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# Understanding the Development of Self-determination in Youth with Disabilities in Foster Care

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Understanding the Development of Self-determination in Youth with  
Disabilities in Foster Care

by

Jennifer L. Powers

A dissertation submitted in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy  
in  
Social Work and Social Research

Dissertation Committee:  
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## **ABSTRACT**

Youth in foster care who experience disabilities face many challenges as they transition out of foster care and into adulthood. In order to assist these youth, it is crucial to understand factors that may impact their self-determination, which research links to positive transition outcomes for youth with disabilities (Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000). While much of the existing research on the correlates and outcomes of self-determination focuses on young people with disabilities overall, and little is known about whether factors such as abuse, family stressors and extended length of time in care, and frequent placement changes influence self-determination.

Exploring predictors of self-determination in youth with disabilities in foster care can be beneficial to researchers and child welfare practitioners who seek to identify effective approaches for helping youth accomplish successful transitions into adulthood. This dissertation examined the extent to which physical and sexual abuse and family stressors, such as unemployment, domestic violence, and homelessness prior to entering care; as well as foster care placement instability and total length of time in care, impact a youth's self-determination. In addition, the influence of demographic features such as race and gender on these associations was examined. Increased understanding of factors that contribute to self-determination can facilitate targeted interventions and services that enhance the lives of youth as they exit out of the foster care system and into adulthood.

Overall, the findings did not reveal significant associations between self-determination and physical and sexual abuse, family stressors, length of time in foster

care or number of placement moves. Post hoc exploratory analysis, however, detected other significant relationships. For example, above and beyond the main effect association of length of time in care, youth who experienced physical abuse and stayed in care for long periods of time demonstrated higher levels of autonomy. Likewise, youth with a greater number of family stressors in their family of origin, and who experienced longer stays in foster care, also demonstrated significantly higher levels of autonomy above and beyond the main effects of family stressors. These relationships speak to the resiliency and the varying nature of self-determination.

## **DEDICATION**

I dedicate this dissertation to my mother, Mamo Kaupana Kuwanoe who always believed in me. I would also like to dedicate this work to my friends who have become my family and to those who I have yet to meet who will share my life and help me stay true to my dreams.

## ACKNOWLEDGEMENTS

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A personal acknowledgement to my closest colleague, Melanie Sage for her emotional and technical support throughout this research and throughout the PhD program.

Most of all, I'd like to acknowledge the youth represented behind the numbers in this dissertation. May they someday be able to achieve their goals and realize their dreams.

## TABLE OF CONTENTS

ABSTRACT.....	i
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
CHAPTER I: PROBLEM STATEMENT.....	1
Factors Affecting Youth in Foster Care.....	4
Summary of Literature on Youth in Foster Care.....	13
CHAPTER II: DEFINITIONS AND FINDINGS ON SELF-DETERMINATION.....	14
Definitions of Self-determination.....	14
Research on Self-Determination and Related Concepts.....	18
Prospective Findings.....	20
Intervention Study Findings.....	21
Research on Related Constructs.....	27
CHAPTER III: THEORETICAL PERSPECTIVES.....	32
Ecological Framework.....	33
The Tripartite Ecological Theory of Self-determination.....	36
Limiations of Theory.....	42
Purpose of Study.....	43
Research Questions and Hypotheses.....	44
CHAPTER IV: METHODOLOGY.....	48

Research Design .....	48
Analysis Plan .....	56
CHAPTER V: RESULTS .....	62
Participant Characteristics on Key Variables .....	62
Research Questions.....	64
Exploratory Analysis .....	74
CHAPTER VI: DISCUSSION .....	76
Major Findings.....	76
Theoretical Implications .....	82
Strengths and Limitations of Study .....	86
Importance to Social Work.....	90
Implications for Policy .....	91
Implications for Future Research.....	91
Conclusions.....	92
REFERENCES .....	94
APPENDIX A.....	114
The Arc Self-Determination Scale.....	114
APPENDIX B .....	115
Demographic Survey .....	115

**LIST OF TABLES**

TABLE 1: ARC-SELF DETERMINATION SCALE AND SUBSCALES .....	52
TABLE 2: MEANS AND STANDARD DEVIATION OF SCORES.....	65
TABLE 3: COMPARISON OF CURRENT FINDINGS TO ARC .....	66

**LIST OF FIGURES**

FIGURE 1: VENN DIAGRAM OF TRIPARTITE ECOLOGICAL THEORY .....38

FIGURE 2: THEORETICAL RELATIONSHIPS.....47

## CHAPTER I: PROBLEM STATEMENT

Youth with disabilities in foster care are arguably one of the most vulnerable populations in the United States. Research has linked foster care, and common antecedents of placement in foster care, such as abuse, with negative future outcomes (Barth, 1990; Conger & Rebeck, 2001; Courtney, Terao, & Bost, 2004; Geenen & Powers, 2006a). In an attempt to divert youth with disabilities from negative outcomes, some research has focused attention on investigating the role of self-determination in influencing these youths' abilities to make better decisions and take steps toward a more positive future (Powers, Geenen, & Powers, 2009; Powers, Turner, Westwood, et al., 2001; Wehmeyer & Schwartz, 1997). Social workers, other researchers, program developers and schoolteachers also have highlighted the importance of self-determination (Wehmeyer & Schwartz, 1998). The term self-determination describes skills, knowledge and beliefs that allow a person to act autonomously with goal-directed and self-regulated behaviors (Wehmeyer, Abery, Mithaug, & Stancliffe, 2003). Exposure to environmental barriers, such as the difficult experiences often faced by youth in foster care, can impede self-determination and, in turn, achievement of positive future life outcomes.

Youth in foster care face a boundless array of barriers and circumstances that impact the course of their lives. For example, most of the half a million children and youth in foster care have experienced some form of maltreatment (U.S. Department of Health and Human Services Administration on Children and Families, 2005). Additionally, children of color are over represented in foster care; according to

national data submitted for fiscal year 2005, from October 2004 through September 2005, racial and ethnic minority children make up approximately 40% of children living in the U.S., yet account for over half of the foster care population. More specifically, African Americans represent 32% of children and youth in care, Hispanic 18%, and another 3% are comprised of children and youth with mixed ethnicities (2005).

The disproportional representation of youth who experience disabilities highlights another outstanding feature of foster care. According to the first foster care population study conducted almost two decades ago, an estimated 47% of foster care youth exiting care were identified as having a disability (Westat, 1991). More recent studies have substantiated the representation of youth in foster care with emotional and behavioral or developmental disabilities to be 35% to 80% (Bruhn, 2003; Child Welfare League of America, 2005; Leslie, et al., 2000). Distinguished by discouraging transitional outcomes, this group often struggles with poor health, inadequate education, barriers to housing, substance abuse, and delinquent behaviors (Barth, 1990; Courtney, et al., 2005).

This dissertation focused on youth who were under the guardianship of the Oregon Department of Human Services (DHS) foster care system. According to the last U.S. Census data, there were over 900,000 youth under the age of 18 living in Oregon (2006). Approximately 5,800 of them were in foster care on an average daily basis. Out of those in foster care in Oregon, 62.5% were Caucasian, 6.4% were coded as race unknown, 8.8% were Native American, 12.8% were Hispanic, 8.3% were

African American, and 1.4% were Asian or Pacific Islander. The families from which those youth come from often have multiple stressors or risk factors that contributed to their loss of custodial rights. The most frequent family stressor noted by caseworkers included alcohol and drug use (42.1%) followed by domestic violence (31.7%) and parental involvement with law enforcement (27%). In addition, 49.1% of youth receiving foster care services were female, and nearly 60% of all those placed experienced less than 3 placement moves while in foster care (Oregon Department of Human Services, 2010).

2005 AFCARS' data indicated that children and youth in the U.S. stayed in state custody an average of 29 months, although the majority of children are in care one to five months (20%). Forty-six percent of all youth in foster care were placed with non-relatives and twenty-four percent with kin, and the goal of 51% of all cases was family reunification. The mean age of children in foster care was 10; however, youth between the ages of 16 and 20 made up the largest age group (21%). This number is particularly impressive given that only 11% of those who entered care were 16 or older, suggesting that youth are more likely to enter foster care at a younger age but tend to stay through adolescence. Similarly, the mean age of the youth who exited care during 2005 was 10, yet the largest portion (8%) exited care at age 18 (Adoption and Foster Care Analysis Reporting System, 2005).

Specific factors such as the reason for entry into foster care and other demographics are thought to explain divergent paths that youth in foster care follow. The combination of these factors, such as multiple placement changes, length of time

in care, physical and sexual abuse, and stress factors impacting family of origin may inhibit the opportunities youth have for developing and exercising the skills necessary to achieve positive outcomes.

### **Factors Affecting Youth in Foster Care**

The Midwest Evaluation of the Adult Functioning of Former Foster Youth (“The Midwest Study”) and Northwest Foster Care Alumni Study (“The Northwest Study”) presented the most comprehensive information to date on the welfare of youth exiting out of foster care. This study on the Adult Functioning of Former Foster Youth provided outcomes of youth in Wisconsin, Iowa, and Illinois as they transitioned into adulthood, including living arrangements, educational attainment, employment, and criminality (Courtney, et al., 2004). The Northwest Study (Pecora, et al., 2005) provided further valuable information on youth in foster care. This research focused on children and youth served by Casey Family Programs in the Oregon and Washington state child welfare agencies between 1988 and 1998, and raised awareness of the challenges of youth in foster care, specifically around the domains of mental health, education, and employment. The results of the Northwest and Midwest studies, however, have come under scrutiny as the samples excluded youth in some disability categories such as developmental disability, thereby misrepresenting the actual outcomes of all youth in foster care (Geenen, Powers, Hogansen, & Pittman, 2007). Acknowledging the limitations of the Northwest and Midwest studies that excluded some youth with disabilities, large-scale population studies nonetheless

provide important information about a cross-section of youth in out-of-home placements.

### **Abuse**

Of the 3.3 million allegations of abuse and neglect reported to child protection services in the U.S., 62% of them resulted in an investigation. Of those investigated, nearly 30% of the allegations resulted in a determination that at least one child was a victim of abuse or neglect. For those allegations that were substantiated, “16.6% were due to physical abuse, 9.3% were due to sexual abuse, 7.1% were from psychological maltreatment, and 2% of the cases were from medical neglect” (U.S. Department of Health and Human Services Administration on Children and Families, 2005, p. 27). An additional 14.3% of case dispositions were classified as “other,” which includes abandonment, threats of harm to the child, or parental drug addiction. The total sum of all these classifications exceeds 100%, indicating an overlap of maltreatment experienced by victims (U.S. Department of Health and Human Services Administration on Children and Families, 2005).

**Gender and abuse.** Jones and McCurdy (1992) found that females were more often reported to have experienced sexual abuse than males (85% vs. 17%) in a sample of 2,814 reported abuse cases. More recently, Alzate and Rosenthal (2009) found girls to be 3.75 times more likely to be abused than boys. Thus, given the higher likelihood of abuse exposure, it can be surmised that gender may be an important factor when assessing future outcomes, particularly for those who experienced sexual abuse.

## **Neglect**

Research on children and youth in foster care cite neglect as the most common form of maltreatment (U.S. Department of Health and Human Services Administration on Children and Families, 2006). The definition of this classification varies across states among service providers, researchers, and court systems. Under the Child Abuse Prevention and Treatment Act (CAPTA), which was amended by the Keeping Children and Families Safe Act of 2003 (P.L. 108-36), cases of neglect fall into three categories: 1) mild, 2) moderate, and 3) severe. In instances of mild and moderate degrees, child protective services (CPS) would not be expected to proceed with a removal from the home (Child Abuse Prevention and Treatment Act, 2003). Examples of these are failure to dress a child appropriately for weather or failure to place a child in an age-appropriate car seat. In comparison, severe neglect results from long-term harm that may lead to medical attention or can also be considered a general failure to provide care on an ongoing basis (Child Abuse Prevention and Treatment Act, 2003).

To further establish a definition of neglect, child welfare experts have created additional categories including physical neglect; medical neglect, inadequate supervision, environmental, emotional, and educational neglect, and newborns pre-exposed to illegal drugs (Children's Bureau DePanfilis, 2006). Unfortunately, in an attempt to clarify these categories of actual neglect, researchers have included factors that may be classified as contributing to neglect rather than those that have direct actions. For example, domestic violence, drug use, and isolation, which are included as components of emotional neglect, are more closely related to a parent's health and

well-being and may or may not lead to neglect of a child. Physical and sexual abuse, however, have direct consequences on the well-being and safety of a child or adolescent.

### **Family Stressors**

In addition to race, gender, and disability type, family environment has been shown to be an important factor in predicting maltreatment (Trickett, Aber, Carlson, & Cicchetti, 1991). Studies highlight the importance of including such risk factors as economic status and single parenting in models predicting maltreatment (Herrenkohl, Herrenkohl, Rupert, Egolf, & Lutz, 1995; Spearly & Lauderdale, 1983). This is due in part to studies that found entry rates in to foster care are associated with parental criminality (Dallaire, 2007), having unstable and inadequate sources of parental income (Lindsey, 1994; Pelton, 1989; Saunders, Nelson, & Landsman, 1993), and level of family stress (Terling, 1999).

Other studies point to the increased attention of child welfare on parental drug use (Child Welfare League of America, 1998). The Child Welfare League of America study found that 80% of child welfare administrators cite drug use and poverty as the two most important issues facing child welfare. Other research has found parental drug use to be predictive of longer stays in foster care (Fanshel, 1975; Lewis, Giovannoni, & Leake, 1997; Walker, Zangrillo, & Smith, 1991) and a reduction in rates of family reunification (Murphy, et al., 1991). Regardless of whether or not parental drug use or caseworker beliefs about drug use leads to higher caseloads, it still proves to be highly associated with placement in foster care.

### **Length of Time in Care**

The purpose of child welfare is to provide a safety net for children who are abused and neglected (Adoption and Foster Care Analysis Reporting System, 2005). Unfortunately, many of these children “experience physical and emotional damage within the system that is intended to protect them” (p. 6). In addition to their experiences prior to entering care, a large number of youth also face significant challenges while in care, such as frequent school transfers (Conger & Rebeck, 2001) placement instability (Pecora, et al., 2005), separation from their family, stigmatization, restrictive settings (Adoption and Foster Care Analysis Reporting System, 2005), changes in case workers (Flower, McDonald, & Sumski, 2005), and lack of positive role models (Yancy, 1998). Unfortunately, the longer youth stay in care, the greater their chances of experiencing these events.

These statistics are particularly concerning given that the length of time in care places these youth at greater risk of having multiple placements. For example, Price, et. al. (2008) researched 700 foster families (34% kinship placements) and found that the number of days in placement significantly predicted placement changes. For youth who resided in foster care for more than three years, 21% had three or four placements, and 16% had five or more placements. Other predictors of placement instability point to youth who are older, and have emotional or behavioral problems (Palmer, 1996; Smith, Stormshak, Chamberlain, & Bridges-Whaley, 2001; Staff & Fein, 1995; Walsh & Walsh, 1990). Research on outcomes of youth in foster care show increased number of placements to be associated with greater risk factors such as

decreased school performance for both males and females, delinquency among males, a greater likelihood of mental health diagnoses, increased risk of having a negative change of placement (as opposed to a return home), homelessness later in life (Anctil, McCubbin, O'Brien, Pecora, & Anderson, 2007) and behavioral problems (D. M. Rubin, O'Reilly, Luan, & Localio, 2007).

