youth who drop out of school.

Theoretical Framework: Ecological theory suggests that youth having more stable placements will be more successful in completing high school. From an ecological perspective, placement stability plays a role in how youth view and interact with their environment. This interaction must occur on a regular basis over an extended period of time in order to be effective and therefore placement stability is crucial for positive youth outcomes.

Hypothesis 2: Foster youth who complete high school have more social supports compared to youth who drop out of school.

Theoretical Framework: Ecological theory suggests that youth having more social supports through their involvement in school activities, volunteer work, and hobbies/interests will be more successful in completing high school. From an ecological perspective, these interactions may help increase their support network for more positive youth outcomes.

Hypothesis 3: Foster youth who complete high school have more relationships with caring adults compared to youth who drop out of school.

Theoretical Framework: Attachment theory suggests that youth who have more relationships with caring adults are more likely to experience more positive outcomes at discharge. Their ability to form a secure attachment to at least one caring adult could make the difference in helping youth overcome adversity.

Hypothesis 4: Foster youth who experience higher levels of placement stability, social supports, and relationships with caring adults will be more successful in completing high school.

Theoretical Framework: Attachment theory suggests that the development of secure attachment in adolescence is associated with more overall positive youth outcomes.

3.2.8 *Internal Validity*

Internal validity refers to the degree that one can draw valid conclusions about the causal effects of one variable on another (Vogt, 2005). A number of threats to internal validity include history, maturation, and selection bias which may affect the dependent variable (Rubin & Babbie, 2008). History is a legitimate threat to this study due to the possibility that at some point in time an extraneous variable might have impacted the outcome variable. Maturation is a legitimate threat because the passage of time might have alleviated some traumatic event which also impacted the outcome variable. Selection bias is another legitimate threat due to the problem of differences between groups that may interact with the independent variable. These other differences between groups could also explain the differences in the outcome variable. Interaction between variables is an important issue in this study and even though this study may not include all relevant variables, a number of control variables are included to counter this problem.

3.2.9 *External validity*

External validity refers to the extent to which the findings of a study are relevant to settings beyond the study (Vogt, 2005) and whether we can generalize those findings to other settings and populations (Rubin & Babbie, 2008). The current study employed a non-probability sample and therefore generalization of findings is limited to the conditions of the current study. The sample size of a study is closely related to external validity in that samples that are randomly selected demonstrate greater levels of external validity due to everyone in the population having the same opportunity of being included in the sample. Consequently, the smaller sample size of approximately 211 cases in the current study is a legitimate threat to external validity.

3.3 Data Analysis

The Statistical Program for Sciences (SPSS) 19.0 was used to analyze and evaluate the data. Descriptive statistics were used to describe the study sample in terms of

demographics and control variables. Chi-square analysis was utilized to assess if there was a statistically significant difference between groups. Logistic regression analysis was used to determine predictor variables of high school completion. Logistic regression is employed as the most effective analysis method due to its ability to establish comparisons between groups while controlling for numerous other variables.

According to Vogt (2005), logistic regression is a kind of regression analysis often used when the dependent variable is dichotomous or multinomial and independent variables may be categorical or continuous. It is usually used for predicting whether something will happen or not, such as graduation from high school or any other event. The dependent or criterion variable is the only variable that is transformed while the independent or predictor variable is left in its natural unit. The maximum likelihood formula provides a goodness of fit ratio which ultimately provides an odds ratio assessing the odds of change in the criterion variable when the predictor variable changes by one unit. Logistic regression was used for testing of the following hypothesis: Foster youth who experience higher levels of placement stability, social supports, and caring adult relationships will be more successful in completing high school.

3.4 Limitations

This study has several limitations that need to be considered. First and foremost, this is a non-experimental, retrospective, cross-sectional design which is susceptible to measurement error since data collected is at one point in time and prohibits causal inferences. The results of this study cannot be generalized to the entire population of foster youth leaving care only as to the study conditions.

The reliance on case extraction is another concern due to the possibility of bias reporting and accuracy of case documentation. This information is documented by various caseworkers throughout the life of a case and human error poses a risk with data entries. Another limitation is that only one method of data collection is utilized through case extraction and therefore triangulation is not feasible. The study utilized a quantitative approach and

therefore measurement of variables such as number of caring adults does not include qualitative data measuring the quality of attachment. As such, the hypothesis findings need to be interpreted with caution.

3.5 Protection of Human Subjects

This current study is in compliance with all requirements of the Institutional Review Board for the Protection of Human Subjects at the University of Texas at Arlington. It was qualified as exempt from coverage under the federal guidelines for the protection of human subjects as referenced at Title 45 Part 46.101(b)(4). This study also meets internal requirements with the Texas Department of Family and Protective Services.

CHAPTER 4

ANALYSIS OF RESULTS

The goal of this study is to explore factors associated with high school completion among foster youth leaving care compared to those who drop out of school. This chapter includes an overall description of the study sample, a comparative summary of groups, research findings and results. The Statistical Program for Social Sciences (SPSS 19.0) was used in the analysis of the data. Tables and figures are utilized to present findings where applicable.

4.1 Description of Sample

A total of 270 cases were reviewed through case extraction from an agency database. The data was collected at the Regional Office of the Texas Department of Family and Protective Services located in Arlington, TX. In reviewing the data, approximately 59 youth were excluded due to not meeting the selection criteria – 38 youth remained in extended care, 10 youth were pending conservatorship through the Department of Aging & Disability Services, 6 were case sensitive, and 5 were returned with relatives prior to discharge. The remaining 211 participants met the selection criteria of youth completing high school or dropping out.

4.1.1 *Demographics*

The average age of discharged youth consisted of 98.1% of youth leaving care at 18 years old and 1.9% of youth leaving care at 19 years of age. The gender distribution of youth consisted of 47% males and 53% females. Of the 211 participants in the study, 46% identified themselves as White, 38% were African-American, 15% were Hispanic, and 1% were Asian. In terms of religious background, participants identified themselves as 31% Unknown, 29%

Protestant, 25% No Preference, 9.5% Other and 5% Catholic. The family type upon entering foster care consisted of 38% single parent household, 39% two-parent household, and 22% living with relative or other.

4.1.2 Foster Care Experience

The length of stay in foster care ranged from 59% staying less than five years (low), 33% staying between 5-10 years (medium), and 7.6% staying 11 or more years (high). The number of caseworkers for youth ranged from 69% having between 1-5 caseworkers (low), 29% having between 6-10 caseworkers (medium), and 2% having 11 or more caseworkers (high). The number of placements for youth ranged from 55.5% having between 1-10 placements (low), 24.6% having between 11-19 placements (medium) and 20% having 20 or more caseworkers (high). In terms of youth identified as teenage parents, 18% of participants were teenage parents and 82% were not teenage parents. In terms of living arrangement of youth at the time of discharge, 41% of youth were in independent living, 20% were on runaway status, 18% were living with relatives, 13% indicated other type of arrangement, and 9% were in transitional housing.

