AN EXAMINATION OF POSITIVE MENTAL HEALTH OUTCOMES
IN FORMER RECIPIENTS OF FOSTER CARE

By

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ABSTRACT

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The purpose of this study was to examine mental health factors including substance use, depression, caretaker bonding, and social self-efficacy in individuals who were previously placed in foster care. This study sought to compare outcomes in those former foster care recipients who experienced relative and non-relative adoption. A total of 185 former foster care recipients participated in the current study. Results indicated that individuals who experienced adoption out of foster care by a relative have lower depression levels and higher ratings of social self-efficacy than those who were adopted by a non-relative and those who were never adopted out of care. The present study found results in low levels of substance use which were relatively equal among these three groups. Additionally, this study found the highest levels of female caretaker bonding in those foster care recipients who had been adopted by a relative as compared to individuals who were adopted by a non-relative and those who were never adopted, however no significant difference was found in the ratings of male caretaker bonding between groups. Data were collected through the use of The Substance Use Inventory, the Hamilton Depression Inventory, the Parental Bonding Instrument-Foster Care, the Social Self-Efficacy Subscale of the Sherer’s perceived Self-Efficacy Scale, and a brief demographic questionnaire.
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CHAPTER I

Introduction

In any given year, approximately 400,000 foster children and adolescents are placed in child welfare, including into family and non-family foster care settings. There has been a considerable rise in the number of children and adolescents residing in foster care from 276,000 in 1985 to approximately 494,000 10 years later (Berrick, 1998; U.S. Department of Health and Human Services, 2012). Although there are various reasons for foster placement, child maltreatment is the leading reason for individuals to enter foster care (McWey, Cui, & Pazdera, 2010). While many children and adolescents show resilience when faced with these challenges, others are at a significant risk for developing mental health symptoms, risk-taking behavior, social disadvantage, and physical health problems (Newton, Litrownik, & Landsverk, 2000; Pecora, White, Jackson, & Wiggins, 2009; Riggs, Augoustinos, & Delfabbro, 2009).

Maltreatment affects individuals differently. Children who have experienced abuse, neglect, and who suffer from trauma of being separated from their biological parents, are susceptible to various mental health disorders (Bruskas, 2008; Pecora, 2005). Studies examining the prevalence of mental disorders in foster children have found that over half experience one or more mental health disorders while residing in care (Casey Family Programs, 2005). These rates are considerably higher than the 25% of children in the general population who are diagnosed with mental health disorders. Research focusing on developmental psychopathology has investigated long-term consequences of maltreatment in relation to other factors that are associated with trajectories of
development, including the type of abuse experienced, child gender, age, the amount of
time residing in foster care, and the placement setting (Cicchetti & Rogosch, 2002).

Many foster children and adolescents spend a significant portion of their
childhood residing in care, even though assisting in their placement and minimizing their
time spent in the foster care system is the main goal of child welfare. About half of the
foster children who are placed into care will remain there for one year or longer, with the
average length of stay in foster care being two years (U.S. DHHS, 2012). The Riggs et
al., (2009) research findings demonstrate that foster care can be therapeutic in providing
recipients with parenting models that give the child a positive sense of belonging within
the family which can later be generalized to other important perceived social beliefs.
One such benefit is an increase in social self-efficacy, which Bandura defines as the
belief in one’s ability to affect the world around them in order to gain a desired result
(Bandura, 1982). Individuals have little incentive to overcome difficult past experiences
and future challenges without feelings of self-efficacy (Riggs et al., 2009).

Child welfare has the intent of protecting foster care recipients; however, the
consequences of doing so have indirectly added to the vulnerability of these individuals.
Although he was referring to the experience of death in his research on attachment,
Bowlby (1998) explains how losing a loved one is “one of the most intensely painful
experiences any human being can suffer” (p.7). This is especially applicable to children
and adolescents who are being placed in foster care. The loss of one’s parents is perhaps
one of the most traumatic events conceivable for an individual. It not only completely
shatters one’s sense of security, but also alters their development, especially if they are
placed into foster care. This is an abrupt transition that takes a child from his or her family, friends, and environment arbitrarily and without closure.

Trying to discover the proportion of former foster care recipients who go on to live healthy productive lives is an important goal. Approximately 28,000 adolescents emancipate to adulthood from a foster care setting every year, many of whom have difficulty transitioning to young adulthood and achieving optimal mental health (Bruskas, 2008; U.S. DHHS, 2012). The Northwest Foster Care Alumni Study (‘Northwest Study’) found that 54.4% of former foster care recipients had significant mental health problems, including depression, post-traumatic stress disorder (PTSD), social problems, and anxiety (Pecora, 2005). Results from the Casey National Alumni Study (‘National Study’) (2005) as well as the Northwest Study (2005) demonstrate that this population is experiencing rates of mental illness considerably higher than those of the general population (Casey Family Programs, 2005; Pecora, 2005; Pecora, White et al., 2009). Mental health outcomes among former foster care recipients are poor and few studies have examined how these individuals fare after leaving the foster care system, particularly in their levels of mental health (Bruskas, 2008; Pecora, 2005).