### **Race**

In addition to these findings on total length of time in care and placement instability, race and ethnicity are also associated with poor outcomes. Children of color remain in care longer, experience more placement instability, have higher drop-out rates in high school, and are more likely to be homeless and involved in the criminal justice system after transitioning out of care (Close, 1983; Courtney & Barth, 1996; Hill, 2006; Johnson-Reid & Barth, 2000; Olson, 1982; Stehno, 1990) and, due to discrimination, lower achievement and motivation (Garcia-Coll, et al., 1996). Children of color are no more likely to be abused than Caucasian children, and differences in abuse reporting and foster care placement may be due to neighborhood conditions and income (Fluke, 2002; Saunders, et al., 1993).

### **Disabilities**

A large proportion of youth in foster care experience one or more disabilities, placing them at greater risk for poor outcomes (Barth, Courtney, Berrick, & Albert, 1994; Cook, McLean, & Ansell, 1991; Coyne, 1997; Geenen & Powers, 2006b; Verdugo, Bermejo, & Fuertes, 1995). A survey of youth in care in New York City found that approximately 30% of youth entering foster care were receiving special

education services and another 56% began services after entering care (Advocates for Children of New York, 2000). Unfortunately, the exact number impacted has yet to be documented and research outcomes vary according to definition (Westbrook, Silver, & Stein, 1998). For example, *The National Evaluation of the Title IV-E Independent Living Programs*, the last population study conducted on youth in foster care, relied on the codes “emotional” or “handicapped” to describe the 47% of youth in the study who were identified as having a disability (Westat, 1991). Other researchers chose to expand the definition of disability by including youth with mental health problems as having a disability. Studies using these estimates find the prevalence to be anywhere between 39 and 80% (DosReis, Zito, Safer, & Soeken, 2001; Leslie, et al., 2000; Stiffman, Chen, Elze, Doré, & Cheng, 1997). Another widely used definition comes from the Individuals with Disabilities Education Act (IDEA) (P. L. 101-476, Section 602(3) and describes disability using identified and specific disability categories under which children may be eligible for special education and related services (IDEA). As defined by this Act, the term “child with a disability” means a child “with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and who, by reason thereof, needs special education and related services.”

Research on youth in foster care find a disproportional number of youth in foster care labeled with emotional/behavioral disorder (EBD) (Smithgall, Gladden,

Yang, & Goerge, 2005). This disorder is one of 12 disability categories specified by IDEA. The IDEA defines this category as follows: "(i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

- (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors
  - (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
  - (C) Inappropriate types of behavior or feelings under normal circumstances.
  - (D) A general pervasive mood of unhappiness or depression.
  - (E) A tendency to develop physical symptoms or fears associated with personal or school problems.
- (ii) The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance" (CFR §300.7 (a) 9).

For the year 2003, Smithgall et al. (2005) found that among 8<sup>th</sup> grade students in the Chicago Public Schools, youth in foster care were disproportionately identified with the special education label of (EBD), compared to youth who did not receive child welfare services (18% vs. 6%).

Emerging research on outcomes of youth in foster care with disabilities is beginning to show that these youth experience far worse outcomes than youth in the general population and youth in foster care who do not experience disabilities. For

example, Cook, McLean and Ansell found that youth with disabilities in foster care are less likely to 1) be employed, 2) graduate from high school, 3) have social support, and 4) be self-sufficient compared to youth in foster care without disabilities (1991). In addition to these poor transition outcomes, youth in care who are classified as having health problems have experienced more abuse (Verdugo, et al., 1995), and they are less likely to be reunified with their biological family than youth without health problems in foster care (Barth, et al., 1994). These findings are supported by Coyne, who found that youth with physical and cognitive disabilities spent longer in care than youth without these types of disabilities (Coyne, 1997).

More recently, Geenen and Powers (2006a) conducted a study of 327 students ages 13 through 21, comparing the academic achievement of 1) youth in foster care who received special education services, 2) youth who received special education services, but were not in foster care, and 3) youth not in foster care who received general education services. The study found that the first group, youth who received special education services and were in foster care, demonstrated lower grade point average, fewer credits earned, and experienced a greater number of schools attended than youth in either of the other two groups. Similarly, Smithgall et al. (2005) found that among students attending Chicago public schools, the graduation rate for youth in care with ED was 18% compared to a graduation rate of 33% for youth with ED who were not in foster care. The above mentioned high prevalence coupled with the poor outcomes highlight the need to consider these youth as an important subsection of the

foster care population: one which shares similar maltreatment experiences, yet struggles with additional barriers.

### **Summary of Literature on Youth in Foster Care**

Taken as a whole, these findings suggest that abuse, length of time in foster care, placement instability, gender, race, disability, and family stressors are important factors impacting transition to adulthood and other outcomes of youth in care. While evidence suggests these factors place youth at increased risk for poor outcomes, very little is known about their potential impact on countervailing factors such as self-determination, which appears to hold promise for bolstering youth's transition success. In the next chapter, definitions of self-determination and associated findings will be discussed as well as theoretical foundations for the development and enhancement of self-determination and the potential impact of maltreatment, placement instability, total length of time in care, family stressors, gender, race, and disability on self-determination. Identification of factors that could potentially impact these youth's self-determination is important for influencing their outcomes.

## **CHAPTER II: DEFINITIONS AND FINDINGS ON SELF-DETERMINATION**

This dissertation explores the role that maltreatment, length of time in care, placement instability, family stressors, gender, and ethnicity play in the expression of self-determination. Self-determination is particularly meaningful for youth in care because this population often lacks the skills, opportunities and support to exercise control over their lives, which is essential for achieving a positive transition to adulthood. Furthermore, enhancement of self-determination has been associated with improved transition outcomes, particularly for youth with disabilities (see Powers et al., 2005, for discussion). Unfortunately, youth in foster care may lack opportunities that facilitate their expression of self-determination, such as histories of unstable living situations, maltreatment and other life stressors. The links between these characteristics of children with disabilities in foster care and their self-determination are currently unknown.

### **Definitions of Self-determination**

Self-determination as a construct evolved out of various philosophical doctrines including debates between believers of free will and those who ascribe to the idea of determinism (For a full discussion see: Wehmeyer, Abery, Mithaug, & Stancliffe, 2003). This centuries-old debate centered on the notion of whom or what is responsible for human actions, i.e. God or man. In his writings "*Abstract of the Essay*" John Locke challenged the notion that ideas are planted in us by God. Rather, these ideas are a result of experiences and reflections on those experiences. It is these ideas

that are then translated into human thought. Human thought, he argues, forms the basis of human action (Locke, 1688).

Psychologists revived this construct in the latter half of the nineteenth century to better understand the complexity of human behavior. Thus, the debate between free will and determinism became replaced by the argument of nature versus nurture. Such debates are evidenced in Freudian theory, which posits that human actions are caused by internal forces like the id while Skinner focused on external causes or stimuli. Neither of these two theories, however, speaks to the notion of autonomy or volition. This omission would be later addressed by theorists in the newly emerging field of personality psychology (Wehmeyer & Palmer, 2003). Using the approach first introduced by determinists who declared that human actions could be a result of both free will and compulsion (soft determinists), Edward Deci and colleagues (1985) introduced intrinsic motivation as a theory while incorporating a role for self-determination. According to Deci, 1) individuals have a need to be self-determining; 2) a need to be competent to master challenges; and 3) events that contribute to human behavior can be either informational, controlling, or amotivating. These three suppositions form the basis of cognitive evaluation theory (CET) (Deci, 1975), which extended the theory of intrinsic motivation to include empirical findings on external events. CET later gave way to self-determination theory which distinguished the underlying causes of human actions by events that were coerced and those that are personally endorsed (Deci, 1992).

Other applications of self-determination became evident in the fields of political science (Heater, 1994), social work (Biestek & Gehrig, 1978) and disability (Nirje, 1972). As would be expected, these diverse features led social scientists to develop varying definitions of this concept while sharing similar features. Although social scientists owe their definitions of self-determination to diverse theoretical backgrounds mentioned above, all of their variations on the concept recognize that the individual is the change agent for improved or diminished returns, yet acknowledge the role of context. Moreover, these researchers agree that self-determined behaviors are not expressed under duress or coercion. Rather, self-determined individuals act out of their own free will (Wehmeyer, et al., 2003).

Field, Martin, Miller, Ward & Wehmeyer (1998) describe self-determination as a

“combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations, together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in our society,” (p. 2).

Wehmeyer (2003) further explains that self-determination is not a process, a set of behaviors or skills, or even a choice. Self-determination represents a set of personal characteristics that are a function of a person's desires, wants, and volitional

choices. This functional definition applies specifically to individuals with disabilities with emphasis placed on volitional actions. The term volition refers to intent, and volitional actions are characterized by actions that are free from external coercion (p. 6).

Finally, deeply aligned with an ecological framework, Abery and Stancliffe (2003) define self-determination as “the product of both the individual and the environment of the person using the skills, knowledge, and beliefs at his/her disposal to act on the environment with the goal of obtaining valued or desired outcomes.” They further indicate that “self-determination is a complex process, the ultimate goal of which is to achieve the level of personal control over life that an individual desires within those areas the individual perceives as important,” (Wehmeyer, et al., p. 27).

In sum, these varying definitions of self-determination rest upon the assumption that self-determination is a multi-dimensional construct that reflects not only characteristics of a person, but behaviors carried out that lead to intentional, self-promoting acts. These theorists acknowledge that self-determination develops as a result of opportunities in the environment, having control over actions, and having the ability to self-direct actions. They further acknowledge that it can be improved and enhanced among youth, adults, and individuals with and without disabilities.

Unfortunately not all individuals, in particular youth in foster care, have access to opportunities to exercise volition. In turn, due to previous maltreatment such as physical and sexual abuse, many youth in care lack the ability to freely make decisions independent of outside influence. For individuals to be self-determined, they must be

provided with the necessary opportunities to exercise self-determination. If persons are to act as causal agents in their lives, they must be given the freedom to exercise their desires (Wehmeyer, 2004). Powers, et al. (2001) also stress this point by stating that opportunities arise out of a person's sense of efficacy and mastery of skills and responses to environmental influences. Further, "opportunities must be available that maximize youth self-attribution of success. It is not sufficient to orchestrate enjoyable activities for youth or to ensure their success by performing key activity elements for them. Rather, opportunities must be created for youth to exercise their own capabilities and to achieve outcomes they value" (Powers, et al., 1996, pp. 295-296).

### **Research on Self-determination and Related Concepts**

Findings from a variety of correlation and prospective studies suggest higher levels of self-determination are associated with positive outcomes. In addition, several intervention studies have demonstrated the causal links between increased self-determination and improved outcomes. Using both theory and research findings as a framework, the ultimate goal of interventions seeking to improve self-determination focus on improving outcomes such as educational and transition planning and mental health. The following sections discuss some of these studies, demonstrating the usefulness of increasing self-determination across populations. In addition to research studies demonstrating the importance and correlations of self-determination, other related concepts such as self-efficacy and self-esteem are also discussed.

## Correlational Findings

A number of studies using the Arc Self-Determination Scale (Wehmeyer & Kelchner, 1995) correlate self-determination with enhanced performance in the areas of school, work, and quality of life. For example, Fornes, Rocco, & Rosenberg (2008) studied the relationship between self-determination and work outcomes. Researchers interviewed 100 adults with IQs between 50 and 67 who were placed in agencies through employment services in South Florida. Using regression analyses, they found that self-determination accounted for 24% of the variance in job retention, 34% of the variance in job performance, and 26% of the variance in job satisfaction. The authors used a convenience sampling method, however, and it is unclear if the individuals requesting services through those agencies had higher levels of self-determination than individuals not enrolled in employment agencies.

Cross-national studies using self-determination as an independent variable also highlight the association between self-determination and employment. For example, Martorell, Gutierrez-Recacha, Pereda, and Ayuso-Mateos (2008) assessed the remunerated employment of 179 individuals in Madrid, Spain enrolled in two employment programs geared toward people with intellectual disabilities. Using the Spanish version of the Arc Self-Determination Scale, researchers found self-determination to be a strong predictor of paid employment ( $B = .033$ ,  $Wald = 7.188$ ,  $p = .007$ ,  $Exp(B) 1.033$ ). The authors noted, however, that the goal of one of the sites used in the study was skill enhancement, which is a component of self-determination.

Also, because of the cross-sectional design, fluctuations of self-determination over time could not be assessed.

Other correlational studies draw attention to environmental factors that may impact level of self-determination. One such study by Wehmeyer and Bolding (1999), found that individuals living or working in community-based settings demonstrated more self-determination, autonomy, satisfaction and had more choices than did matched peers living or working in congregate settings such as group homes, sheltered workshops, institutions, nursing homes, or day programs. While conducting preliminary analysis on their sample of 327 high school students receiving special education services, differences in gender were noted, with females scoring higher on self-determination than males ( $\beta = .27, r = 2.86, p < .01$ ).

Bivariate correlations point to the connection between self-determination and quality of life among individuals with developmental disabilities ( $r = .25, p = .04$ ) (Wehmeyer & Schwartz, 1998). Among the subscales used to measure quality of life; empowerment/independence, competence/productivity, social belonging/community integration, and satisfaction, the subscale measuring competence/productivity had the highest correlation ( $r = .36, p < .05$ ).

### **Prospective Findings**

Using a longitudinal design, Wehmeyer and colleagues studied the relationship between self-determination and outcomes of persons after 1 and 3 years post high school (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). For these studies, data were collected on youth with intellectual disabilities during their final year of

high school. The first study (Wehmeyer & Schwartz, 1997) found that students with higher levels of self-determination (one standard deviation above a mean of 113) were more likely to achieve positive adult outcomes such as employment and earnings than students with lower self-determination scores (one standard deviation below the mean). Those in the high self-determination group were more likely to have a checking account ( $\chi^2 = 4.75, p < .05$ ), a savings account ( $\chi^2 = 5.34, p < .02$ ), and were more likely to be employed ( $\chi^2 = 6.75, p < .01$ ) three years post high school, compared to the group with lower self-determination scores.

Using youth from the study above, Wehmeyer and Palmer (2003) prospectively examined students' level of self-determination and a number of other transition outcomes. These researchers again compared outcomes of youth with higher levels of self-determination to youth with lower self-determination scores as determined by the Arc Self-Determination scores gathered in high school. For example, the group with scores above one standard deviation (18.25) of the mean (74.72) was significantly more likely to report improvements in access to overall benefits such as vacation and sick leave and was more likely to live independently and have greater financial independence than the group who performed lower on this same measure.