Table 4.1

Description of Study Sample (n=211)

Age of Youth at discharge	18 yo = 98.1% 19 yo = 1.9%
Gender	Females = 53% Males = 47%
Race	White – 46% African American – 38% Hispanic – 15% Asian – 1%
Religion	Unknown – 31% Protestant – 29% No Preference – 25% Other – 9.5% Catholic – 5%

Table 4.1 - continued

Family Type	Two Parents – 39% Single Parent – 38% Other – 22%
Length of Stay	Low (1 – 5) = 59.2% Med (6 -10) = 33.2% High (11 or more) = 7.6%
Number of Caseworkers	Low (1 – 5) = 69.2% Med (6 – 10) = 28.9% High (11 or more) = 1.9%
Number of Placements	Low (1 – 10) = 55.5% Med (11 – 19) = 24.6% High (20 or more) = 19.9%
Teen Parents	Not Teen Parents = 82% Teen Parents = 18%
Living Arrangement	Ind. Living = 41% Runaway = 20% Living w/relative = 18% Other = 13% Transitional Housing = 9%

4.2 Comparison of Groups

In the study sample of 211 participants, a total of 85 youth (40%) completed high school compared to 126 youth (60%) who dropped out of school. The mean age at discharge was 18 years of age for both groups. Chi-square analysis was utilized for comparing differences between groups and logistic regression was utilized to determine predictor variables for high school completion.

4.2.1 *Demographics*

A chi-square analysis was calculated for comparing age, gender, race, religion, and family type with high school completion. In terms of age comparison, results indicated there was a statistically significant difference between the two groups ($p < .05$). Youth who completed high school consisted of 95.3% who were 18 years of age and 4.7% were 19 years of age. Youth who dropped out of school consisted of 100% who were 18 years of age. A higher

number of youth who completed high school were 18 years of age or older compared to those who dropped out.

A chi-square analysis was calculated for comparing gender with high school completion and there was no statistically significant difference between the two groups ($p = .38$). A chi-square analysis was also calculated comparing race, religion, and family type and results indicated no statistically significant difference for race ($p = .16$), religion ($p = .24$), and family type ($p = .41$).

4.2.2 *Length of Stay in Care*

A chi-square analysis was calculated to determine whether there was a statistically significant difference between groups regarding the length of stay in care, number of caseworkers, and number of placements. In terms of length of stay in foster care and high school completion, results indicated there was no statistically significant difference between the two groups ($p > .05$). The length of stay for youth who completed high school ranged from 56.5% staying 0-5 years (low), 35.3% staying between 6-10 years (medium), and 8.2% staying between 11 or more years (high). The length of stay in care for youth who dropped out ranged from 61.1% staying 0-5 years (low), 31.7% staying between 6-10 years (medium) and 7.1% staying 11 or more years (high).

4.2.3 *Number of Caseworkers*

In terms of the number of caseworkers and high school completion, results indicated that there was a statistically significant difference between the two groups ($p < .05$). The number of caseworkers for youth who completed high school ranged from 65.9% having between 1-5 caseworkers (low), 29.4% having between 6-10 caseworkers (medium), and 4.7% having 11 or more caseworkers (high). For youth who dropped out, the number of caseworkers ranged from 71.4% having between 1-5 caseworkers (low), 28.6% having between 6-10 caseworkers (medium), and 0% having 11 or more (high). Surprisingly, the number of caseworkers for youth who completed high school was higher compared to those who dropped out.

4.2.4 Number of Placements

In terms of number of placements in foster care, chi-square results indicated there was a statistically significant difference between the two groups ($p < .05$). As expected, the number of placements for youth who completed high school was lower compared to the number of placements for those who dropped out. The number of placements for youth who completed high school ranged from 69.4% having between 1-10 placements (low), 20% having between 11-19 placements (medium), and 10.6% having 20 or more placements (high). The number of placements for youth who dropped out ranged from 46% having between 1-10 placements (low), 27.8% having between 11-19 placements (medium), and 26.2% having 20 or more placements (high).

Table 4.2

Comparison of Groups w/Control Variables

	Completed HS (n=85)	Did not complete HS (n=126)	*Sig.
Age	18 yo = 95.3% 19 yo = 4.7%	18 yo = 100%	*p= 6.04
Gender	M = 44.4% F = 55.6%	M = 50.6% F = 49.4%	p = .769
Race	White – 51.8% Black – 34.1% Hispanic – 11.8% Asian – 2.4%	White – 42.9% Black – 40.5% Hispanic – 16.7% Asian – 0%	p= 5.20
Religion	Protestant – 27.1% Catholic – 3.5% No Preference – 20% Other – 12.9%	Protestant – 30.2% Catholic – 6.3% No Preference – 28.6% Other – 7.1%	p=5.45
Family Type	Single Parent – 34.1% Two Parents – 44.7% Other – 21.2%	Single Parent – 41.3% Two Parents – 35.7% Other – 23%	p=1.79
Length of Stay in FC	Low (1 - 5 yrs) = 56.5% Med (6 - 10 yrs) = 35.3% High (11 or more) = 8.2%	Low (1 - 5) = 61.1% Med (6 - 10 yrs) = 31.7% High (11 or more) = 7.1%	p=.457

Table 4.2 - continued

No. of Caseworkers	Low (1–5) = 65.9% Med (6–10) = 29.4% High (11 or more) = 4.7%	Low (1–5) = 71.4% Med (6–10) = 28.6% High (11 or more) = 0%	*p=6.16
No. of Placements	Low (1–10) = 69.4% Med (11–19) = 20% High (20 or more) = 10.6%	Low (1–10) = 46% Med (11–19) = 27.8% High (20 or more) = 26.2%	*p=12.45
Teenage Parents	Not Teen Parents = 89.4% Teen Parents = 10.6%	Not Teen Parents = 77.8% Teen Parents = 22%	*p=4.75
School Activities	Not Involved = 55.3% Involved = 44.7%	Not Involved = 77% Involved = 23%	*p=11.01
Volunteer Work	Not Involved = 82.4% Involved = 17.6%	Not Involved = 96% Involved = 4%	*p=11.06
Hobbies	Not Involved = 54.1% Involved = 45.9%	Not Involved = 58.7% Involved = 41.3%	p=.440
Relationships with caring adults	1 caring adult = 14% 2-3 caring adults = 85.9%	1 caring adult = 69% 2-3 caring adults = 19%	*p=92.08
Sibling Contact	1 -2 times per yr = 8.2% 3-5 times per yr = 27.1% More than 5 = 32.9% No contact = 30.6%	1-2 time per yr = 23% 3-5 time per yr = 6.3% More than 5 = 7.1% No contact = 63.5%	*p=50.65
Contact with Extended Family	No contact = 34.1% Some contact = 65.9%	No contact = 62.7% Some contact = 37.3%	*p=16.59
Employment	No experience = 37.6% Some experience = 62.4%	No experience = 61.9% Some experience = 38.1%	*p=11.96
PAL Training	Completed PAL = 92.9% Not Completed = 7%	Completed PAL = 58.7% Not Completed = 41.3%	*p=29.80
COS Transitional Planning	Completed COS = 87.1% Not Completed = 12.9%	Completed COS = 59.5% Not Completed = 40.5%	*p=18.54
Mental Health	Diagnosis = 75.3% No Diagnosis = 24.7%	Diagnosis = 95.2% No Diagnosis = 4.8%	*p=18.09
Substance Abuse	History = 9.4% No History = 90.6%	History = 31.7% No History = 68.3%	*p=14.40

Table 4.2 - continued

Juvenile Detention	History = 20% No History = 80%	History = 65.9% No History = 34.1%	*p=42.84
Living Arrangement at discharge	Ind. Living = 52.9% Transitional = 12.9% University = 11.8% Unauthorized = 0% Runaway = 0% Relatives = 14.1% Friends = 3.5% Job Corps = 2.4% Military = 1.2% TYC = 1.2%	Ind. Living = 32.5% Transitional = 5.6% University = 0% Unauthorized = 3.2% Runaway = 33.3% Relatives = 19.8% Friends = 4% Job Corps = 0% Military = 0% TYC = 1.6%	*p=59.76

4.2.5 Teenage Parenting

In terms of teenage parenting and high school completion, 89.4% of youth were not teenage parents and 10.6% of youth were teenage parents (n=85). In comparison to youth who dropped out, 77.8% were not teenage parents and 22% of youth were teenage parents (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). Youth completing high school had a much lower percentage of teen parents. Foster youth who are teen parents are less likely to complete high school compared to youth who are not teenage parents.