### **Intervention Study Findings**

The combination of having a disability, experiencing maltreatment and being in foster care puts this group of youth in great need of interventions that will enhance their future. A review of interventions targeting enhancement of self-determination

among individuals with disabilities offers promising results for youth with disabilities in foster care. Wood et. al (2005) conducted a meta-analysis of research on self-determination interventions, reviewing a total of 21 articles focused on self-determination in individuals with disabilities. The findings revealed an effect size of 1.38 across all studies and a standard deviation score of .37, reflecting very large gains (Alzate & Rosenthal, 2009) in self-determination for the intervention participants. The variable “choice making,” which was the focus of 10 articles, was the most prevalent component of self-determination impacting individuals with disabilities ( $N = 10$ ), followed by 5 articles mentioning self-management, and one article discussing problem solving. The authors discuss the lack of intervention research in other areas of self-determination, such as decision-making, goal achievement, self-awareness, self-advocacy, and self-efficacy (2005).

Research that aims to improve self-determination generally targets one or more components of self-determination. For example, different self-determination models have been shown to be associated with outcomes such as academic improvement through increased problem solving and goal setting (Wehmeyer, et al., 2000). In this study, authors field-tested the Self-Determined Learning Model of Instruction that aimed to teach students to become causal agents in their own lives. This intervention focused on teaching decision-making, independent performance, self-evaluation, and adjustment skills and consisted of three phases introducing a problem at each phase that the student must solve. Using a pre-post single group design, a total of 21 teachers were recruited to implement this intervention with 40

students receiving special education services in Texas and Wisconsin. Paired sample T-tests between pre and post intervention revealed significant increases in level of self-determination as measured by the Arc Self-Determination Scale ( $M = 94$  vs.  $M = 99$ ,  $p < .05$ ) and improved scores on the goal attaining scaling (GAS) process used to measure goal attainment.

Powers and colleagues field tested the impact of their self-determination enhancement intervention called *TAKE CHARGE* using two small randomized controlled studies (Powers, Turner, Ellison, et al., 2001; Powers, Turner, Westwood, et al., 2001). The aims of these intervention studies varied slightly with one focusing on outcomes of activity accomplishments and psychosocial adjustment for 20 students with physical disabilities and health conditions (Powers, Turner, Ellison, et al., 2001); the other study focused on outcomes of transition planning by 43 students with diverse special education classifications (Powers, Turner, Westwood, et al., 2001). In each study, self-determination was measured with the youth version of the Family Empowerment Scale (Koren, DeChillo, & Friesen, 1992), a 34-item self-assessment of one's capacity to manage day-to-day circumstances, services, and advocate for others. The intervention model included (a) coaching for youth in applying self-determination skills to reach their personal goals, (b) mentorship experiences, and (c) support to assist parents of the youth to promote achievement and positive self-attributions in their children. Intervention group youth in the Powers, Turner, Ellison et al. study (2001) participated in the intervention for 5 months, which included (a) two 50-minute weekly sessions with a coach, (b) monthly workshops for youth, their parents, and

adult mentors, (c) community activities for youth and mentors, and (d) support for parents via telephone and home visitations. This intervention yielded positive results with the treatment group showing significant improvements over the comparison group from pre-test to post-test on psycho-social adjustment ( $F = 11.36$ ,  $d = .88$ ,  $p < .01$ ), empowerment ( $F = 14.91$ ,  $ES = 1.55$ ,  $p < .01$ ), and level of activity accomplishment ( $F = 21.96$ ,  $d = 2.05$ ,  $p < .01$ ).

The second study (Powers, Turner, Westwood, et al., 2001) randomized 43 youth with diverse disabilities to either a control group or a treatment group that received the *TAKE CHARGE* intervention with specific goals of increasing youth's 1) involvement in transition planning, 2) transition planning awareness, 3) empowerment, and 4) participation in transition planning meetings. After this 4-month intervention, which included 50-minute coaching sessions two times per week, mentoring, and parent support, improved outcomes were found in all areas compared to the control group. For instance, youth receiving the intervention showed significant improvement with large effects in educational planning ( $F = 21.04$ ,  $p < .01$ ,  $d = .71$ ), significant with medium effects in empowerment ( $F = 15.56$ ,  $p < .01$ ,  $d = .61$ ), and significant with small to medium effects for student transition awareness ( $F = 6.32$ ,  $p < .05$ ,  $d = .39$ ), compared to the non-treatment group.

More recently (2009), this author served as a researcher on the MY LIFE study, in which self-determination enhancement was specifically evaluated among youth in foster care receiving special education services (Geenen, et al., 2007). A total of 60 youth in foster care who received special education services were randomly

assigned to a control group or a treatment group that received an average of 50 hours of coaching in applying self-determination skills to achieve their self-selected transition goals and participated in an average of three workshops with mentors who also had experience in foster care. Youth were assessed pre-intervention, post-intervention, and one year post-intervention. Immediately following the intervention, the treatment group demonstrated higher levels of self-determination with medium to large effects ( $M = 111.83$  vs.  $M = 97.5$ ,  $p < .05$ ,  $d = .65$ ), and quality of life ( $M = 84.30$ ,  $SD = 8.66$  vs.  $M = 75.92$ ,  $SD = 11.36$ ,  $d = .83$ ). Youth receiving the treatment also demonstrated improvements in employment with 31% reporting they were currently working one year post-intervention, compared to 16% in the comparison group. At follow-up 72.4% of the treatment group youth had completed high school, compared to 50% in the control group. While not conclusive, these findings suggest that enhanced self-determination is associated with improved transition outcomes for youth in foster care with disabilities.

Research has also investigated the effectiveness of a self-determination model with a younger population. For example, Bruno (200) used a randomized control trial to compare the effects of a self-determination intervention called Steps to Self-Determination by Field and Hoffman (1992) on 73 sixth grade students from a single elementary school. While the study found non-significant differences between treatment and control groups on the outcome measures of self-determination, explanatory style or depressive symptoms, students in the intervention group showed decreased levels of depressive features at posttest. Thus, while the intervention did not

yield increased self-determination, one identified positive outcome was decreased depressive features.

Other intervention studies, while not specifically measuring self-determination, targeted one or more component of self-determination. For example, using a randomized sample of 130 secondary students, Martin et al. (2006) examined the effectiveness of an intervention called the Self-Directed IEP, which was designed to increase youth participation in their IEP meetings. Researchers found that after completion of the program, the students demonstrated an increase in the amount of time they talked, started, and led their own IEP meetings. Mithaug et al. (1987) developed a model for youth with disabilities targeting self-evaluation and self-regulation to improve employment outcomes. The purpose of this model was to teach students experiencing disabilities skills they could use during transition from school to work. The skills learned in this model included (a) youth decision making (b) independent performance, where youth learn to follow through on their action plans (c) self-evaluation, where youth learn to self-evaluate their outcomes, and (d) adjustments, where youth learn to modify their future actions based on past performance. This study (Mithaug, et al., 1987) and the other studies previously cited demonstrate the impact of improving components of self-determination, such as choice-making skills, goal attainment, self-evaluation and regulation, providing a critical opportunity for youth who are denied the ability to make important decisions for themselves.

Thus, to date, several studies on the correlates of self-determination and outcomes of self-determination enhancement suggest that self-determination serves as a catalyst for positive outcomes among youth with disabilities, including youth in foster care. What is not known, however, is the extent to which self-determination in this population is impacted by maltreatment and family stressors prior to foster care placement, gender and race, and total length of time in care and instability after entering foster care.

### **Research on Related Constructs**

Although research on self-determination offers substantial information on correlates of self-determination as well as effective interventions targeting positive outcomes, little research exists that specifically links the factors of interest in this dissertation research with self-determination. Other related constructs such as self-efficacy and self-esteem, however, have been well established in the literature as being impacted by experiences unique to youth in foster care such as removal from family (Ackerman & Dozier, 2005), loss of community (Lyman & Bird, 1996), and physical and sexual abuse (Bolger, Patterson, & Kupersmidt, 1998).

#### **Self-efficacy**

Self-efficacy, or a person's assessment of his or her capability to execute a course of action needed to achieve their desired outcome (Bandura, 1977) addresses the question of what drives a person's actions. Research on individuals who were sexually abused reveals an association between past sexual abuse and diminished sense of self-efficacy (Cheever & Hardin, 1999; Gluhoski & Wortman, 1996). Other

research points to the impact of multiple abuse types; sexual, physical, and psychological, and their negative impact on a person's sense of self. Rather than focusing attention on skills for developing self-awareness and self-efficacy, an abused individual is more likely to focus on their own personal safety (Harter, 1999). Such maladaptive pathways of coping demonstrate the negative consequences of childhood abuse on later outcomes.

Not all studies on self-efficacy support the hypothetical link between trauma and lowered self-efficacy. Saigh et al. (1995) compared self-efficacy expectations of three groups of adolescents. The first group experienced traumatic war events and carried diagnoses of PTSD, the second group were exposed to similar levels of trauma but were not diagnosed with PTSD, and the third group did not experience trauma or trauma-like symptoms. Using Bandura's Multidimensional Scales of Perceived Self-Efficacy (Miller, Coombs, & Fuqua, 1999), researchers found the first group (trauma exposed, PTSD positive) to have lower levels of self-efficacy than the other two groups. These results indicate a possible mediating effect of PTSD rather than a direct effect of trauma itself. This finding is particularly salient for youth in foster care who have a high prevalence of PTSD (Keller, Salazar, & Courtney, 2010).

Other research points to age at which the traumatic events occurred as a possible explanation for differences in self-efficacy scores (Dinwiddie, et al., 2000; Kim & Cicchetti, 2003; Vondra, Barnett, & Cicchetti, 1989). The older the person was at the time of abuse, the more likely he or she would have used problem-solving strategies as a coping mechanism (Dinwiddie, et al., 2000). Not all research supports

this claim, however. Kim and Cicchetti (2003) collected data on 305 maltreated and 195 non-maltreated children from low income families. Using analyses of variance, they found that children who were maltreated displayed higher levels of self-efficacy compared to children who were not maltreated ( $F(1,403) = 7.68, p < .0125$ ). The authors concluded that youth who were maltreated utilized coping strategies when faced with conflict. Significant differences were not found between younger and older children (less than and greater than 8 years). They did find, however, that ratings of behavioral symptomology showed younger maltreated children demonstrated higher levels of externalizing ( $F(1,403) = 45.73, p < .0125$ ) and internalizing ( $F(1,403) = 8.27, p < .0125$ ) behaviors than did non-maltreated children of the same age.

### **Self-esteem**

The construct of self-esteem also shares some similarities with self-determination in that it originates in the internalization of social interactions (Vygotsky, 1978). Numerous studies have documented the link between foster care experiences and self-esteem (DeRobertis, 2003; Kazin, Moser, Colbus, & Bell, 1985; Schofield & Beek, 2005a). This may be due in part to the relationship between a child's developing self-esteem and maternal affection (Coopersmith, 1967). Because of the abuse and neglect experienced by youth in foster care, these youth often develop diminished levels of self-esteem. Moreover, research has also shown that youth in foster care continue to experience a degradation in self-esteem not experienced by non-foster care youth (Ackerman & Dozier, 2005; Gil & Bogart, 1982; Hicks & Nixon, 1989).

Other research studies have failed to demonstrate the link between self-esteem and youth in foster care (Flynn, Ghazal, Legault, Vandermeulen, & Petrick, 2004; Lyman & Bird, 1996). Researchers theorize that the failure to find a link between foster care and self-esteem may be due in part to intervening factors such as positive experiences with foster parents (Ackerman & Dozier, 2005; Schofield & Beek, 2005b).

A meta-analysis of the relationship of child sexual abuse to adult psychological adjustment examined a total of 26 published articles producing effect sizes across studies (Jumper, 1995). This meta-analysis sought to investigate to what extent child sexual abuse impacts psychological adjustment as measured by psychological symptomatology, depression, and low self-esteem. Using an unbiased effect size estimate ( $r$ ), the researcher found an overall effect size estimate of .17, supporting the hypothesis of a relationship between sexual abuse in childhood and impaired psychological adjustment in later life, as measured by low self-esteem. Upon further exploration, the study found that the relationship between child sexual abuse and self-esteem varied greatly according to sampling. For example, lower effect sizes were detected from samples drawn from college students compared to higher effect sizes among clinical samples. The author gave possible explanations for these differences, 1) college aged students are relatively young, therefore negative long-term effects have yet to surface, and 2) college students would be expected to have higher socioeconomic backgrounds and higher I.Q.'s than community or clinical samples which may influence psychological adjustment of the sample (Jumper, 1995).

The literature on youth in foster care, youth with disabilities, and individuals who experienced abuse provides many clues useful for predicting outcomes for youth with disabilities in foster care who have experienced abuse. To date, however, most of this research remains disjointed, leaving many unanswered questions. While it is not possible to define the link between foster care factors and level of self-determination, research on related concepts such as self-efficacy and self-esteem brings to light the multitude of possible predictors such as mental health status, age at the time of abuse, and the relationship between the youth and their foster parent. These issues will be further explored in the limitations of theory section.

### CHAPTER III: THEORETICAL PERSPECTIVES

Research indicates youth in foster care are more likely to have a disability label, experience more abuse, have more stressors or risk factors impacting their family of origin, and experience more frequent moves than youth in the general population. They are also over represented as racial minority groups and may be impacted differentially according to gender.

As revealed in the previous chapter, growing evidence highlights the association between self-determination and positive outcomes for youth with disabilities. The focus of this chapter is to discuss how an ecological framework and in particular, Abery and Stancliffe's tripartite ecological theory of self-determination (Wehmeyer, et al., 2003) could inform the association between these experiences of youth in care and their level of self-determination. Addressing the role of the environment in motivating internal drives and offering opportunities for development are critical to understanding human behavior. Considering a population that has cognitive, physical and/or emotional disabilities, that has been maltreated, and that also has high home and school mobility (Pecora, et al., 2005), an ecological framework may serve as a useful foundation for understanding youths' level of self-determination.

It is expected that youth in foster care have impaired self-determination due to their personal and environmental characteristics, a theory supported by an ecological approach to understanding the development of self-determination. More specifically, the tripartite ecological theory of self-determination by Abery and Stancliffe

(Wehmeyer, et al., 2003), elucidates how self-determination could be explained, compromised or enhanced in this population. This theory is selected because it specifically addresses the social ecology of self-determination while acknowledging the relationship of internal factors such as desire for and exercise of control.

### **Ecological Framework**

What is the role of the environment in the development of self-determination? What happens at different ecological levels that could influence the development and expression of self-determination? These questions are important for understanding the broader forces that influence an individual's level of self-determination. In addition to considering factors that impact the internal process of developing self-determination (e.g. beliefs and learning skills), an ecological perspective allows for a broader view of the individual's ability to express self-determination in his or her environment (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Wehmeyer, et al., 2003).

According to Bronfenbrenner (1989), a person's ecosystem consists of four levels relative to the individual, including the microsystem, mesosystem, exosystem, and macrosystem. This perspective is important to self-determination theory as it helps to understand how environmental influences impact an individual's development. Each system within an individual's environment or ecosystem has the potential to influence development in either a positive "salutogenic" or negative "pathogenic" way (Garbarino, 2001). Pathogenic influences, also known as risk factors, include abuse, lack of a consistent nurturing relationship, discrimination, and economic adversity, as

well as any other environmental factors harmful to an individual's development.

Salutogenic factors are those that allow for optimal achievement, including nurturing guardians, positive role models, and adequate education, and provide for an overall optimal level of self-determination.