4.2.6 School Activities

In terms of school activities and high school completion, 55.3% of youth were not involved in school activities and 44.7% of youth were involved in activities (n=85). In comparison to youth who dropped out, 77% were not involved in school activities and 23% were involved in activities (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A higher percentage of youth involved in school activities completed high school compared to youth who dropped out. Foster youth involved in school activities are more likely than those with no involvement to complete high school.

4.2.7 *Volunteer Work*

In terms of volunteer work and high school completion, 82.4% of youth were not involved in volunteer work and 17.6% of youth were involved in volunteer work (n=85). In comparison to youth who dropped out, 96% of youth were not involved in volunteer work and 4% of youth were involved in volunteer work (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A much higher percentage of youth who completed high school were involved in volunteer work compared to those who dropped out. Foster youth involved in volunteer work are more likely than youth with no involvement to complete high school. A Chi-square analysis was calculated comparing involvement in hobbies with high school completion and results indicated there was no statistically significant difference between the two groups.

4.2.8 *Relationships with Caring Adults*

In terms of relationships with caring adults and high school completion, 14.1% of youth indicated having at least one caring adult and 85.9% of youth indicated having 2-3 caring adults (n=85). In comparison to youth who dropped out, 69% of youth indicated having at least one caring adult and 19% of youth indicated having 2-3 caring adults (n=126). A chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A much higher percentage of youth who completed high school had 2-3 caring adults compared to youth who dropped out. Youth having a higher number of caring adults are more likely than youth with fewer or no caring adults to complete high school.

4.2.9 *Sibling Contact*

In terms of sibling contact and high school completion, 8.2% of youth indicated having sibling contact 1-2 times per year, 27% of youth had sibling contact 3-5 times per year, 32.9% of youth had contact more than 5 times per year, and 30.6% of youth had no contact (n=85). In comparison to youth who dropped out, 23% of youth had sibling contact 1-2 times per year, 6.3% of youth had sibling contact 3-5 times per year, 7.1% of youth had contact more than 5

times per year, and 63.5% had no contact (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A higher percentage of youth who completed high school had sibling contact more than 5 times per year (32.9%) compared to youth who dropped out (7.1%). Similarly, a higher percentage of youth who dropped out had no sibling contact (63.5%) compared to youth who completed high school (30.6%).

4.2.10 *Contact with Extended Family*

In terms of contact with extended family and high school completion, 34% of youth had no contact with extended family and 65.9% of youth had some contact (n=85). In comparison to youth who dropped out, 62.7% of youth had no contact with extended family and 37.3% of youth had some contact (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). More than half of youth who completed high school indicated having contact with extended family compared to those who dropped out. Foster youth having more contact with extended family are more likely than youth having no contact to complete high school.

4.2.11 *Employment Experience*

In terms of employment experience and high school completion, 37.6% of youth had no experience and 62.4% of youth had some experience (n=85). In comparison to youth who dropped out, 61.9% of youth had no experience and 38% of youth had some experience (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). More than half of foster youth who completed high school had some employment experience compared to youth who dropped out. Foster youth with some employment experience are more likely than youth with no experience to complete high school.

4.2.12 *Independent Living Services*

Independent living services and high school completion was examined based on youth participation in PAL training and COS transitional planning.

In terms of PAL training and high school completion, 92.9% of youth had completed PAL training (n=85) and 7% had not completed PAL training. In comparison to youth who dropped out, 58.7% had completed PAL training and 41.3% had not completed PAL training (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A much higher percentage of youth receiving PAL training completed high school compared to those who dropped out.

In terms of COS transitional planning and high school completion, 87.1% had received transitional planning and 12.9% of youth had not received transitional planning (n=85). In comparison to youth who dropped out, 59.5% had received transitional planning and 40.5% had not received transitional planning (n=126). A chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A higher percentage of youth receiving transitional planning completed high school compared to those who dropped out.

4.2.13 *Mental Health*

In terms of mental health diagnosis and high school completion, 75.3% of youth had a mental health diagnosis and 24.7% had no mental health diagnosis (n=85). In comparison to youth who dropped out, 95.2% had a mental health diagnosis and 4.8% had no mental health diagnosis (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A high percentage of youth having a mental health diagnosis completed high school (75.3%) compared to percentage of youth having a mental health diagnosis (95.2%) who dropped out of school. Similarly, a much higher percentage of youth with no mental health diagnosis (24.7%) completed high school compared to percentage of youth with no mental health diagnosis (4.8%) who dropped out of school. The majority of youth who dropped out had a mental health diagnosis compared to those who completed high school. It is interesting to note that even though both groups had high numbers of youth with a mental health diagnosis, a large percentage of youth with mental health diagnosis had completed high school.

4.2.14 *Substance Abuse*

In terms of substance abuse history and high school completion, 9.4% of youth had a history of substance abuse and 90.6% of youth had no history of substance abuse (n=85). In comparison to youth who dropped out, 31.7% of youth had a history of substance abuse and 68.3% of youth had no history of substance abuse (n=126). A chi-square analysis indicated a statistically significant difference between groups ($p < .05$).

A much higher percentage of youth with no history of substance abuse (90.6%) completed high school compared to youth with no history of substance abuse who dropped out (68.3%). Similarly, a much higher percentage of youth with a substance abuse history dropped out of school (31.7%) compared to youth with a substance abuse history that completed high school (9.4%). Foster youth having no substance abuse history are more likely than those having a substance abuse history to complete high school.

4.2.15 *Juvenile Detention*

In terms of juvenile detention history and high school completion, 20% of youth had been in juvenile detention and 80% of youth had no history of juvenile detention (n=85). In comparison to youth who dropped out, 65.9% of youth had been in juvenile detention and 34.1% of youth had no history of juvenile detention (n=126). A chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A much higher percentage of youth with juvenile history (65.9%) dropped out of school compared to youth with juvenile history (20%) who completed high school. Foster youth with no history of juvenile detention are more likely than youth with a history of juvenile detention to complete high school.

4.2.16 *Living Arrangement*

In terms of living arrangement at discharge and high school completion, 52.9% were living independently, 14% were living with relatives, 12.9% of youth were in transitional housing, and 5% were in university housing (n=85). In comparison to youth who dropped out, 33% of youth were on runaway, 32.5% of youth were living independently, 19.8% were living with

relatives, and 5.6% were in transitional housing (n=126). A Chi-square analysis indicated a statistically significant difference between groups ($p < .05$). Most of the youth who completed high school were living independently, living with relatives, or in transitional housing. Most of the youth who dropped out were on runaway, living independently or with relatives.

Descriptive statistics analysis was used to determine the percentage of youth who requested a college tuition waiver at discharge. This analysis was run only for the group of youth who completed high school. The results showed that a majority of youth who completed high school (72.9%) requested a college tuition waiver and a smaller percentage of youth who completed high school (27.1%) did not request a college tuition waiver at discharge.

4.3 Hypothesis Findings

Hypothesis 1: Foster youth who complete high school have more placement stability than youth who drop out of school.

In testing the first hypothesis, a chi-square analysis was used to determine differences between groups and results indicated there was a statistically significant difference between the two groups ($p < .05$). The number of placements for youth who completed high school was lower compared to the number of placements for youth who dropped out.

Table 4.3
Number of Placements

	Youth who Completed HS (n=85)	Youth who Dropped Out (n=126)	Sig.
Number of Placements	Low (1 – 10) = 69.4% Med (11 – 19) = 20% High (20 or more) = 10.6%	Low (1 – 10) = 46% Med (11 – 19) = 27.8% High (20 or more) = 26.2%	p=12.49

The number of placements for youth who completed high school ranged from 69.4% having between 1-10 placements (low), 20% having between 11-19 placements (medium), and 10.6% having 20 or more placements (high). The number of placements for youth who dropped

out ranged from 46% having between 1-10 placements (low), 27.8% having between 11-19 placements (medium), and 26.2% having 20 or more placements (high).

Hypothesis 2: Foster youth who complete high school have more social supports than youth who drop out of school.

In testing the second hypothesis, a chi-square analysis was used to determine differences between groups in terms of social support which included school activities, volunteer work, and hobbies. In terms of school activities and volunteer work, a chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A higher percentage of youth who completed high school were involved in school activities and volunteer work compared to youth who dropped out. In terms of hobbies, chi-square results indicated there was no statistically significant difference between the two groups.

Table 4.4
Social Supports

	Youth who Completed HS (n=85)	Youth who Dropped Out (n=126)	*Sig.
School Activities	44.7%	23%	* $p=11.01$
Volunteer Work	17.6%	4%	* $p=11.06$
Hobbies	45.9%	41.3%	$p=.440$

Hypothesis 3: Foster youth who complete high school have more significant relationships with caring adults than youth who drop out of school.

In testing the third hypothesis, a chi-square analysis was used to determine differences between groups in terms of relationships with caring adults. For youth who completed high school, 14.1% indicated having at least one caring adult and 85.9% indicated having 2-3 caring adults. In comparison to those who dropped out, 69% of youth indicated having at least one caring adult and 19% indicated having 2-3 caring adults. A chi-square analysis indicated a

statistically significant difference between groups ($p < .05$). A much higher percentage of youth who completed high school had 2-3 caring adults compared to youth who dropped out.

Table 4.5

Relationships with Caring Adults

	Youth who Completed HS (n=85)	Youth who Dropped Out (n=126)	*Sig.
Relationships with Caring Adults	1 caring adult = 14% 2-3 caring adults = 85.9%	1 caring adult = 69% 2-3 caring adults = 19%	*p=.92.08

Hypothesis 4: Foster youth who experience higher levels of placement stability, social supports, and relationships with caring adults will be more successful in completing high school.

To test the fourth hypothesis, logistic regression analysis was utilized to determine whether or not these variables predicted high school completion. To arrive at the results, number of placements, social supports and relationships with caring adults were first run separately and then together with all control variables.

In running the number of placements alone, this variable accounted for 8% ($r^2=.080$) of the variation between high school completion and dropping out. This association was statistically significant ($\beta=1.32$, $p=.002$). For each one unit increase in the number of placements, youth were 3.7 times as likely to complete high school ($B=3.73$). The next step included number of placements together with all control variables in the regression model. This model accounted for 56% ($r^2=.565$) of the variation between high school completion and dropping out. The number of placements did not remain statistically significant when the control variables were added. Instead, two other variables that were statistically significant for predicting high school completion were having contact with extended family ($\beta=1.37$, $p=.001$) followed by PAL training ($\beta=2.17$, $p=.002$). For one unit increase in having contact with extended family, youth were 3.9 times as likely to complete high school ($B=3.94$). For one unit increase in PAL training, youth were 8.7 times as likely to complete high school ($B=8.79$).

Table 4.6

Logistic Regression - Number of Placements

	B	S.E.	Wald	Sig.	Exp (B)
Number of Placements alone	1.316	.419	9.868	.002	3.73
Number of Placements w/ control variables	-.130	.720	.033	.857	.878
Extended Family	1.371	.417	10.813	.001	3.94
PAL Training	2.174	.715	9.235	.002	8.79

In running social supports alone, this variable accounted for 7% ($r^2=.069$) of the variation between high school completion and dropping out. Of the three social supports, volunteer work ($\beta=1.646$, $p=.002$) and school activities ($\beta=.864$, $p=.006$) were statistically significant. For each one unit increase in volunteer work, youth were 5.1 times as likely to complete high school ($B=5.186$). For each one unit increase in school activities, youth were 2.3 times as likely to complete high school ($B=2.374$).

The next step included social supports together with all control variables in the regression model. This model accounted for 56% ($r^2=.564$) of the variance between youth who completed high school and those who dropped out. Volunteer work remained statistically significant ($\beta=1.7$, $p=.016$), however school activities did not remain statistically significant. Again, two variables that were more statistically significant than social supports were having contact with extended family ($\beta=1.37$, $p=.001$) followed by PAL training ($\beta=2.1$, $p=.003$).

Table 4.7

Logistic Regression - Social Supports

	B	S.E.	Wald	Sig.	Exp (B)
Volunteer Work	1.646	.538	9.367	.002	5.186
School Activities	.864	.313	7.639	.006	2.374

Table 4.7 - continued

Volunteer Work w/control variables	1.670	.695	5.781	.016	5.311
School Activities w/control variables	.236	.443	.284	.594	1.266
Extended Family	1.370	.416	10.834	.001	3.934
PAL Training	2.118	.704	9.063	.003	8.318

In running the number of relationships with caring adults alone, this variable accounted for 4% ($r^2=.048$) of the variation between youth who completed high school and youth who dropped out. This association was statistically significant ($\beta=.486$, $p=.008$). For each one unit increase in the number of caring adults, youth were 1.6 times as likely to complete high school ($B=1.62$). The next step included number of caring adults together with all control variables in the regression model. This model accounted for 56% ($r^2=.565$) of the variance between youth who completed high school and youth who dropped out.

The number of relationships with caring adults remained statistically significant ($\beta=.54$, $p=.048$), however, two other variables that were more significant were having contact with extended family ($\beta=1.37$, $p=.001$) followed by PAL training ($\beta=2.17$, $p=.002$). For one unit increase in having contact with extended family, youth were 3.9 times as likely to complete high school ($B=3.93$). For one unit increase in PAL training, youth were 8.7 times as likely to complete high school ($B=8.79$).

Table 4.8

Logistic Regression - Relationships with Caring Adults

	B	S.E.	Wald	Sig.	Exp (B)
Caring Adults	.486	.182	7.126	.008	1.625
Caring Adults w/control variables	.543	.275	3.902	.048	1.721

Table 4.8 - continued

Extended Family	1.371	.417	10.813	.001	3.941
PAL Training	2.174	.715	9.235	.002	8.795

In running the significant variables together, the number of placements was not statistically significant, however, school activities ($\beta=.851$, $p=.007$), number of caring adults ($\beta=.480$, $p=.008$), and volunteer work ($\beta=1.45$, $p=.009$) were statistically significant. When adding the control variables, school activities did not remain statistically significant. Volunteer work ($\beta=1.6$, $p=.019$) and number of caring adults ($\beta=.554$, $p=.041$) were statistically significant but not as much as other two variables of having contact with extended family ($\beta=1.36$, $p=.001$) and PAL training ($\beta=2.0$, $p=.003$) which remain the best predictors of high school completion. For one unit increase in having contact with extended family, youth were 3.9 times as likely to complete high school ($B=3.91$). For one unit increase in PAL training, youth were 7.8 times as likely to complete high school ($B=7.85$).