Youth in foster care who experience disabilities are often deprived of the environmental supports necessary to ensure self-determination. According to Abery and Stancliffe (2003), "there are a multitude of factors at both the individual or psychological level and within the environment that contribute to the development and exercise of self-determination" (p. 251). Hostile environments can preclude even the most intrinsically motivated individuals from leading a self-determined life (2003).

Because self-determination is the product of both the individual and the environment, negative experiences caused by the environment suggest youth in foster care would exhibit low levels of self-determination. Non-supportive environments that produce pathogenic experiences can create barriers to developing and enhancing self-determination. Moreover, past research into the negative effects of placement instability and outcomes such as an inability to form strong relationships with caring adults, and behavioral and mental health problems (Harden, 2004; James, Landsverk, Slymen, & Leslie, 2004; Newton, Litrownik, & Landsverk, 2000) lead to further speculation about how placement instability could negatively impact self-determination.

An ecological framework serves as a useful roadmap for understanding the development of self-determination among youth in foster care. This approach suggests

that individuals are affected by factors close in proximity such as peers and family members, which in turn are affected by more distally located factors such as employment opportunities and foster care policies. Put forth by Bronfenbrenner (1989), the potential impact of these ecological factors is apparent at each of the following levels.

### **Micro and Mesosystems**

The microsystem refers to the immediate setting in which persons live; it includes self, family, school, and work. Proximity to the individual distinguishes this system from all other levels. Within an ecological framework, the microsystem provides opportunities for the development of factors that facilitate self-determination. For example, social relationships influence attitudes and beliefs that contribute to moral development, skills, and self-determination. Moving one layer away from the individual, the mesosystem encompasses the processes by which each of the microsystems interacts with each other. For example, the mesosystem of an individual youth includes the relationships formed between the family system and the school system. The relationship between the systems can have a direct impact on the youth. For example, schools that provide services such as after school programs and subsidized meals can reduce stress on low-income families or parents with exceptional caregiver needs.

### **Exosystem and Macrosystem**

The exosystem and the macrosystem make up the next two layers of an individual's ecosystem. Like the mesosystem, the exosystem contains linkages

between settings. It differs in that one or more of these settings does not immediately influence the individual. The exosystem contains the relationship between a youth's foster parents and the agencies that provide support to those parents. For example, certain foster care policies exist that would restrict a youth's opportunities to develop confidence and creativity, such as seeking employment, driving an automobile, or managing finances. The macrosystem, the most distal of all levels, encompasses the attitudes, beliefs, and ideologies that indirectly influence an individual's ecosystem. Examples of macrosystem influences range from discriminatory actions by providers to a general belief in the protection of vulnerable youth.

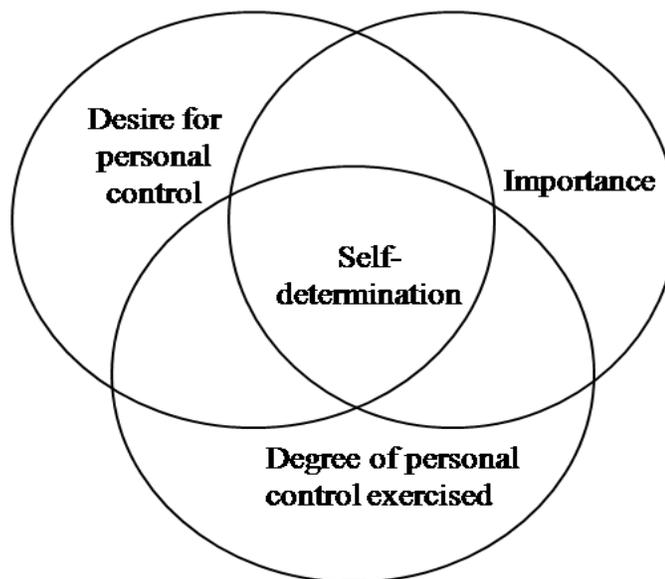
### **The Tripartite Ecological Theory of Self-determination**

Much of the research on youth in foster care points to the long-term effects of abuse, family stressors, placement instability, and total length of time in care. For example, studies on youth in foster care show the long-term effects of trauma and abuse on psychological functioning and adaptation (Kendall-Tackett, 2003; Kessler & Magee, 1994), and multiple placement changes associated with mental health problems (James, et al., 2004). The outcomes of these studies demonstrate both the resiliency of youth and also the psychological fragility resulting from their histories. Building on the ecological framework of Bronfenbrenner (1989), Abery and Stancliffe's model of self-determination (Wehmeyer, et al., 2003) may help to explain some of the negative effects youth in this population experience.

Four basic assumptions underscore this theory. The first assumption, that all persons are capable of and have a desire for self-determination, acknowledges that all

individuals, from infancy and beyond, can to some degree express self-determination. This expression can be muted or enhanced by conditions in the environment. The second assumption proposes that self-determination is expressed along a continuum. This expression can vary according to both pathogenic and salutogenic experiences. The third assumption acknowledges adaptations of human beings over the life span with respect to how much and when self-determination happens. According to this assumption, the development of self-determination continues throughout a person's life as both the context and opportunities for growth change. The final assumption of this framework describes how self-determination results from interactions between individuals and their environment.

Following the assumptions described above and depicted in Figure 1, self-determination can be understood as the cross-section between three factors: (a) desired degree of personal control, (b) degree of personal control exercised, and (c) decisions and actions based on importance. The Venn diagram below illustrates this relationship.



*Figure 1.* Venn diagram of tripartite ecological theory.

### **Desire for Personal Control**

Desire for personal control relates to how much control individuals *want to* exercise in a given situation, keeping in mind that most people do not want to exercise full control over every aspect of their lives (Wehmeyer, et al., 2003). Instead, this aspect can fluctuate over time and vary according to a person's ability, knowledge of a situation, personal preference, level of stress involved, and how much freedom the person has been given to decide how much control can be exercised. In other words, desired level of control cannot be forced upon a person nor can decisions to carry out important decisions be refuted if a person is to exercise self-determination.

Research shows that having a past history of sexual abuse impacts sense of control. For example, Carlisle (1992) examined 523 female college students with a history of sexual abuse and found the behavioral strategy most widely used among

these women to be characterized by passivity and powerlessness, and external locus of control. Similar results were found among adolescent males who were sexually abused. In a study conducted on both adolescent males and females, Boisso, Lutz and Gray (1989) found that both genders perceived less control over their lives compared to adolescents who did not experience sexual abuse.

Other studies draw attention to the influence of parenting style on decision-making of abused individuals. For example, Gonzales & Wolters (2006) found an association between parents who were communicative, nurturing, and supportive of independence, and children who “adopt goals that reflect intrinsic motivation such as improving their abilities, the enjoyment of learning, and overcoming a challenge” (p. 212). Conversely, it could be hypothesized that youth in foster care who are victims of childhood abuse denied an encouraging and supporting caretaker would not have optimal levels of intrinsic motivation necessary for desiring control over important decisions.

### **Degree of Personal Control Exercised**

Individuals exercise varying degrees of control over their lives depending on a number of conditions including living restrictions, age, financial status, or as previously mentioned, having a past history of abuse (Boisso, et al., 1989; Carlisle, 1992). Notwithstanding, most people fall somewhere in the middle between having total control over areas of their lives as would be expected from someone who is healthy, male, and has a supportive family, and having less control over their lives as a

result of factors such as poverty, physical abuse, or having an emotional or behavioral disability.

Parents who are abusive are controlling, and fail to provide a supportive environment to their children (Hoeve, et al., 2007) negatively influence the degree of personal control exercised by being more directive and restrictive than non-abusive parents with their children (Mash, Johnston, & Kovitz, 1983), by asserting more power (Chilamkurti & Milner, 1993) and applying more punitive discipline techniques (Trickett & Kuczynski, 1986). In addition to these past events, youth living in foster care have many experiences that may impact their abilities to exercise personal control. This is especially true for youth who are placed in residential treatment centers. Research conducted on treatment facilities in Florida found the use of highly restrictive procedures among youth in foster care (Crosland, et al., 2008). These findings are particularly alarming given the maltreatment already experienced by these youth. Although not tested, it can be theorized that over time, youth from both abusive families of origin and placed in restrictive settings would have limited ability to exercise control.

### **Importance and Self-determination**

The final factor in the tripartite theory describes the degree of importance given to particular decisions and its contribution to level of self-determination. Individuals who place a high degree of importance on decisions impacting their lives and who have the desire for and ability to exercise control over this area have higher levels of self-determination. Placing a high amount of importance over decisions yet

lacking the ability to control outcomes equates to lower levels of self-determination. Conversely, low levels of importance and low levels of desire and exercise of control may not necessarily impact self-determination. For example, if a youth is unhappy in his or her placement (low importance for current living situation), decisions by someone else such as a youth's caseworker about a placement change may not erode his or her level of self-determination. This is true given "the level of self-determination depends on the degree of concordance between desired and exercised levels of control, weighted by importance" (Wehmeyer, et al., 2003, p. 48). Thus, level of importance for an action ascribed by the youth provides the foundation underlying the influence of desired or expressed control on that youth's self-determination.

Demographic factors such as gender, ethnicity and disability may also influence youth's perspectives of importance and how much control is desired and exercised. For example, the self-determination of a young female with a history of sexual abuse may not be negatively impacted by multiple placements if these placements do not address her desire to be placed with a nurturing female foster parent. This young woman may respond more positively to multiple placements if the hope is to be placed with a nurturing woman. Likewise, adolescent girls who are at greater risk for sexual abuse (Ards, Chung, & Myers, 1998) may experience less opportunity to exercise control than males or other females who entered care for reasons other than sexual abuse. Given that African-American youth stay in care longer than Caucasian youth (McMurtry & Lie, 1992), these youth may have decreased opportunities to exercise control, which in turn could influence the

importance they place on making decisions impacting their lives. Youth with disabilities could be expected to have less exercised control given the restrictive settings in which many of them live or go to school (Parrish, et al., 2001).

### **Limitations of Theory**

The tripartite ecological theory provides a useful framework for understanding how youth could come to exercise varying degrees of self-determination. The theory demonstrates how many individuals, given their history and environment can have elevated or diminished levels of self-determination. More specifically, youth in foster care may have limited ability to exercise control, may relinquish their desire for personal control, and may not find particular goals important; all of which are crucial for expressing self-determination. Although personal qualities and environmental circumstances may impact these three areas in the expression of self-determination, this theory does not account for the potential impact of other factors. Moreover, although this theory provides a framework for understanding that the environment plays a major role influencing the individual, the theory does not demonstrate how the relationship between person and environment develops. Instead, the theory points to internal clues such as the amount of control desired and how much importance and individual places on decisions to be indicative of varying levels of self-determination.

The theory does quite well in explaining how these internal factors make up self-determination, however omission of external factors that influence desire or importance leaves many unanswered questions. For example, according to the tripartite theory, a person who desires personal control and has the ability to exercise

control, but who does not find a particular decision important, would exert low-level of self-determination. Although theoretically this supposition makes intuitive sense, it does not provide the reader with an explanation for the low levels of importance.

While the theory identifies key elements that support the expression of self-determination, many questions remain related to factors that underlie these elements.

In the case of youth who have both negative and protective experiences such as previous physical abuse and receiving mental health counseling for the abuse while in foster care, predicting which experience will supersede the other in impacting the youth's self-determination becomes difficult. For example, if a youth who experiences physical and sexual abuse also has a nurturing foster parent, drawing clear conclusions regarding the respective linkages between abuse, treatment in foster care, and self-determination becomes complicated.

Weighing these considerations, an ecological framework incorporating the tripartite theory nevertheless helps to explain how factors such as severe abuse and neglect, multiple foster care placements, total length of time in care, family stressors, and demographic variables such as gender and race could impact the expression of self-determination. Investigating these associations is the purpose of this dissertation. What is needed is an empirical analysis of the effects that these experiences have on self-determination for youth in foster care with disabilities.

### **Purpose of Study**

As research begins to surface that demonstrates the relationship between self-determination and positive outcomes, it is useful to consider the impact between self-

determination and outcomes in the vulnerable population of youth with disabilities in foster care. By understanding how experiences prior to foster care, like abuse and family stressors, and experiences during care, such as placement stability and duration impact youths' self-determination, it may be possible to tailor interventions to the needs of these youth. Further understanding is also needed about the impact of gender and race on self-determination, and the interplay of these demographic factors on the associations between the factors of abuse, family stressors, placement instability and duration and the outcome of youth self-determination.

### **Research Questions and Hypotheses**

The overall research agenda of this dissertation was to explore key determinants of self-determination among youth in foster care who experience disabilities. The research examined the impact on self-determination of conditions that preceded foster care placement and occurred during foster care placement, as well as the moderating effects of gender and race on these associations. As depicted in the theoretical model in Figure 2, the following research questions and hypothesis were examined.

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**Research Question #1.** What is the relationship between specific experiences before entering foster care such as sexual and physical abuse, and intensity of family stressors such as domestic violence, parental drug use, and unemployment and level of self-determination?

H<sub>1</sub>: Foster care youth who have experienced both physical and sexual abuse have lower levels of self-determination.

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H<sub>2</sub>: There is a negative relationship between intensity of family stressors and level of self-determination. As the number of family stressors increases, the level of self-determination decreases.

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**Research Question #2.** What is the relationship between experiences during care such as multiple placements and total length of time in care and level of self-determination?

H<sub>1</sub>: Foster care youth who experience more placement disruptions will exhibit lower levels of self-determination.

H<sub>2</sub>: There is a negative relationship between duration of time spent in foster care and self-determination. The longer time youth spend in foster care, the lower their level of self-determination.

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**Research Question #3.** To what extent do gender, race, and disability type impact the level of self-determination?

H<sub>1</sub>: Gender is associated with level of self-determination. Females will exhibit lower levels of self-determination.

H<sub>2</sub>: There is no relationship between race and level of self-determination.

H<sub>3</sub>: Disability type is related to self-determination. Youth with emotional/behavioral disorders will have lower levels of self-determination.

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**Research Question #4.** To what extent do gender, race, and disability moderate the relationship between pre-care variables such as physical and sexual abuse, and family stressors and during care variables such as total length of time in care and number of placements and self-determination?

H<sub>1</sub>: Gender moderates the relationship between pre-care experiences such as physical

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and sexual abuse, and family stressors and level of self-determination.

H<sub>2</sub>: Race moderates the relationship between pre-care experiences such as physical and sexual abuse, and family stressors and level of self-determination.

H<sub>3</sub>: Disability moderates the relationship between pre-care experiences such as physical and sexual abuse, and family stressors and level of self-determination.

H<sub>4</sub>: Gender moderates the relationship between experiences during care and level of self-determination.

H<sub>5</sub>: Race moderates the relationship between experiences during care and level of self-determination.

H<sub>6</sub>: Disability moderates the relationship between experiences during care and level of self-determination.