Table 4.9

Logistic Regression - Significant Variables

	B	S.E.	Wald	Sig.	Exp (B)
(Significant Variables)					
School Activities	.851	.317	7.203	.007	2.342
Caring Adults	.480	.182	6.942	.008	1.616
Volunteer Work	1.452	.552	6.905	.009	4.270
(With Control Variables)					
Volunteer Work	1.628	.695	5.485	.019	5.091
Caring Adults	.554	.271	4.184	.041	1.740
Extended Family	1.365	.416	10.783	.001	3.915
PAL Training	2.061	.691	8.899	.003	7.858

4.4 Results

Hypothesis 1: Foster youth who complete high school have more placement stability than youth who drop out of school.

This hypothesis was supported. The number of placements for youth who completed high school was lower compared to the number of placements for those who dropped out. The number of placements for youth who completed high school ranged from 69.4% low (1–10), 20% medium (11–19), and 10.6% high (20 or more). In comparison, number of placements for youth who dropped out ranged from 46% low (1-10), 7.8% medium (11–19), and 26.2% high (20 or more).

Hypothesis 2: Foster youth who complete high school have more social supports than youth who drop out of school.

This hypothesis was not supported in terms of social supports that included school activities, volunteer work, and hobbies. Chi-square results showed that there was no statistical difference between groups in terms of hobbies; however, there was a statistical significance for school activities and volunteer work. A higher percentage of youth who completed high school were involved in school activities and volunteer work compared to those who dropped out.

Hypothesis 3: Foster youth who complete high school have more significant relationships with caring adults than youth who drop out of school.

This hypothesis was supported. A chi-square analysis indicated a statistically significant difference between groups ($p < .05$). A much higher percentage of youth who completed high school had 2-3 caring adults compared to youth who dropped out. Youth having a higher number of caring adults are more likely than youth with fewer or no caring adults to complete high school.

Hypothesis 4: Foster youth who experience higher levels of placement stability, social supports, and relationships with caring adults will be more successful in completing high school.

This hypothesis was not supported. Logistic regression analysis results showed that having contact with extended family and PAL training were better predictors of youth completing high school.

CHAPTER 5

CONCLUSIONS AND DISCUSSIONS

The primary purpose of this study was to explore the factors associated with high school completion among foster youth leaving care. Youth in foster care face many challenges that negatively impact their ability to complete high school and go to college. Nevertheless, some foster youth are successful in achieving their goals of completing high school. The hypothetical formulation guiding the current study is that youth with more placement stability, social supports, and relationships with caring adults are more likely to complete high school. Educational outcomes for youth leaving care were examined based on an integrative model of ecological theory and attachment theory.

A sample of 211 foster youth who aged out of care at the end of fiscal year 2009 was included in this study. The data was collected over a time period of nine months and agency records were examined through case extraction of an existing agency database. After analyzing the data, two variables that remained as best predictors of youth completing high school were having contact with extended family followed by PAL training. Other significant variables included volunteer work and number of caring adults. This research is important because there is limited research on how these variables impact educational outcomes of youth leaving care. This chapter will provide a summary of the findings, limitations of the study, implications for policy and practice, as well as recommendations for further research.

5.1 Interpretation of Findings

The study sample consisted of 211 participants from Region 3 (Dallas-Fort Worth). A comparison of two groups consisted of 85 youth (40%) who completed high school and 126

youth (60%) who dropped out of school. In comparing both groups, it was interesting to note that differences between the two groups in terms of gender, race, religion, and family type were not statistically significant. In addition, the length of stay in foster care was not significant.

In terms of age at discharge, youth who completed high school stayed in care past 18 years of age compared to those who dropped out and approximately one third of youth who dropped out were on runaway status prior to aging out of care. This may be attributed to older youth gaining a better understanding of the value of staying in care to finish high school. This is consistent with the literature in that older youth were more likely to finish school (McMillan & Tucker, 1999), and educational outcomes of foster youth who remained in care were much better than those who had left care (Courtney & Dworsky, 2006; Courtney, et al, 2007). In addition, youth who remained in care were twice as likely to be enrolled in an educational program as those who were discharged from care (Courtney, et al, 2004).

In terms of teenage parenting, youth who completed high school had a much lower percentage of teen parents compared to youth who dropped out. More than twice the number of youth who were teenage parents dropped out compared to the number of teenage parents who completed high school. As anticipated, this finding is not surprising since foster youth struggle with so many issues and becoming a teenage parent while in foster care compounds their struggles even more. Their struggle to finish high school becomes an even greater challenge.

Youth involvement in school activities was consistent with the literature in that a higher percentage of youth involved in school activities completed high school compared to less than a quarter of youth who dropped out. According to the literature, involvement in school activities is one of the various factors contributing to academic success along with other factors such as fewer placements, challenging high school curriculum, social support, and training (Merdinger, et al, 2005; Pecora, Williams & Kessler, 2006). The majority of participation in school activities included sports and school clubs.

Likewise, a much higher percentage of youth who completed high school were also involved in volunteer work compared to those who dropped out. The number of youth who completed high school and involved in volunteer work was three times higher compared to youth who dropped out. The majority of volunteer work included church and community. A much higher percentage of youth who completed high school also had more relationships with caring adults compared to youth who dropped out. The majority of relationships with caring adults included foster parents, family members, and caseworkers.

Similarly, a higher percentage of youth who completed high school also had more sibling contact. Those who completed high school had sibling contact more than 5 times per year (32.9%) compared to youth who dropped out (7.1%). In contrast, a higher percentage of youth who dropped out had no sibling contact (63.5%) compared to youth who completed high school (30.6%). In addition, more than half of youth who completed high school indicated having contact with extended family compared to those who dropped out. This is consistent with the literature in that youth receiving support services, relationships with caring adults, and strong commitment to helping others were factors associated with successful outcomes (Engstrom & Tinto, 2008; Hass & Graydon, 2008).

In terms of employment experience, almost two thirds of foster youth who completed high school had some employment experience compared to one third of youth youth who dropped out having some employment experience. This is consistent with the literature in that youth who had fewer placements or completed school also had higher odds of being employed at exit status (McMillen & Tucker, 1999).

In terms of substance abuse history, a high percentage of youth with a substance abuse history (31.7%) dropped out of school compared to youth with a substance abuse history (9.4%) who completed high school. Likewise, a much higher percentage of youth with juvenile history (65.9%) dropped out of school compared to youth with juvenile history (20%) who

completed high school. Foster youth with a history of substance abuse and/or juvenile detention are less likely to complete high school.

5.2 Major Findings

It was assumed that variables related to foster care experience such as length of stay in care, number of caseworkers, and number of placements would be significantly lower for youth completing high school compared to youth who dropped out but this was not the case.

In terms of length of stay in care, results indicated there was no statistically significant difference between the two groups. The length of stay for youth who completed high school was 8.2% in the highest range (10 or more years) compared to length of stay for youth who dropped out was 7.1% in the highest range (10 or more years).

In terms of the number of caseworkers, results indicated that there was a statistically significant difference between the two groups. It was assumed that the number of caseworkers would be lower for those who completed high school compared to those who dropped out. Surprisingly, the number of caseworkers for youth who completed high school was actually higher compared to those who dropped out. This may be attributed to increased number of caseworkers offering more options in terms of transitional planning for helping youth stay on track. Of the various relationships developed along the way, it only takes one individual for making a difference in their lives and having more caseworkers could mean higher chances of getting it right.

As anticipated, the number of placements for youth who completed high school was lower compared to the number of placements for youth who dropped out. This translates to youth with higher number of placements having less stability and youth with lower number of placements having more stability. This finding is consistent with the literature in that factors such as fewer placement changes increased the likelihood of successful outcomes (McMillan & Tucker, 1999; Reilly, 2003; Pecora, Kessler & O'Brien, 2006).

In comparing the two groups for number of placements, results indicated a statistically significant difference. Youth who dropped out had more than twice the number of placements in the high range (20 or more) compared to youth who completed high school. In the regression model, placements alone accounted for 8% ($r^2=.080$) of the variation between high school completion and dropping out. For each one unit increase in the number of placements, youth were 3.7 times as likely to complete high school ($B=3.73$), however, when running the number of placements together with all control variables, the number of placements did not remain statistically significant.

In comparing the two groups for mental health diagnosis, the findings showed a statistically significant difference between groups. The percentage of youth having a mental health diagnosis was 75.3% for those who completed high school compared to 95.2% for those who dropped out. Even though the difference between the two groups was statistically significant, it was unexpected to find such high numbers of youth having a mental health diagnosis that completed high school. Stated differently, this means that approximately 25% of youth who completed high school do not have a mental health diagnosis compared to only 5% of youth who dropped out of school who do not have a mental health diagnosis.

The living arrangement at discharge is an important finding in that one third of youth who dropped out of school were on runaway status (33.3%). Another third of youth were either in independent living (32.5%), living with relatives (19.8%) or living with friends (4%). A much higher percentage of youth who completed high school were in independent living (52.9%), living with relatives (14.1%), transitional housing (12.9%), university housing (11.8%) or living with friends (3.5%). An even smaller percentage of youth who completed high school were in Job Corps (2.4%) or the military (1.2%) compared to none of these options identified for youth who dropped out. A significant finding is that a third of youth who dropped out were on runaway status which represents a very high percentage of youth leaving the foster care system prematurely.

Another significant finding was that contact with extended family was more significant than relationships with caring adults or sibling contact. In comparing the two groups, chi-square results showed that a much higher percentage of youth who completed high school had some contact with extended family (65.9%) compared to youth who dropped out (37.3%). Likewise, the percentage of youth having no contact with extended family was much higher among youth who dropped out (62.7%) compared to youth who completed high school (34.1%).

In terms of independent living services, it was assumed that participation in both PAL training and COS transitional planning would be significant, however this was not the case. When comparing the two groups, a higher percentage of youth receiving PAL training and transitional planning completed high school compared to those who dropped out. This is consistent with the literature in that level of education, number of foster care placements, receiving services and training before leaving care, social support networks, and job experience increased the likelihood of successful outcomes (Reilly, 2003) and that positive placement history and independent living preparation reduced poor outcomes (Pecora, Kessler & O'Brien, 2006). However, in the regression model, PAL training was found to be statistically significant but COS transitional planning was not statistically significant. This difference could be attributed to PAL training consisting of a series of training modules compared to COS transition planning which consists of a group meeting at least once or twice prior to discharge. The former builds knowledge and skills in preparation for adult living whereas the latter is a group meeting of persons involved working with individual youth for purposes of discharge planning.

Logistic regression analysis was used to determine variables predicting high school completion. A major finding showed two variables as the best predictors of youth completing high school are contact with extended family and PAL training. In the regression model, volunteer work ($\beta=1.6$, $p=.019$) and number of caring adults ($\beta=.554$, $p=.041$) were statistically significant but not as much as other two variables of having contact with extended family ($\beta=1.36$, $p=.001$) and PAL training ($\beta=2.0$, $p=.003$).

The factors predicting high school completion are supported by integrative model of ecological theory and attachment theory. Ecological systems theory was used to explore the factors in the environmental setting associated with foster youth leaving care that complete high school. From an ecological perspective, interactions of youth in their immediate setting and between systems influence youth outcomes when leaving care. Although the foster care system is not an ideal setting for youth, PAL training provides assessment and training for helping youth transition into adulthood. It also provides education about benefits and resources available for independent living. Attachment theory was used to explain the importance of developing early childhood attachments for forming healthy attachments later in life and how this may influence educational attainment. From an attachment perspective, having reliable and close relationships increases the chances of youth achieving their full potential and finding committed relationships after leaving care. This is especially critical since research shows that youth in foster care have an increased rate of psychopathology (Rutter, et al, 2001). Thus, it is important for youth who have formed attachments with extended family to maintain these relationships for improving youth outcomes.

5.3 Methodological Limitations

This study has several limitations that need to be considered. First and foremost, this is a non-experimental, retrospective, cross-sectional design which is susceptible to measurement error since data collected is at one point in time and does not permit causal inferences. The study employed a non-probability sample and convenient sampling plan which is a legitimate threat to external validity and generalization of findings is limited to the conditions of the current study.

The reliance on case extraction is another concern due to the possibility of bias reporting and accuracy of case documentation. This information is documented by various caseworkers throughout the life of a case and human error poses a risk with data entry. Another limitation is that only one method of data collection is utilized through case extraction

and therefore triangulation is not feasible. The study utilized a quantitative approach and therefore measurement of variables such as number of number of caring adults does not include qualitative data measuring the quality of attachment. As such, the hypothesis findings need to be interpreted with caution.

5.4 Implications for Practice, Policy, and Research

The findings of the study support the need for program improvement in terms of utilizing best practices for supporting youth contact with extended family and increasing transitional services for youth aging out of foster care.

5.4.1 *Practice*

A significant finding of this study was contact with extended family as being a predictor of high school completion. Implications for practice include more collaboration and efforts by agency staff and caregivers for maintaining connections between youth and their families especially with current budget cuts that impact the quality of service delivery. In the past, child welfare agencies have struggled with supporting family visits due to lack of resources for providing transportation to and from; hence the current system does not lend itself for ongoing family contacts. Current methods of contact between youth and their families may include family visits, telephone calls or letters. The responsibility of transporting youth to and from family visits is placed primarily on caregivers and caseworkers which becomes burdensome when considering the numbers of youth and traveling involved. This issue of transportation could be alleviated by allowing youth access to social media sources and new technology for maintaining family connections. Computer access to face time and Skype could be viable options as communication tools and probably more cost-effective. Other barriers include restricted access of telephone or computer use by caregivers and/or agency staff. Strategies for removing barriers to ongoing family contact could involve better collaboration between youth, caregivers, agency, and family members for choosing effective methods of family contact and allowing supervised access to youth. Strategies may include making family contacts a priority

on youth service plans to ensure that caregivers are allowing and encouraging ongoing family contacts. Also, providing caseworkers with updated technology for utilizing during monthly contacts would allow for supervised contacts via Facebook or Skype.