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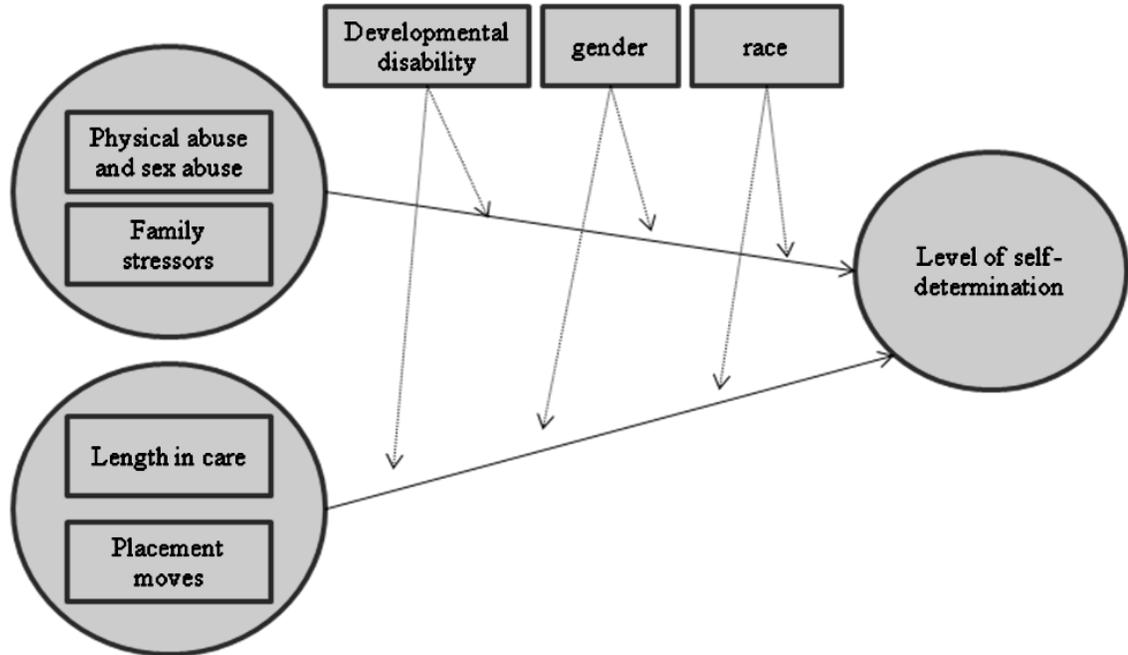


Figure 2. Theoretical relationships.

## CHAPTER IV: METHODOLOGY

### Research Design

This dissertation employed analysis of secondary quantitative data from two intervention studies. These two studies, My Life and Project Success, were conducted at the Regional Research Institute for Human Services at Portland State University in Portland, Oregon. The purpose of the two studies was to evaluate the efficacy of a self-determination enhancement intervention called *TAKE CHARGE* on the educational and transition outcomes of foster youth with disabilities. Although the data originates from two studies that employ a longitudinal design, only a cross-section of data collected at baseline was used for this dissertation. The result of this type of design provides exploratory, descriptive, and explanatory analysis (Rubin & Babbie, 2008).

### Sample

The samples for the two studies were selected using a random sampling method over multiple time periods. Combining the samples from these two studies was possible given the similarities in sampling frames and measurement tools. Across the studies, the sampling frame researchers focused on was any youth: 1) currently in DHS custody for at least 90 days, 2) ranging in ages from 16.5 to 17.11 years of age for the My Life Project and 14 to 16 or grades 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> for Project Success, 3) with disabilities (as specified by those receiving special education services), 4) living in Multnomah County, Oregon, and 5) attending Portland Public Schools. Youth were excluded if they were in 24-hour residential care during the recruitment phase of the

study because they were not available to participate in all components of the intervention.

### **Procedures**

The original two studies followed similar recruitment procedures. A list of youth currently in the custody of the Oregon Department of Human Services (DHS) was provided to school district staff. The list was then crosschecked against school records to identify the youth who were receiving special education services from Portland Area Public Schools. Additionally, Multnomah County Developmental Disabilities Services confirmed whether youth received developmental disabilities services. Youth and their foster parents were then sent written information about the study and contacted to offer additional information about their potential participation. An orientation meeting was scheduled for interested youth and their guardian or foster parents where they were given a description of the project and the possible risks. It was further explained that participation in the research study was completely voluntary and that they could exit the program at any time. The youth signed an assent form and a DHS representative, the legal guardian, provided consent. The foster parent signed a school release of records and a general release of information. Approximately 95% of the youth and foster parents who were contacted elected to participate. Reasons given by youth who declined to participate included lack of time or interest in meeting with an interventionist.

MSW/PhD students in the School of Social Work at Portland State University, as well as full and part-time project staff conducted the data collection for both

projects. Interviewers completed trainings provided by the principal investigators, observed an experienced data collector, and were then monitored during their first data collection session. During the initial orientation to the project, the interviewer scheduled a time for completing the assessments. Each assessment took between 45 minutes to 2 hours, with multiple assessment meetings for some youth based on youth disability and time availability. The questionnaires were reviewed for accuracy and completeness by a trained PhD student and entered into SPSS.

### **Measures and Variables**

In both projects, data were gathered through interviews with youth and case file reviews located at the offices of Oregon DHS Child Welfare Division. The current study relies on youth self-report measures used during the two parent studies; My Life and Project Success. The instruments used to measure self-determination in this study had been tested on individuals with an array of disabilities. The instruments were comprised of both self-reports and data collected from the Statewide Automated Child Welfare Information System (SACWIS) using the Family and Children Information System (FACIS), which is updated and maintained regularly by DHS. The data collected from the FACIS application used for this study was a compilation of information provided by the caseworker such as the date the youth entered into care, placement moves, and reports made to the local child welfare office indicating type of abuse. Other variables of interest including gender, ethnicity and level of self-determination came from the structured interviews performed the My Life/Project Success staff. The following instruments were used to answer the research questions.

**Arc Self-Determination scale.** The main objective of this dissertation was to determine what factors best predict level of self-determination among youth in foster care. The dependent variable, self-determination, was measured by the Arc Self-Determination Scale, which is a 72-item measure developed on the basis of the functional theory of self-determination proposed by Wehmeyer and colleagues (Wehmeyer, 1992). According to the measure's author, self-determination includes four essential characteristics, which are reflected in the Arc Self-Determination Scale. Those four characteristics; a) autonomy, b) psychological empowerment, c) self-regulation, and d) self-realization are thought to define self-determined behavior and emerge across the life span (Wehmeyer, 1996). The total of all 4 subscales provided a continuous, ratio-level dependent variable for the overall measure as well as continuous variables from the different subscales that make up the measure. Scores range in values from 0 to 148 with higher values indicating higher self-determination.

The characteristics which are represented by scales in the measure were field tested with 500 youth with disabilities in an educational setting in Texas, Virginia, Alabama, Connecticut, and Colorado. The majority of individuals experienced mild intellectual and learning disabilities although a smaller group ( $N=58$ ) had no disability. Fifty-six percent of the youth were Caucasian, 45% male, 42% female and 13% gender unspecified. No statistical differences were noted by gender, however, differences were found by disability type. Using ANOVA procedures youth without disabilities had significantly higher total scores than youth with intellectual disabilities [ $F(2,335) = 24.02, p < .05, M = 106.58, SD = 15.67$  versus  $89.02, SD = 21.91, ES=.92$ ]

(Wehmeyer, 1996; Wehmeyer & Kelchner, 1995). The instrument produced overall adequate reliability (Nunnally, 1970). The table below lists the alpha's obtained in the measure's field test by domain.

Table 1

*Arc Self-Determination Scale and Subscales*

Subscale	Chronbach's Alpha
Autonomy	.9
Self-regulation	-- (not tested)
Psychological Empowerment	.73
Self-realization	.62
Total Summed Score	.9

Items one through 32 form the subscale labeled "Autonomy" and are made up of close-ended questions such as "*I make my own meals or snacks,*" "*I make friends with other kids my age,*" "*I do free time activities based on my interests,*" "*I volunteer in things that I am interested in,*" "*I make long-range career plans,*" and "*I choose my own hair style.*" These questions are matched with ordinal responses of "*I do not even have the chance,*" "*I do sometimes when I have the chance,*" "*I do most of the time*" and, "*I do every time.*" This domain reflects 2 outcomes of self-determination; acting independently and acting on the basis of preferences, beliefs, values and abilities. According to Wehmeyer, this domain was originally designed for parents to measure youth's opportunities to make decisions, and then tailored to youth as a self-measure (Wehmeyer, 1996).

The next subscale of the Arc Self-Determination measure, “Psychological empowerment,” refers to locus of control, self-efficacy and outcome expectancy. This section makes up 16 questions where respondents chose the statement that best describes their overall perception of control. Youth were asked to choose from two questions, the one that best describes them. For example, youth selected one of the following statements, “I can make my own decisions,” or “Other people make decisions for me.” Answers that represent psychologically empowered beliefs were given one point.

The following section “Self-regulation” comprised two areas; interpersonal cognitive problem-solving behavior and goal setting with task performance. Both subsections included open-ended responses. Youth were given a beginning and an end to a story and asked to describe the middle section. The closer their answer matched a negotiated solution, the higher the points earned. An example of this question reads, “You are at a new school and you don’t know anyone. You want to have friends. The story ends with you having many friends at the new school.” In order to earn the highest possible points (2), the youth must demonstrate a negotiation for both parties. Both goal setting and task performance were measured in this domain with youth answering such questions as “Where do you want to live when you graduate?” then indicating how to achieve that goal. Points were assigned according to whether the youth had a plan and how many steps toward that plan they were able to list.

The last subscale, “Self-realization” describes self-awareness, self-acceptance, self-confidence, self-esteem, and self-actualization. The 15 statements that make up

this final construct are dichotomous and respondents were asked to choose whether or not they “*agree*” or “*disagree*” with the statements. For example, youth who agreed with the statement “It is better to be yourself than to be popular” were given 1 point versus 0 points for those who disagreed with the statement.

**Demographic survey.** A demographic survey was administered to the participants including gender, race, and family background. This one page form included both self-report data such as race and gender, as well as fields used to gather existing data from DHS and school records. Gender was dichotomized and coded as 0/1 with females = 1 and males = 0. Due to the small sample size, and distribution of race in the sample, the variable RACE was divided into two categories with Caucasians coded “1” and minority youth coded as “0”.

Youth were also assessed according to disability type. The following categories are noted on the demographic form collected from youths’ IEP documents: ADD/ADHD, Emotional/behavioral, developmental disabilities, speech/language impaired, health impairment, autism spectrum, learning disability, and vision impairment. Given the relatively small sample size, and distribution of disability categories in the sample, youths’ primary disability codes were grouped in two categories (a) youth labeled as emotional/behavioral either as primary or secondary diagnosis (b) youth with other types of disabilities.

### **SACWIS Administrative Database**

Using the demographic survey form, the following predictor variables were collected from DHS case files located in SACWIS using FACIS.

**Maltreatment.** Many of the youth in the study were expected to have multiple abuse types and included physical abuse (PA), sexual abuse (SA), and other types of maltreatment categorized as “other” includes neglect or threat of harm. Maltreatment reports to DHS that were not substantiated were not included. Both physical abuse and sexual abuse variables were dummy coded as 0/1 dichotomous variables. Youth who experienced both types of abuse were included in both groups.

**Placement moves and total length of time in care.** Along with maltreatment type, the number of placement moves and how long youth stay in care was collected from the SACWIS administrative database and recorded on the demographic survey. For this research, the number of placement moves experienced was collected at the initial baseline data collection date and measured as a continuous, ratio-level independent variable. The date the youth first entered care up to the baseline collection date provided the total length of time a youth spent in care.

**Family stressors.** For youth who enter foster care in Oregon, the reporting caseworker logs any noticeable family stressors in the home during his or her assessment. There are a total of 14 such stressors from which the caseworker may choose. This variable represents events in the social environment that impact youth. All of the stressors were dummy coded as 0/1, then summed to create an index of severity. Frequencies of the categories are provided in the index. The following lists the codes in their entirety:

PDA = parent/caregiver alcohol or drug abuse

DV = domestic violence

IH = inadequate housing

PMI = parent/caregiver mental illness

PDD = parent/caregiver developmental disability

CMI = child mental illness

CDD = child developmental disability

HCR = heavy child care responsibility (parent has 3 or more children to care for)

PLEA = parental/caregiver involvement with LEA

HHU = head of household unemployed

FFD = family financial distress

NBP = new baby/pregnancy

HOA = parental/caregiver history of abuse in family of origin

SI = social isolation

### **Analysis Plan**

#### **Preliminary Analysis**

Prior to conducting the analyses, all variables used were examined in SPSS v.17 to ensure that data were accurately entered, missing values were accounted for, and distributions were appropriate to the specific test assumption. According to Tabachnick and Fidell (2007), the first step in the data preparation process is to ensure accuracy of the data file by proofing and conducting frequencies. Both procedures were followed thereby ensuring that all continuous variables were within appropriate ranges and missing values were coded properly. To reduce multicollinearity, the

continuous variables used to create interaction terms; total length of time in care, placement instability and number of family stressors were centered.

Another major consideration was checking patterns of missing data. This was especially true given the sample size. Less than 2 percent of cases contained missing data on the variables of interest resulting in an analysis sample made up of 188 youth with disabilities in foster care. Cases in which the independent variables were missing, e.g. demographic characteristics, abuse history, or foster care experiences, were eliminated from this research. Examples of these instances were noted when youth moved from states that did not exchange data with Oregon or as a result of clerical errors in the SACWIS database.

Frequency distributions allowed for a thorough screening of extreme values or univariate outliers. All of the subscales plus the sum score were assessed using this method and no extreme values were detected. Finally, to ensure robustness of the analyses, continuous variables were assessed for normality, linearity, and homoscedasticity (Tabachnick & Fidell, 2007). Assessing these violations included examining scatter plots of the variables' residuals. The subscales autonomy and self-realization did not violate any of these assumptions. Psychological empowerment, however, revealed a negative skew with respondents scoring mostly in the higher value ranges. A decision was made to not transform this variable given its only partial contribution to the overall sum of self-determination.

## **Statistical Analyses**

The ultimate goal of the analyses was to measure the impact of maltreatment, placement instability, and family stressors on level of self-determination, and also to examine the potential moderating influence of gender, race and disability on those relationships. To achieve this goal, a series of statistical analyses were conducted. These analyses included: Pearson's correlation, partial correlation, and hierarchical multiple regression both with and without interaction terms. An alpha score of less than .05 was set in order to test significance, and appropriate effect sizes were provided according to test. In addition to tests of significance, Cronbach's alpha was calculated to measure reliability of the scales used. Further descriptions of the analysis used are as follows:

**Bivariate analyses.** Also known as the Pearson product-moment correlation coefficient, Pearson's  $r$  functions as a useful way of measuring the relationship between the independent  $X$  and dependent  $Y$  variables at the bivariate level. Values for this statistic range from -1.00 and +1.00 with 1.00 representing a perfect correlation between variables  $X$  and  $Y$  (Tabachnick & Fidell, 2007). Pearson's correlation was used to assess the relationship between continuous independent variables, e.g. physical and sexual abuse, severity of family stressors, placement instability, total length of time in care, and the dependent variable of self-determination. Both significant relationships and those trending toward significance were found using this test and these variables were used in the final models testing the impact of factors on self-determination. In addition to correlation, partial correlations

were used to measure significant relationships at the bivariate level within the regression models.