Youth involvement in volunteer work was another significant finding that needs more attention. Most of the youth who were involved in volunteer work identified being involved through church and community settings. The possibility of volunteer work opportunities could be enhanced and supported through collaborative partnerships between the caregivers, agency staff, and community partners. Taking it a step further, volunteer work could easily be incorporated into PAL training for enhancing the learning aspect through a service learning component. This would serve not only to enhance their learning about available resources in the community but would also provide hands on experience of giving back to the community.

Another area that could be enhanced through the use of technology is accessibility of PAL training for hard to reach youth. Making online courses available could help alleviate problems resulting from lack of transportation, availability of trainers and limited training locations. This would be in addition to handwritten packets currently available by mail for PAL training credit. Youth access to educational supports such as tutoring and credit recovery is another area that needs to be improved by working in collaboration with school districts and community partners. Many foster youth are not on grade level and need credit recovery which may involve attending summer school. The responsibility for paying fees and associated costs falls primarily on the caregiver and if they are unable to pay there is no other alternative with the exception of some limited funds through local child welfare boards which are subject to availability. A collaborative partnership with school districts for waiving fees related to credit recovery and summer school could help improve youth's chances of finishing high school and going to college. A community partnership could also be initiated in search of volunteers for tutoring youth after school hours and weekends. Challenges and supports for successful transitions as mentioned in the literature include the need for collaboration and better

communication among all adults involved with youth. This means working toward a paradigm shift from current case practice to a more youth focused practice for identifying unmet needs and sustaining permanent connections for youth (Scannapieco, et al, 2007).

5.4.2 *Policy*

Implications for policy consist of making policy changes that support family connections and transitional services. In the 1990's, child welfare reforms shifted the focus on family continuity and reforms included working with the child's extended family and supporting lifetime connections. To date, allocation of resources for maintaining family connections are still lacking and this should be a priority based on the research indicating that youth having contact with extended family have more successful outcomes. Policy changes should support the use of social media and new technology such as Face Time or Skype as cost-effective communication tools.

Currently, transitional services offered by child welfare agencies include both PAL training and transitional planning; however, this study found that PAL training was more statistically significant. Policy changes should include expanding the ages of youth for receiving transitional services and changing this from a voluntary service to a mandated requisite for youth aging out of care. This would include advocating for continued or increased funding for PAL services and removing barriers such as poor attendance due to limited availability of trainers, training sites and transportation issues. Policy changes should support making online courses available to help alleviate some of these problems. Additional policy changes should address youth access to educational supports such as tutoring and credit recovery. This would include implementing a statewide initiative that focuses on collaborative partnerships with school districts for waiving fees related to credit recovery and community partners for tutoring services.

A huge improvement for transitional services is the tracking and reporting of youth outcomes at discharge which was part of the 1999 Chafee Foster Care Independence Act. The

National Youth in Transition Database (“NYTD”) was created for collecting state data on various youth outcomes including educational attainment. The State of Texas was required to start collecting data on October 1, 2010 and submit data no later than May 15, 2011 (DFPS, 2009). A major incentive for compliance with this standard is that non-compliance may lead to state penalties. In essence, the penalty for non-compliance with NYTD standards may result in a reduction of 1 to 5% of the state’s annual Chafee Foster Care Independence Program funding which is used to provide PAL training (DFPS, 2010). If the state does not comply by this deadline, it will have another chance to submit data by next reporting period of November 15, 2011 (DHHS, 2010).

5.4.3 *Research*

Implications for research include the need for assessing youth outcomes based on theoretical framework. This study explored factors associated with high school completion among foster youth leaving care based on an integrative model of ecological theory and attachment theory. In the literature review, few studies mentioned a theoretical framework for their research. Most of the studies reviewed assessed the exit status of youth leaving care (McMillan & Tucker, 1999; Reilly, 2003) or explored factors related to academic success (Hines, et al, 2005; Merdinger, et al, 2005). Other studies identified best supports for educational achievement (Zetlin, et al, 2006), supports for successful transition (Scannapieco, et al, 2007), and foster youth who successfully transitioned to college (Hass & Graydon, 2008).

One study described educational achievement of youth formerly in foster care (Pecora, Williams, & Kessler, 2006). Two well known large scale studies are the Northwest Foster Care Alumni Study (Pecora, Kessler, & O’Brien, 2006), which describes how foster care experiences are associated with educational achievement and the Midwest Study (Courtney, et al, 2004) of how former youth are faring during transition.

Considering the current findings, a more rigorous study with a much larger sample size would make a significant contribution to the literature of foster youth outcomes at discharge. A

combination of both quantitative and qualitative approaches would also lend itself to more rich and significant data.

5.4 Future Research

The most obvious gap in research is the lack of studies for assessing outcomes that include specific educational supports and services. In addition to completing high school, there are even fewer studies of former foster youth attending college. Only three studies included a sample entirely of former foster youth attending college. In this study alone, it was found that a majority (72.9%) of youth who completed high school had obtained a state college tuition waiver at discharge. More research in this area would help to further our knowledge and understanding of factors contributing to their educational success in college. Factors contributing to their educational success could help improve program areas and services for increasing the likelihood of foster youth finishing high school and going to college.

Additional research is also needed to better understand the factors related to educational attainment and the interrelationship of these factors. Only one research study described an education initiative model related to academic success of foster youth and more research is needed for assessing the effectiveness of specific programs and interventions. The research indicates that youth have a desire to pursue higher education but lack the necessary support, training, and resources for helping them achieve their educational goals.

Further research is needed for assessing outcomes of youth leaving foster care in light of recent programs initiated for improving independent living programs and transitional services. These services include the addition of transition specialists and education specialists for improving educational outcomes. Education specialists act as liaisons between the state child welfare agency and the school districts for resolving educational issues affecting children and youth. They provide case consultation, technical assistance, and trainings and participate in transition planning. How effectively these resources are being utilized by child welfare agencies could make the difference for improving education outcomes. A program evaluation for

assessing the effectiveness of programs and services is necessary for purposes of program improvement and making policy changes in child welfare agencies.

State and federal legislation does not provide an endless supply of monies for meeting the needs of this population and more research is needed for finding the best possible use of resources (Collins, 2004). The reality is that providing services for helping youth to become productive members of society totally outweigh the costs of the negative consequences to society when youth are unable to sustain themselves as adults. A better understanding of these ecological factors will help provide guidance and future direction for improving educational outcomes of foster youth.

In Texas, youth can remain in extended foster care up to the age 22 for purposes of completing high school or vocational training and research is needed for assessing outcomes of this population. This includes using evidence based research, adequate sized samples, and inclusion of youth in post secondary programs. Further research of this population would help to gain a better understanding of factors related to educational achievement and more successful outcomes of youth leaving care. For Texas, the verdict is still out with the first round of youth outcomes being reported through National Youth in Transition Database and we remain optimistic that it's a step in the right direction for identifying needs and making changes that support more successful youth outcomes including educational outcomes.