**Multivariate analysis.** Multiple Regression methods represent an entire class of analyses and, as with bivariate regression, the goal is to make predictions or estimations of the parameters of the linear model using ordinary least squares (OLS). The OLS approach classifies the criterion variables as a linear function of the predictor variables. By regressing the dependent variable on the independent variables, variance accounted for can be calculated for each of the predictors used as well as for each individual beta weight. The  $R^2$ , or squared multiple correlation coefficient, provides an estimate of this variance as well as an indication of the strength of the relationship between the independent and dependent variables (Myers & Well, 2003).

Taking this procedure one step forward to test whether an independent variable differs as a function of the presence of a moderator variable is called a moderator multiple regression model. The moderator model measures the impact that one variable has on varying levels of another (Aiken & West, 1991). This analysis was used to test the relationship between pre-care variables (sexual and physical abuse, and family stressors) on self-determination, and foster care experiences (total length of time in care and number of placement moves) on self-determination controlling for gender, race, and disability type. Age was a consideration, but not included, as the bivariate analysis did not detect any association with self-determination. To construct the models, all main effects were entered into step one (sexual and physical abuse, family stressors, total length of time in care, number of placement moves, gender,

race, disability type) saving the residuals for each of the subscales and the total score. Next, a total of 21 theoretically driven product terms were created by multiplying the demographic characteristics of gender, race, and disability type by each of the pre-care and during care variables. At step two, using the residuals from step one as dependent variables, 21 interaction terms were put in the models and using backwards elimination, final models for each of the four subscales and the total score were created. Only respective significant and trend level interactions were retained for the final models. Table two lists the results of the regression models. Below is a list of the variables tested for each of those models.

Model 1.	<b>Autonomy</b>
Main Effects	Physical abuse, family stressors, total length of time in care, gender, race, number of moves
Interactions	physical abuse x total length of time in care, number of family stressors x total length of time in care
Model 2.	<b>Self-regulation</b>
Main Effects	Physical abuse, family stressors, total length of time in care, gender, race, number of moves
Interactions	Race x number of placement moves
Model 3.	<b>Psychological Empowerment</b>
Main Effects	Physical abuse, family stressors, total length of time in care, gender, race, number of moves
Interactions	Physical abuse x gender
Model 4.	<b>Self-realization</b>
Main Effects	Physical abuse, family stressors, total length of time in care, gender, race, number of moves
Interactions	Race x number of moves
Model 5.	<b>Total Score</b>
Main Effects	Physical abuse, family stressors, total length of time in care, gender, race, number of moves
Interactions	Physical abuse x total length of time in care, number of family stressors x total length of time in care

## CHAPTER V: RESULTS

### Participant Characteristics on Key Variables

#### Participants

Based on both the inclusion and exclusion criteria described above, the My Life Project enrolled a total of 76 youth and Project Success 138 youth, however 26 were excluded from the Project Success sample because the dependent variable needed for this study was not collected at baseline. The resulting sample size for this study was 188. T-tests indicate that samples did not statistically differ on key variables such as number of placement moves (Project Success,  $M = 7.57$ ,  $SD = 6.57$ ; My Life,  $M = 7.04$ ,  $SD = 5.87$ ;  $t(186) = .551$ ,  $p = .582$ ), intensity of family stressors (Project Success,  $M = 4.06$ ,  $SD = 2.10$ ; My Life,  $M = 3.60$ ,  $SD = 2.19$ ;  $t(186) = 1.426$ ,  $p = .459$ ), total length of time (in months) in foster care (Project Success,  $M = 90.06$ ,  $SD = 5.25$ ; My Life,  $M = 95.86$ ,  $SD = 54.45$ ;  $t(186) = -.685$ ,  $p = 8.46$ ), physical abuse (Project Success,  $M = .47$ ,  $SD = .50$ ; My Life  $M = .44$ ,  $SD = .50$ ,  $t(186) = .308$ ,  $p = .08$ ), sexual abuse (Project Success,  $M = .33$ ,  $SD = .47$ ; My Life  $M = .44$ ,  $SD = .50$ ,  $t(186) = -1.542$ ,  $p = .07$ ).

The demographic makeup of the final sample included 42% female, and the average age of participants at the time of the assessment was 15.5 years ( $SD = 1.13$  years). Fifty percent of the youth identified as Caucasian, 26% African American, and 24% of the sample were Native American, Hispanic, Asian Pacific Islander or mixed race/ethnicity. Although the primary disability of youth varied across the sample, using coding from the youth's IEPs, the majority had a either a primary or secondary

label of emotional or behavioral disorder (40.4%), followed by learning disability (20.7%), health impairment (20.2%), intellectual disability (9%), speech or language impairment (4.3%), autism spectrum disorder (2.7%), ADD/ADHD (1.6%), hearing impairment (.5%), and one youth (.5%) was labeled as vision impaired. For analytical purposes, the categories were collapsed into two groups: 1) those with emotional/behavioral disorders (40.4%), and 2) youth with other disability labels (59.6%). Out of the total 188 youth, 63 (33.5%) did not have documented abuse histories, versus 125 with abuse histories (66.5%). Those who experienced sexual abuse only made up 21.3% of the sample, those with physical abuse only comprised 29.3%, and those who had both documented sexual and physical abuse made up 16% of the sample. For analytic purposes, the abuse variables physical and sexual were dichotomized as those who experienced physical abuse 1 versus those who did not, 0 (37.3%, 0%). Those who experienced sexual abuse were also coded as 1 versus 0.

The mean number of family stressors present in participant's family of origin was 3.89 out of a total of 14 listed factors, ( $SD = 2.14$ ), with parent drug and alcohol abuse the most frequently cited family stressor (56.9%), followed by head of household unemployed (47.3%), domestic violence (44.7%), and heavy child care responsibility (43.6%). Total length of time in care, measured from the date of first entry into foster care to the date study assessment data were collected, averaged 92.22 months (7.68 years,  $SD = 4.67$  years). During foster care, youth experienced a mean of 7.37 placement moves ( $SD = 6.31$ ).

The Arc Self-Determination Scale (Wehmeyer, 1992), the dependent measure used for this dissertation, included 4 subscales: autonomy, self-regulation, psychological empowerment, and self-realization. Participants had a mean score of 100.09 ( $SD = 18.11$ ) for the overall measure, with a mean of 61.07 ( $SD = 14.82$ ) for autonomy, a mean of 12.52 ( $SD = 4.61$ ) for self-regulation, a mean of 14.17 ( $SD = 2.17$ ) for psychological empowerment; and mean of 12.33 ( $SD = 2.02$ ) for the self-realization subscale. Table two below provides a table of the breakdown of scores across domains by groups.

T-tests were used to test for differences between the current study findings and the original pilot study (Wehmeyer & Kelchner, 1995). Results revealed youth in this study to have statistically higher subscale scores with the exception of autonomy and the total score compared to the original pilot study although Cohen's  $D$  indicates the relationship to be a weak association for the total score ( $M = 100.09$ ,  $SD = 18.11$  vs.  $M = 97.52$ ,  $SD = 19.43$ ,  $p = .053$ ,  $Cohen's d = .13$ ). Table three below compares the current study's scores to the original pilot study.

### **Research Questions**

Table four shows the intercorrelations used to answer research questions one, two, and three. In each case, the rejection level was set to .05. The dependent variables used in each of the analysis reflected the subscales in the Arc Self-Determination Scale; autonomy, self-regulation, psychological empowerment, self-realization and the total score. Following the correlations, four hierarchical regression models, and two partial correlations were used to test for significant relationships.

Table 2

*Means and Standard Deviation of Scores*

	Autonomy		Self-regulation		Psychological Empowerment		Self-Realization		Sum	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Gender										
Male	60.95	15.3	12.14	4.42	14.19	2.11	12.49	1.86	99.78	18.08
Female	61.23	14.22	13.05	4.84	14.14	2.25	12.11	2.22	100.53	18.27
Primary Disability										
Emotional/behavioral	61.62	14.41	13.16	4.58	14.07	2.21	12.01	2.17	101.04	17.97
Race/ethnicity										
African American	63.5	17.29	12.88	4.23	14.9	1.31	12.63	1.83	103.9	19.38
Caucasian	59.72	14.56	12.04	4.8	13.76	2.49	12.23	2.11	97.79	18.11
Other	61.28	12.32	13.07	4.61	14.26	1.99	12.24	2.06	100.85	16.3
Abuse types										
No abuse indicated	60.98	16.19	12.30	4.67	14.48	1.44	12.56	1.52	100.32	18.78
Physical abuse	61.91	13.72	12.89	4.41	14.09	2.52	12.54	2.15	101.43	17.28
Sexual abuse	61.83	15.02	12.58	4.62	14.25	2.26	12.13	2.08	100.78	16.74
Both abuse types	58.7	13.9	12.23	5.04	13.57	2.57	11.77	2.56	96.27	20.21

Table 3

*Comparison of Current Findings and Pilot Testing of the Arc SDS*

	Wehmeyer, n=500		Dissertation, n=188	
	M	SD	M	SD
Autonomy	63.35	15.5	61.07*	14.82
Self-regulation	9.78	4.95	12.52**	4.61
Psychological empowerment	13.28	2.64	14.17**	2.17
Self-realization	11.11	2.25	12.33**	2.03
Total Summed Score	97.52	19.43	100.09	18.11

\* $p < .05$ , \*\* $p < .01$ ;

**Research Question One**

The first research question, "What is the relationship between abuse and intensity of family stressors and self-determination?" measured the link between abuse experienced before care and the level of self-determination. Referring to correlation matrix in Table 2, the first three columns represent the independent variables: physical abuse, sexual abuse, and family stressors. Rows ten through 14 list the dependent variables used above. The first hypothesis predicted that youth who experienced physical abuse or sexual abuse would demonstrate lower levels of self-determination. Youth who experienced physical abuse did not demonstrate lower levels of self-determination as measured by the subscales: autonomy ( $r = -.011$ , NS), self-regulation ( $r = -.037$ , NS), psychological empowerment ( $r = -.122$ , NS), self-realization ( $r = -.037$ , NS), and the total score ( $r = -.021$ , NS). Likewise youth with

Table 4

*Inter-correlations of Independent and Dependent Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PA													
2. SA	-.045												
3. FS	.078	.035											
4. Moves	.015	.178*	.129										
5. Length	.001	.062	.151*	.369**									
6. Gender	-.025	.214**	-.077	.169*	.034								
7. Race	.043	.022	.002	.025	-.005	-.011							
8. EmoBx	.092	-.052	.048	.160*	.067	.133	-.022						
9. Age	-.033	.114	-.110	.054	.098	-.009	.062	.006					
10. Auton.	-.011	-.030	-.059	.067	.025	.009	-.091	.048	.007				
11. SelfReg	.026	-.016	.025	.110	-.012	.098	-.097	.116	.047	.194**			
12. PsyEmp	-.122	-.076	-.056	.112	.027	-.012	-.192**	.015	-.064	.372**	.247**		
13. SelfReal	-.037	-.138	.088	-.032	-.010	-.093	-.051	-.115	-.097	.260**	.127	.579**	
14. SUM	-.021	-.053	-.039	.092	.019	.021	-.128	.058	-.001	.941**	.457**	.552**	.426**

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed).

sexual abuse histories did not show significant differences in autonomy ( $r = -.030$ , NS), self-regulation ( $r = -.116$ , NS), psychological empowerment ( $r = -.076$ , NS), self-realization ( $r = -.138$ , NS) or the sum ( $r = -.053$ , NS). Both the non-significant findings as evidenced by the  $p$  values ( $p > .05$ ) and weak correlations evidenced by the  $r$  values ( $r < .3$ ) indicate the data failed to reject the null hypotheses.

The second hypothesis related to research question number one predicted a negative relationship between intensity of family stressors and self-determination. Significant relationships were not detected for any of the subscales nor were the  $r$  values suggestive of a moderately strong association (autonomy,  $r = -.059$ , NS; self-regulation,  $r = .025$ , NS; psychological empowerment,  $r = -.056$ , NS; self-realization,  $r = .088$ , NS; total score,  $r = -.039$ , NS). The greater the number of family stressors observed in the home did not impact the level of self-determination among youth in this sample.

### **Research Question Two**

Research question two examined the relationship between youth's experiences during care such as number of placement moves and total length of time in foster care and level of self-determination. Hypothesis one predicted a negative association between placement moves and self-determination. The results failed to reject the null hypothesis. Greater number of moves was not associated with level of self-determination as measured by the subscales (autonomy,  $r = .067$ , NS; self-regulation,  $r = .110$ , NS; psychological empowerment,  $r = .112$ , NS; self-realization,  $r = -.032$ , NS and total score,  $r = -.032$ , NS) and evidenced by the  $p$  value ( $p > .05$ ) and weak  $r$  values ( $r < .3$ ).

The second hypothesis associated with research question two found similar results. The longer youth stayed in care did not impact level of self-determination (autonomy,  $r = .025$ , NS; self-regulation,  $r = -.012$ , NS; psychological empowerment,  $r = .027$ , NS; self-realization,  $r = -.101$ , NS; total score,  $r = .019$ , NS).

### **Research Question Three**

Research question three focused on the relationships between demographic characteristics such as gender, race and disability on level of self-determination. It was expected that females would have lower levels of self-determination than males due to higher rates of sexual abuse. The data did not provide support for the alternative hypothesis. Using the Arc Self-Determination Scale, the association between gender and the subscales did not reach statistical significance nor were the relationships reflective of a weak or moderate association. For example, the relationship between gender and each of the subscales are as follows: autonomy ( $r = .009$ , NS), self-regulation ( $r = .098$ , NS), psychological empowerment ( $r = -.012$ , NS), self-realization ( $r = -.093$ , NS) or the total score ( $r = .021$ , NS). Males and females did not differ with respect to level of self-determination.

The second hypothesis proposed that there would be no association between race and self-determination. The results provided mixed support for this relationship. Using the overall summed score as a measure of self-determination, the research hypothesis was confirmed. Caucasian youth were no more likely to be self-determined than minority youth ( $r = -.128$ , NS). A small negative correlation was found, however, between race and psychological empowerment ( $r = -.192$ ,  $p < .01$ ). Caucasian youth reported lower

levels of psychological empowerment; however, they did not differ with respect to overall level of self-determination.

The third hypothesis predicted a relationship between disability types, i.e. youth with emotional and behavioral disorders and level of self-determination. Using Pearson's correlation, the data did not confirm this relationship. Emotional/behavioral disorder was not associated with autonomy ( $r = .048$ , NS), self-regulation ( $r = .116$ , NS), psychological empowerment ( $r = -.015$ , NS), self-realization ( $r = -.115$ , NS) or the total score ( $r = .058$ , NS). Youth diagnosed with emotional/behavioral disorder did not experience lower levels of self-determination than youth with other primary disability categories.

#### **Research Question Four**

Table five presents the regression models used to answer the 4<sup>th</sup> research question: To what extent do gender, race, and disability type moderate the relationship between pre-care and during care experiences? The main effects model for the autonomy subscale was not significant nor were there any significant associations found at the bivariate level when controlling for other variables. As noted in the methodology section, insignificant interactions were trimmed from the models. Gender, race, and disability type did not moderate the relationship between pre-care and during care experiences and autonomy.

Table 5

*Multiple Regression Models of Arc SDS by Domain and By Sum*

R2	Outcome	Predictor	Step 1		Step 2	
	Autonomy		$\beta$	<i>SE B</i>	$\beta$	<i>SE B</i>
.02		PA	-.003	2.194	.002	2.134
		FS	-.070	.521	-.082	.509
		Length	.007	.021	-.113	.028
		Gender	-.011	2.250	-.011	2.193
		Race/Ethnicity	-.093	2.180	-.072	2.128
		PI	.078	.190	.070	.186
.08*		PA x Length	--	--	.229*	.038
		FS x Length	--	--	.186*	.009
R2	Outcome	Predictor	Step 1		Step 2	
	Self-regulation		$\beta$	<i>SE B</i>	<i>B</i>	<i>SE B</i>
.03		PA	.029	.678	.028	.679
		FS	.023	.161	.023	.161
		Length	-.062	.007	-.060	.007
		Gender	.082	.695	.080	.697
		Race/Ethnicity	-.101	.674	-.101	.675
		PI	.118	.059	.072	.092
.03		Race x PI			.057	.111
R2	Outcome	Predictor	Step 1		Step 2	
	Psychological Empowerment		$\beta$	<i>SE B</i>	<i>B</i>	<i>SE B</i>
.07*		PA	-.112	.312	-.232*	.410
		FS	-.066	.074	-.053	.074
		Length	-.014	.003	-.026	.003
		Gender	-.045	.320	-.173	.428
		Race/Ethnicity	-.191**	.310	-.178*	.309
		PI	.140	.027	.147	.027
.09*		Gender X PA	--	--	.223	.633

R2	Outcome	Predictor	Step 1		Step 2	
	Self-realization		$\beta$	<i>SE B</i>	<i>B</i>	<i>SE B</i>
.02		PA	-.043	.299	-.045	.298
		FS	.090	.071	.090	.071
		Length	-.013	.003	-.005	.003
		Gender	-.083	.307	-.089	.306
		Race/Ethnicity	-.049	.298	-.048	.296
		PI	-.023	.026	-.184	.040
.04		Race x PI			.201	.049
R2	Outcome	Predictor	Step 1		Step 2	
	Sum		$\beta$	<i>SE B</i>	$\beta$	<i>SE B</i>
.03		PA	-.013	2.668	-.009	2.614
		FS	-.049	.634	-.060	.623
		Length	-.014	.026	-.117	.035
		Gender	-.003	2.736	-.003	2.686
		Race/Ethnicity	-.130	2.651	-.112	2.606
		PI	.108	.231	.101	.227
.08		PA x Length			.199*	.047
		FS x Length			.167*	.011

\* $p < .05$ , \*\*  $p < .01$ ; PA - Physical Abuse; FS - Total Number of Family Stressors, Length - Total length of time in care; Race/Ethnicity - Caucasian and other; PI - Placement instability measured by number of moves.

*Note:* Total length of time in care, number of risk factors, and placement instability were centered at their means.

The next model used to answer the research question used the subscale self-regulation as the dependent variable. The overall model was not found to be significant nor did the main effects model detect any significant bivariate associations. The interaction race x family stressors was entered into the model at step two but not found to be a significant predictor of self-regulation. The demographic characteristics of the youth in the sample were not significant above and beyond the main effects.

Psychological empowerment was the dependent variable in third model used to answer this research question. The main effects model for this subscale found race to be negatively associated with this component ( $\beta = -191, p < .01$ ). Minority youth reported lower psychological empowerment than Caucasian youth in this sample after controlling for physical abuse, family stressors, total length of time in care, and gender. Together these variables accounted for 7% of the variance in this subscale.

The final interaction model accounted for 9% of the variance in psychological empowerment, with one interaction term, gender x physical abuse. This interaction term was not found to be a significant predictor after controlling for the main effects. At step two, however, physical abuse was found to be negatively associated with this subscale ( $\beta = -232, p < .05$ ). Neither gender, race, nor disability type moderated the effects of pre-care and during care experiences and psychological empowerment.

The regression model for self-realization had no significant interaction terms or main effects. The product term race x placement instability was entered into step two of this model due to trend level associations found previously. The relationship was not found to be a significant predictor of self-realization after controlling for the main effects. The demographic characteristics of youth in this sample did not moderate the relationship between pre-care variables and self-realization.

The final regression model for the total score on the Arc Self-Determination scale did not detect any significant main effects nor were the models significant. Because none of the hypothesized interactions were significantly related to the dependent variable, they were not included in the final model. As a result, gender, race, and disability type did not

moderate the relationship between pre-care and during care experiences and total self-determination.

### **Exploratory Analysis**

Further analyses revealed some significant findings. Significant associations were found for key variables such as gender, disability, and the two variables used to measure during care experiences. Beginning with the demographic characteristics, a significant but weak correlation was found between females and sexual abuse reports ( $r = .214, p < .01$ ) indicating that females in this sample had more reports of sex abuse than males. Females also experienced more placement moves compared to males although this association was weak as well ( $r = .169, p < .05$ ). Additionally, a medium positive association between number of placement moves and total length of time in care indicated that the longer the youth in this sample stayed in foster care, the greater the number of placement changes they will experience ( $r = .37, p < .01$ ).

Significant interaction terms were found to be significant predictors using the backwards elimination method to further explore the impact of pre-care and during care variables on level of self-determination. The final interaction model for autonomy accounted for 8% of the variance when physical abuse x total length of time in care ( $\beta = .229, p < .05$ ), and family stressors x total length of time in care ( $\beta = .186, p < .05$ ) were entered. These relationships indicate that above and beyond the main effect association of length of time in care, youth who experienced physical abuse and stayed in care longer demonstrated higher autonomy. Similarly, the less stronger interaction term of family stressors x total length of time in care also had positive associations with autonomy:

youth with higher numbers of risk factors in their family of origin with increasing total length of time in care reported higher levels of autonomy beyond the baseline of family stressors and total length of time in care by itself.

These two interactions were also found to be positively associated with the total Arc Self-Determination score. Their combined effects accounted for 8% of the variance in the summed score. The overall model was not significant, however, and required more parsimonious tests. Using partial correlation, after controlling for the direct effects of physical abuse and total length of time in care, the interaction of these two variables was found to be weakly correlated with the sum ( $r = .162, p < .05$ ). Those youth with longer stays in foster care coupled with physical abuse had higher total scores on the Arc Self-Determination Scale above and beyond the direct effects. The second partial correlation produced similar results. After controlling for the direct effects of number of family stressors and total length of time in care, the interaction of the two variables was weakly correlated with the overall sum of the scale. Youth who had longer stays in care and more family stressors demonstrated higher self-determination above and beyond the direct effects of total length of time in care and number of family stressors ( $r = .185, p < .05$ ).

## CHAPTER VI: DISCUSSION

### Major Findings

The primary goal of this dissertation was to understand the impact of maltreatment and family stressors prior to entering foster care, and the total length of time in foster care and placement instability, on youth's level of self-determination. This dissertation did not generate support for the research hypotheses, however exploratory analyses revealed some interaction effects between these variables and other variables of interest and self-determination. This section will discuss the findings within the context of theory as well as provide possible explanations for the null findings. Following this discussion, the study's implications for theory will be discussed.

The first research question focused on examining the relationship between pre-foster care variables of abuse and family stressors and self-determination. Using various statistical techniques such as Pearson's correlations, and regression models testing interactions, these pre-foster care experiences were found to be only marginally associated with self-determination. In addition, after controlling for the direct effects of gender, disability type, length of time in care, and placement moves, individual abuse types did not appear to be predictive of overall level of self-determination.

Past research on the impact of abuse on similarly related concepts such as self-efficacy and self-esteem helps to make sense of these findings. Well known in the psychological literature, researchers have conducted studies on the outcomes of abuse on individual's psychopathology (Kim & Cicchetti, 2003; Toth, Cicchetti, Macfie, Maughan, & Vanmeenen, 2000). In one such study by Kim & Cicchetti (2003), differences in self-

efficacy among maltreated and non-maltreated children found unexpected outcomes. Young children (less than 8 years) who were abused in the past and exposed to conflicting stimuli ( $N = 266$ ) displayed higher levels of self-efficacy compared to non-abused children ( $N = 141$ ) ( $M = 2.67$ ,  $SD = .62$  vs.  $M = 2.49$ ,  $SD = .60$ ,  $p < .01$ , *Cohen's d* = .295). The authors make sense of their findings by theorizing that maltreated children may have inflated self-perceptions. These perceptions reflect the coping strategies needed to control home settings that are chaotic and uncontrollable. Given the similarities in family environments of the youth in this study, it would make sense that differences between groups by abuse type may not be detected. The unstable environments that characterize youth in care appear to influence these youth equally regardless of abuse type. A connection between family stressors and self-determination did not offer support for this association, however. Other explanations suggest that inflated self perceptions may even serve as a type of protective factor against mental health disorders such as depression (Cicchetti & Howes, 1991; Cicchetti & Schneider-Rosen, 1986; Costello, 1989).

The failure to establish a link between abuse and family risk factors and self-determination may also be a result of other mediating effects of mental health disorders. For example, past research on individuals who experienced trauma found that only the group who were trauma exposed and displayed PTSD had lower levels of self-efficacy (Miller, et al., 1999). Although the youth in this sample were not screened for this type of mental health condition, traumatic events such as abuse remains a predictor of PTSD in later life (Kolko, et al., 2010). Mental health as a mediating factor was not considered in

this dissertation due to sample size and small proportions of youth with these types of disabilities. Because the majority of youth in this sample had emotional/behavioral disorders as their primary diagnosis, the effects of other mental health conditions were not considered.

The second research question examined the connection between total length of time in care, number of placement moves, and level of self-determination. Again, the findings of this study did not support the hypotheses that these experiences would negatively impact an individual's self-determination. Results of both the bivariate analyses and regression models show no relationships exist between these two factors and self-determination although they are moderately correlated with one another ( $r = .369, p < .01$ ). These results were particularly surprising given past research demonstrating negative outcomes of youth with longer stays in care and with multiple placements (Harden, 2004; James, et al., 2004; Newton, et al., 2000).

Some evidence points to findings that fall more in line with the current study's findings. For example, Flynn et. al. (2004) found no differences between self-efficacy of youth in care versus youth in the general population. Similarly, using data from the Casey Family Programs, Pecora et. al. (1998) found that length of time in care and placement changes did not predict self-esteem among youth in foster care. The author points out that these results may be a consequence of the services provided by Casey Family Programs as these youth receive additional support compared to youth in the general foster care population. Likewise, youth in this current study may have also benefited from services

received from local independent living programs, special education services, or therapeutic foster care homes.

The hypotheses related to the third research question focused on demographic characteristics such as gender, disability type, and race, and their individual relationships with self-determination. Differences between groups on overall self-determination were not found in this research – with one exception. Youth who identified as Caucasian had significantly lower of one component of self-determination: psychological empowerment, compared to minority youth. Unlike autonomy, psychological empowerment measures psychologically empowered beliefs encompassing both locus of control and self-efficacy. The racial differences found may be due in part to racial identity among African American youth. Past research on African American youth and levels of psychological well-being found that an individual's racial identity moderated the effects of discrimination on psychological well-being (Seaton, 2009).

The study's failure to detect any other group differences by subscale or overall self-determination scores was surprising. The hypothesized relationship between gender and self-determination came out of studies that demonstrated females have experienced more sexual abuse (Alzate & Rosenthal, 2009) and lower self-esteem (Kling, Hyde, Showers, & Buswell, 1999). The results of this study fall more in line with research on self-determination that does not support the association between gender and self-determination (Wehmeyer, et al., 2003). These contradictory findings would indicate that self-perceptions may be different from actual competencies to express self-determination. Although females may internalize negative self-perceptions due to past history of sexual

abuse, they are not expressing lower self-determination than males. This makes sense given that differences in self-determination did not differ by abuse type.

Contrary to the hypothesized relationships, youth EBD did not score lower self-determination than youth with other types of disabilities. These results were unexpected given the negative outcomes of these youth in general (Landrum, Tankersley, & Kaufman, 2003; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005) and youth in care (Smithgall, et al., 2005), and the link between outcomes and self-determination (Field, Sarver, & Shaw, 2003). This prediction was made in part because of past research linking youth with EBD to higher rates of abuse (Johnson-Reid & Barth, 2000) and longer stays in care (Smithgall, et al., 2005). Because negative associations were not made between abuse and total length of time in care, having EBD may not be sufficient reason to express lower levels of self-determination.

The research findings suggest that youth who experienced physical abuse report higher levels of autonomous behaviors when they are in care longer, after controlling for the direct effects of physical abuse, family stressors, total length of time in care and placement instability, and race and ethnicity. As previous research shows, abusive parents are more controlling of their children's behaviors than non-abusive parents (Chilamkurti & Milner, 1993; Mash, et al., 1983; Trickett, et al., 1991). As these same youth spend time in foster care, what was once a more restrictive environment, may now allow for more autonomy. This may happen as a result of two forces: 1) youth in care may experience more freedom and better home environments than their previous home with biological parents, and 2) the foster parents may provide a more detached style of

parenting, neglecting some of the basic needs of youth that they must in turn, perform by themselves.

Alternatively, youth who come from homes that were physically abusive may be endowed with characteristics and learned coping strategies that make them more resilient. This finding supports previous research that found that among adult survivors of childhood physical abuse the more resilient survivors relied on constructive aggression styles compared to those who were less resilient (Cirillo, 2000). The results from this research would indicate that the longer youth who were physically abused stayed in foster care, the more they desired control over areas of their lives.

Similar results were found among youth who had multiple family stressors in their family of origin. As with youth who were physically abused, total length of time in care moderated the effects of family stressors. These youth reported higher levels of autonomy as measured by the self-determination scale. The longer time in care may have served as a protective factor to these youth, as the difference in home environments become less chaotic than previously experienced. It can also be theorized that due to the high incidence in family stressors (i.e. domestic violence, and parental drug abuse) these youth may have become more resilient or “parentified” and better able to interact autonomously within their environment. The term parentification describes the process by which a child fulfills the role of the parent (Boszormenyi-Nagy & Spark, 1973). Research has established the link between parentification and family stressors such as parent drug abuse, and persistent neglect (Bekir, Childress, & Gariti, 1993; Godsall, Jurkovic, Emshoff, Anderson, & Stanwyck, 2004). For example, youth who come from homes

where there are a high number of risk factors may have had to learn to be more independent by taking on the role of the parent. The longer these youth stay in care, the more they draw on their traits of independence and autonomy.

Looking at past research on youth with disabilities, youth in care, and survivors of physical and sexual abuse helps to place the findings of this dissertation into context. Theorists in these respective research areas provide many alternative explanations for the findings discovered in this dissertation. Those explanations include inflated levels of self-efficacy of youth who experienced abuse as a coping mechanism, possible mediation effects of mental health disorders, and a de-linking of negative self-perceptions with lower self-determination. Given the complexity of these youth's experiences and characteristics, all of these explanations must be considered before any conclusion can be drawn.