APPENDIX A
FOSTER YOUTH LEAVING CARE
RESEARCH QUESTIONNAIRE

Foster Youth Leaving Care
Research Questionnaire

Youth demographics

1. What is youth's Age at discharge? _____

2. What is youth's Gender?

- Male
- Female

3. What is youth's Race and/or Ethnicity?

- White
- Black
- Hispanic
- Asian
- Am Indian/AK Native
- Native Hawaiian/Pacific Islander
- Other

4. What is youth's Religion?

- Protestant
- Catholic
- No Preference
- Other
- Unknown

5. What are youth's Person Characteristics?

- Sibling Group
- Sexually Acting Out
- Emotionally Disturbed
- Learning Disabled
- Post Traumatic Stress Disorder
- Bipolar Disorder
- Major Depressive Disorder
- Eating Disorder
- Conduct Disorder
- Oppositional Defiant Disorder
- Obsessive Compulsive Disorder
- Fire Setting History
- Animal Cruelty History
- ADHD
- Runaway
- Self Abuse
- Assaultive Behavior
- Drug Abuse
- Gang Activity
- Mentally Ill
- Teen Parent
- Previously Adopted
- Other
- None Indicated

6. What is youth's Family Type prior to coming into care?

- Single parent household
- Two parent household
- Other

Foster Care Experience

7. Age of youth when entering foster care? _____

8. Reason for initial placement in foster care? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Physical Abuse | <input type="checkbox"/> Neglectful Supervision |
| <input type="checkbox"/> Sexual Abuse | <input type="checkbox"/> Abandonment |
| <input type="checkbox"/> Emotional Abuse | <input type="checkbox"/> Refusal to accept parental responsibility |
| <input type="checkbox"/> Physical Neglect | <input type="checkbox"/> Other |
| <input type="checkbox"/> Medical Neglect | |

9. Number of Removals? _____

10. Number of Placements? _____

11. Type of Placements? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Emergency Shelter | <input type="checkbox"/> State Hospital |
| <input type="checkbox"/> Foster Home | <input type="checkbox"/> Texas Youth Commission Facility |
| <input type="checkbox"/> Group Home | <input type="checkbox"/> Juvenile Detention |
| <input type="checkbox"/> Kinship Care | <input type="checkbox"/> County Jail |
| <input type="checkbox"/> Adoptive Home | <input type="checkbox"/> DFPS Office |
| <input type="checkbox"/> Residential Facility | <input type="checkbox"/> Runaway Status |
| <input type="checkbox"/> Psychiatric Facility | <input type="checkbox"/> Other |

12. Length of time spent in foster care? _____

13. Length of time at most recent placement? _____

14. Number of caseworkers while in foster care? _____

15. Number of schools attended while in foster care? _____

16. What is youth's Living Arrangement at discharge?

- | | |
|--|---|
| <input type="checkbox"/> Independent Living | <input type="checkbox"/> Living with relative |
| <input type="checkbox"/> Transitional Housing | <input type="checkbox"/> Living with friends |
| <input type="checkbox"/> University or college housing | <input type="checkbox"/> Job Corp |
| <input type="checkbox"/> Unauthorized Placement | <input type="checkbox"/> Military |
| <input type="checkbox"/> Runaway | <input type="checkbox"/> TYC |

17. Is youth a teenage parent?

- Yes
 No

Social Supports

18. Was youth involved in any extra-curricular activities at school? (check all that apply)

- Art/Drawing Clubs/Organizations

- Band
- Dance
- Sports
- Cheerleading
- None
- Other

19. Was youth involved in any type of volunteer work? (check all that apply)

- Community
- Church
- School
- None
- Other

20. Was youth involved in any special hobbies or interests? (check all that apply)

- Art/Drawing
- Writing
- Reading
- Music
- Cooking/Baking
- Swimming
- Skateboarding
- Video games
- Puzzles
- Movies
- Computers
- None
- Other

Relationships with Caring Adults

21. Does youth have significant relationship(s) with adult(s) for help or advice?

- 1 person
- 2-3 persons
- More than 3 persons
- None

22. If yes, what is that person's relationship to youth? (check all that apply)

- Foster parent
- Family member
- Family friend
- Older sibling
- Caseworker
- School Staff
- Special Advocate
- Other Adult
- None

23. Does youth have sibling(s) in foster care?

- Yes
- No

24. What is the average number of times per year that youth has contact with siblings?

- 1-2 times
- 3-5 times
- More than 5 times
- None

25. Does youth have contact with extended family members?

Yes

No

Education and Employment

26. Did youth participate in any of the following school programs? (check all that apply)

ESL/Bilingual

Gifted and Talented

Vocational

Special Education

None

Other

Unknown

27. Did youth repeat a grade level in high school?

Yes

No

28. Did youth complete high school?

Yes

No

29. What is youth's educational status at discharge?

Working toward completing high school

Completed GED

Completed High School Diploma

Attending community college or university

Other

30. What is youth's employment experience at discharge?

No experience

Some experience

31. Has youth expressed a desire to pursue college?

Yes

No

32. What is youth's career interest?

Business

Law

Medicine

Engineering

Criminal Justice

Health profession

Computer science

Social work

Education

Performing Arts/theatre

Culinary Arts

Food & Beverage

Retail

Cosmetology

Military Service

Other

Independent Living Services

33. Did youth complete Preparation for Adult Living Program?

- Yes
- No

34. Did youth participate in a Circle of Support for transitional planning?

- Yes
- No

35. Did youth obtain a state college tuition waiver at discharge?

- Yes
- No

Youth health status at discharge

36. Does youth have a diagnosed learning disability?

- Yes
- No

37. Does youth have a mental health diagnosis? (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> ADHD/ADD | <input type="checkbox"/> Mental Retardation |
| <input type="checkbox"/> Post Traumatic Stress Disorder | <input type="checkbox"/> Oppositional Defiant Disorder |
| <input type="checkbox"/> Bipolar Disorder | <input type="checkbox"/> Conduct Disorder |
| <input type="checkbox"/> Mood Disorder | <input type="checkbox"/> Reactive Attachment Disorder |
| <input type="checkbox"/> Generalized Anxiety Disorder | <input type="checkbox"/> Adjustment Disorder |
| <input type="checkbox"/> Major Depressive Disorder | <input type="checkbox"/> Substance Dependence |
| <input type="checkbox"/> Eating Disorder | <input type="checkbox"/> Other |
| <input type="checkbox"/> Dysthymic Disorder | |
| <input type="checkbox"/> Obsessive Compulsive Disorder | |
| <input type="checkbox"/> Borderline Personality Disorder | |

38. Is youth taking prescribed psychotropic medications?

- Yes
- No

39. Has youth experienced substance abuse problems?

- Yes
- No

40. Has youth been in juvenile detention?

- Yes
- No

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BIOGRAPHICAL INFORMATION

Dr. Elizabeth Garza-Higgins received her Bachelor's degree in Political Science from the University of Texas at Brownsville in 1994. She received her Master of Science in Social Work in 2003 from the University of Texas-Pan American and a PhD in Social Work in 2011 from University of Texas at Arlington.

As a social worker with the Texas Department of Family and Protective Services, Dr. Garza-Higgins worked with youth and families for over fourteen years. She has experience providing services to youth in foster care, facilitating trainings for foster/adoptive families, and working on state initiatives for increasing adoptions. As educational specialist, she has been part of a collaborative effort for developing transitional plans for youth and working with school staff for improving educational outcomes of youth aging out of foster care.

As a school social worker with Arlington Independent School District, Dr. Garza-Higgins continues working toward improving educational outcomes for youth in the school setting. She has experience providing services to youth and families for helping them identify barriers to educational success. This includes implementing evidence based programs for increasing parental involvement and providing services related to teenage pregnancy prevention and dropout prevention. Her research interests include foster youth in transition, positive youth development, parental involvement, teenage pregnancy prevention and dropout prevention.