### **Theoretical Implications**

Placing the above findings within the context of theory elucidates our understanding of how these youth have developed and adapted to their environment given their past history and current environment in which they live. Although the statistical findings were unexpected, the results are not beyond the scope of theoretical explanation. The next section will review the subscales and total score in the Arc Self-Determination Scale that were most impacted by demographic characteristics, abuse, family stressors, and total length of time in care and placement instability. The performance of these subscales in this sample will then be linked to the tripartite ecological theory of self-determination.

The subscales within the Arc Self-Determination Scale; autonomy, self-regulation, psychological empowerment, and self-realization offer insight into the concept of self-determination. According to the measure's author, autonomy includes four behavioral categories that contribute to this outcome. They are: 1) self-family care activities, 2) management activities, 3) recreational and leisure activities, and 4) social and vocational activities. Together these categories measure actions based on personal preferences and are independent of external interference.

According to the tripartite ecological theory of self-determination, youth who desire personal control, are able to exercise control, and work toward goals that are important to them exhibit high levels of self-determination. The need to exhibit autonomy while in care may increase over time and these youth struggle to exert control over situations. As previously mentioned the subscale autonomy appeared to be the most impacted by experiences unique to youth in foster care. Youth who previously were denied these activities because of abusive and controlling parents may use constructive aggression styles or rely on developmentally inappropriate parenting strive to seek out experiences that enhance autonomy and overall self-determination. This presents a key point for youth who find themselves suddenly on their own after aging out of care. Without the continual support of family, which is often missing for youth aging out of foster care versus the youth in the general population, youth in foster care may need to demonstrate levels of self-determination above and beyond what is generally needed for positive outcomes.

Unlike autonomy, psychological empowerment measures a youth's locus of control and self-efficacy. In other words, this subscale provides statements that measure one's perception of control. Rather than the previous subscale that measured actual ability to act independently, this subscale represents psychologically empowered beliefs. Caucasian youth performed lower in this aspect of self-determination compared to minority youth. This finding may be a result of racial identity serving as a type of protective factor against any effects of discrimination.

These findings draw attention to the tripartite theory's description of the interplay between desire for control and exercise of control. Because of negative cognitions about the self due to physical abuse, Caucasian youth may have less confidence in their abilities to exercise control. Interestingly, females in this sample do not internalize these beliefs any less than the males in the sample as was previously hypothesized. It is possible that females, who experienced more sexual abuse, have received more counseling and support than males.

The self-determination subscale representing self-regulation measured a youth's cognitive problem-solving abilities. The associations of this subscale with the independent variables of interest were not statistically significant, as little variance in youth scores on this subscale were detected. Interestingly, this sample's mean of 12.5 was higher than the normed sample mean of 9.78. One explanation is that these youth received more specialized assistance from special education teachers. Such assistance may include problem solving and goal setting. Because of past history, these youth may have elevated problem-solving abilities that were useful for surviving in their family of

origin and in foster care. Moreover, unlike youth in the normed sample, these youth may be receiving independent living services provided by DHS.

The final subscale of the Arc Self-Determination Scale, self-realization, provides a measurement for the concepts of self-acceptance, confidence, self-esteem and self-actualization. As with the self-regulation subscale, no significant associations were found for the self-realization subscale and the independent variables in this study. It would appear that self-realization for the youth in this sample is not impacted differentially by experiences associated with foster care. Both the learned and intrinsic characteristics of self-realization appear to be impacted similarly across the groups.

According to the assumptions laid out by the theory, the expression of self-determination can vary according to both pathogenic and salutogenic experiences. The central research question of this dissertation relied heavily on this assumption. It was assumed that abuse history and foster care experiences served as pathogenic experiences that would diminish a youth's ability to express self-determination. What were not considered, however, were salutogenic experiences such as counseling, IEP and ILP services, and internal coping skills that are triggered by duration in care. Unfortunately, these possible intervening variables were not measured for this study, nor were relationships with siblings, other foster youth, other family members, schoolteachers, or even caseworkers considered. It is possible that these other microsystems served as protective factors for youth in care, in particular, youth who experienced sexual abuse.

This research raises a very important question: "How much self-determination do youth in foster care with disabilities need to achieve positive outcomes as they transition

into adulthood?” Up to this point, past research has established the link between future outcomes and self-determination among youth with disabilities, and has highlighted the need to improve outcomes of youth in foster care. What is not often considered are the structural barriers that these youth experience that are not shared by youth in care without disabilities and youth with disabilities not in care. Expecting youth with surmounting negative experiences to achieve independence at the age of majority would be to overlook the continued support of family as well as the benefits afforded by one’s socio-economic status. Simply put, these youth may need to exercise self-determination above and beyond their peers in order to realize positive adult outcomes, given their other barriers such as diminished access to support systems after transition out of foster care. Support for this claim is evidenced by the results of the two intervention studies used for this dissertation. In the My Life study, for example, youth in the treatment group had significantly higher levels of self-determination compared to the control group post intervention ( $M = 111.83$  vs.  $M = 97.5$ ,  $p < .05$ ,  $ES = .65$ ). In Project Success, youth in the treatment group demonstrated an increased number of goals as measured by change scores from baseline to post-intervention than the comparison group ( $M = .7143$ ,  $SD = 1.41$  vs.  $M = .1034$ ,  $SD 1.54$ )  $t = -2.121$ ,  $df = 105$ ,  $p < .05$ ,  $ES = .41$ ).

### **Strengths and Limitations of Study**

This research included a number of limitations that must be considered before conclusions can be made about the influence of experiences related to youth in foster care, especially when measuring such an elusive concept as self-determination. To begin, reliability of self-reported data posed noteworthy limitations. The data provided for this

dissertation relied on only one measure of self-determination. Given that this measure was field-tested on youth with disabilities who were not in foster care in the original study, other measures of this concept as well as a measure specifically designed for foster care youth might have provided additional support or alternative findings. In addition, the scales within the measure did not hold equal weight. For example, the autonomy subscale functioned as the total score because the range allowed for greater variance of the total score.

Another threat to validity is called evaluation apprehension, or social desirability among the target population (Singleton & Straits, 2005), and may have introduced error. It can be assumed that the youth used for this research would want to bias their answers in the direction of desirable traits, thereby making a positive impression on the interviewer. Although researchers from the two studies, *My Life* and *Project Success*, were careful to avoid this risk by using interviewers who were unknown to the youth, it can be assumed that a certain degree of evaluation apprehension influenced the results of the data.

Administrative data collected from caseworkers was one of the data sources, and this may have contributed to problems with reliability. The main predictor variables used: abuse types, number of moves, length in care, and family of origin stress factors, relied heavily on caseworkers entering and coding these phenomena in to the administrative database. Unfortunately, there exists no current method of verifying the accuracy of such worker report. Moreover, such inaccuracy becomes enhanced when considering the high turnover rate among child welfare workers and the challenges of training new workers

(Potter, Comstock, Brittain, & Hanna, 2009). This point leads to another limitation that centers on when and to what degree youth were exposed to abuse. The abuse types collected from the administrative data only provides a snapshot of what type of abuse occurred prior to entering care, rather than at what age the youth experienced the abuse. Additionally, many of the youth had previous reports prior to entry into care that were either found to be unsubstantiated or did not lead to removal from the home yet may have had a significant impact on their development.

Another limitation of the current study centers on the exclusion criteria. Because receiving special education services was used as screening criteria for entrance into the intervention study, youth who did not attend school were excluded. It is impossible to know whether or not these excluded youth have similar or dissimilar levels of self-determination. However, due to the age at which most of the youth entered the studies, it is highly unlikely that drop-out rates would have impacted the results. Likewise, using cross-sectional data limited the ability of this research to demonstrate change over time. Using longitudinal data would enhance these findings given that self-determination develops over time, as do historical events such as abuse in care and the effects of duration in care. Because the two studies used for this dissertation were intervention studies, a longitudinal analysis was not possible.

Statistically, the study results were impacted by limitations related to both decision rules and also low effect sizes. In order to maintain adequate r-square values in the regression models, adjustments were made by trimming the models for each subscale. For example, the interaction between gender and physical abuse was not found to be a

significant predictor of autonomy in the backwards elimination model but trended toward significance in the model analyzing psychological empowerment. This may have resulted in missing significant findings that would be apparent in a larger sample size.

Additionally, for some of the significant associations found (physical abuse x length in care and self-determination and family stressors x length in care and self-determination), the R-squared contributions of the independent variables were quite low in each of the regression models ( $< .10$ ). This would indicate a weak strength of relationship and leaves open the possibility for other possible explanatory models.

All limitations aside, strengths of the current research offer new knowledge to this field. Given that much of what we know of the foster care population comes from two major population studies that excluded youth with certain types of disabilities, and studies on self-determination do not focus on youth in foster care, this dissertation expands our understanding of how self-determination develops among youth in foster care who experience disabilities. The strengths of this research center on the capacity to explore options and assist this vulnerable group of youth. Careful planning of sample selection and size from the two parent studies allows for adequate generalizability of the data to other populations of similar characteristics, most importantly, adolescent youth ages 14-17, in foster care, attending public schools in a metropolis area, and receiving special education services. In addition, given the current levels of self-determination among this sample, and the negative outcomes that many of them experience as they transition out of care may mean that these youth need *more* self-determining behaviors than youth who have more family and structural support.

### **Importance to Social Work**

The primary mission of the social work profession focuses on the enhancement of well being for all people with added consideration for vulnerable populations. The social work profession was built upon values that support this mission. These values; service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence, make up the bulk of social work education, research, and practice (NASW, Code of Ethics).

The purpose of this research on youth with disabilities in foster care focused on promoting these values with extra emphasis placed on the value of respecting the dignity and worth of individuals. As stated in the revised 1999 NASW Code of Ethics, “Social workers promote clients’ socially responsible self-determination” (National Association of Social Workers, p. 20). The enhancement and promotion of self-determination, however, is limited in the current social work body of literature. The findings of this study help bridge what is known in the fields of education and psychology to the current body of research on this topic in social work by focusing on a population most familiar to the profession, youth in foster care.

Moreover, findings from this research can help program developers to understand the complexity and the facilitators and barriers of such a highly valued attribute. In addition, this research can also aid program developers as they target the enhancement of self-determination and self-determining behaviors among varying populations such as youth who are trauma exposed, experience a high degree of mobility, and have multiple stressors impacting their families. In other words, varying degrees of self-determination

may require more innovation and flexible interventions that would accommodate these youth in particular.

### **Implications for Policy**

This study aimed to understand the link between experiences shared by foster care youth and their ability to be self-determined. Notwithstanding, this research does not ignore the impact foster care policies could have on this relationship. Federal policies addressing housing, welfare, social security benefits, permanency planning, and family reunification have all drastically impacted youth in foster care (Allen & Bissell, 2004). On a national level, it is clear that policy makers and planners are aware of the discouraging picture of outcomes for youth in foster care. This dissertation notes the efforts made by local agencies with respect to protecting the well being of such a vulnerable group of children and youth with varying degrees of abuse histories. Results of this research adds knowledge to further the progress made by local and federal agencies by demonstrating how maltreatment and placement disruptions impact the ability of foster care youth to successfully transition out of care. This knowledge can be used to influence agency policies directing how youth in settings such as ILP programs are treated and encouraged to develop and pursue goals and objectives.

### **Implications for Future Research**

Although this dissertation did not establish a direct link between history and self-determination among this sample, it does open the door for future research aiming to understand the impact of abuse and foster care on self-determination. These findings bring to light the dearth of information we have on the causes of negative outcomes of

youth with disabilities in foster care. Much more is needed to determine which, if any, intervening variables can account for the negative adult outcomes of this population.

Youth in foster care with disabilities as a whole do not experience positive adult outcomes compared to youth in the general population and youth in foster care without disabilities (Barth, et al., 2007; Smithgall, et al., 2005). Further research exploring the resiliency concept of youth who have had negative experiences, yet achieve successful future outcomes is needed to better understand and support those who are less resilient or less self-determined.

### **Conclusions**

Youth in foster care with disabilities face immense challenges as they transition from adolescence in care into an adult life of independence and responsibilities. For many of the nearly 500,000 youth in the U.S. who make this sudden transition from foster care, poor outcomes such as unemployment, homelessness, and incarceration are not far from reality. Fortunately, researchers and service providers have taken notice and have begun to develop interventions that target areas in which they believe can improve these youth's ability to charter their own course toward a better future.

One promising solution for avoiding these outcomes involves enhancing skills, beliefs, and opportunities central to making positive steps. These components form the building blocks for what is known to theorists as self-determination. Self-determination allows individuals to engage in autonomous, goal-directed, and self-regulated behaviors. For youth in foster care, to be able to exercise these characteristics becomes even more

crucial as they lack many of the familial support and struggle with additional maltreatment histories compared to their same-aged peers.

This dissertation focused on the youth's ability to adapt to these histories while in foster care. It explored ways in which these youth's level of self-determination was impacted as a result of abuse and time spent in foster care. While the findings about predictors of self-determination remain mostly unknown, this study does demonstrate the resiliency of these youth and all that is left to explore about how to create better incomes for this group.

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## APPENDIX A

### The Arc Self-Determination Scale

The Arc's Self-Determination Scale (Adolescent Version) was developed by The Arc National Headquarters with funding from the U.S. Department of Education, Office of Special Education Programs (OSEP), under Cooperative Agreement #H023J20012. Questions used in Section One (Autonomy) were adapted, with permission from the authors, from the Autonomous Functioning Checklist. Questions used in Section 4 (Self-Realization) were adapted, with permission from the author, from the Short form of the Personal Orientation Inventory. Appropriate citations from both instruments are available in The Arc's Self-Determination Scale Procedural Guidelines:

Wehmeyer, M., & Kelchner, K. (1995). *The Arc's Self-determination scale: Procedural guidelines*. Arlington, TX: Arc National Headquarters.

## APPENDIX B

### Demographic Survey

Date \_\_\_\_\_

Data collector(s): \_\_\_\_\_ Participant ID: \_\_\_\_\_

Date of birth: \_\_\_\_\_ Gender: Male\_\_ Female\_\_

Ethnicity (check the one that student feels best describes their ethnicity):

<input type="checkbox"/>	American Indian or Alaskan Native	<input type="checkbox"/>	Hispanic
<input type="checkbox"/>	Asian or Pacific Islander	<input type="checkbox"/>	White or Caucasian
<input type="checkbox"/>	Black or African American		
<input type="checkbox"/>	Multi ethnic: Please describe		
<input type="checkbox"/>	Other (specify)		

2. Nature of student's PRIMARY disability (check only one, as specified on IEP)

ADD or ADHD

AS

D

Emotional or behavioral disorder

Lear

Learning disability

Hearing impairment including deafness

Phys

Physical disability

Developmental

TBI

Speech or language impairment

\_\_Visi

on impairment  
 \_\_Health impairment (specify) \_\_\_\_\_

\_\_No

specific diagnostics

- 3. Date of participant's first entry into substitute care \_\_\_\_\_
- 4. Total number of placements since participant first entered care: \_\_\_\_\_
- 5. Has participant experienced maltreatment (substantiated/founded cases)? \_\_\_ no \_\_\_ yes
  - 13a. If no, is case \_\_\_ voluntary \_\_\_ delinquency \_\_\_ other
  - 13b. If yes, what form of maltreatment? (check all that apply)

	Sex abuse		Physical abuse
	Neglect		Emotional maltreatment/mental injury
	Threat of harm		Other