To evaluate how youth may have been impacted by foster care, the current study focused on mental health outcomes in adults ages 19-51 years old who were former recipients of foster care and who spent one year or more in foster care. This research added to existing literature by investigating former foster care recipients’ experiences of caretaker bonding, perceived social self-efficacy, substance use, and psychological well-being. This study expanded upon existing literature by examining the differences
between individuals who were previously adopted by a relative, recipients who were adopted by a non-relative, and individuals who were never adopted from foster care.
CHAPTER II

Literature Review

Role and Performance of Child Welfare

The government is obligated to protect children who are removed from their parents’ custody and placed into the foster system because of maltreatment (Berrick, 1998; Rosenfeld et al., 1997). The child welfare system must follow a set of basic rules codified in federal, state and local legal statutes. The system’s governing principles are held within child protection, family support, and family privacy, all of which should contribute to the three major goals of child welfare (Berrick, 1998). The child welfare services system’s goal is to protect children from harm by their parents or caregivers while promoting permanence, or long-term stable placement. As a way to ensure a safe environment for children and adolescents, child welfare also offer support to both parents and extended relatives that is necessary for at-risk families. When foster placement outside of the home is warranted, the system aims to find caregivers who can support foster children’s families and, more importantly, be accepted as part of their family (Berrick, 1998; Riggs et al., 2009; Schofield, 2002).

The Adoption Assistance and Child Welfare Act of 1980 represented the principal legislation regulating child welfare. This federal law was created as a way to promote lifetime permanence for foster care recipients—another major goal of child welfare that is characteristic of good practice. Legal terms define permanence to include three types of custody: “(1) reunification with a biosocial parent, (2) adoption, in which legal rights to parenthood are severed with the biological parent and are fully transferred to an
alternative adult, or (3) legal guardianship, in which authority for the child is transferred from the parent to an alternative caregiver” (Rosenfeld et al., 1997). One should consider how placement settings can either help or inhibit an individual’s possibility for permanence as well as for their propensity to have a legal lifetime relationship with a caregiver.

Foster care is an intervention program intended to enhance a recipient’s well-being while decreasing his or her emotional problems (Denuwelaere & Bracke, 2007; McWey et al., 2010). A major goal of this program is to protect individuals who have experienced negative family circumstances such as abuse. Research has found that foster care recipients are susceptible to a wide range of problems but can learn resiliency throughout life when they experience stable and nurturing relationships (Riggs et al., 2009). Foster families play an important role in their foster recipient’s recovery from maltreatment and in providing new opportunities for them to experience healthy relationships with their caregivers (Riggs et al., 2009; Schofield, 2002). Foster care should assist in an individual’s ability to engage in healthy coping strategies and to continue their development of meaningful interpersonal relationships and general self-efficacy. In providing a caring, flexible, and therapeutic environment, foster care providers can help meet their recipient’s developmental needs, overcome skill deficits, and correct maladaptive behaviors (Berrick, 1998; Riggs et al., 2009; Schofield, 2002). By having an opportunity to practice newly acquired, healthier behaviors with peers and adults, foster care recipients are expected to be able to move towards having a more competent adulthood.
The child welfare system has not always been accountable for performance outcomes of children and adolescents in foster care. In addition to policy and practice changes that occurred after the Adoption Assistance and Child Welfare Act of 1980, the system has a history of not tracking children once they age out of care. Researchers have also paid little attention as to how former care recipient’s transition from foster placement which makes comparisons of previous and current foster care models especially challenging (Fechter-Leggett & O’Brien, 2010). Historically, outcomes were based upon a child welfare agency’s compliance to federal and state requirements. In 1994, however, an amendment to the Social Security Act was passed which allowed for performance outcomes to emphasize the end results of children and families involved in foster care (Administration for Children and Families, 2006). In 2001, the Children’s Bureau implemented statewide evidenced-based assessments of the outcomes of the child welfare system; however, the results of the assessments typically focus on the positive, rather than negative, outcomes of foster placement.

Child and Family Services Reviews (CFSRs) assessed how well each state was meeting the needs of the children it served as well as how well they were meeting the requirements of the system. Fourteen areas of compliance were attempted: seven related to the needs of children and seven related to systemic requirements. The areas related to the children being served in the foster care system were divided into three categories: safety, permanency, and well-being (U.S. DHHS, 2005). The first Child and Family Services Reviews in the United States weren’t completed until March 2004, and were generally negative. The 50 states, Puerto Rico, and the District of Columbia all failed to
meet the minimum standards for all areas of child welfare. Out of the 14 areas assessed, the median compliance was 6, and not even one state met the federal requirements of providing stability and permanency for children involved in the child welfare system (Children’s Administration Research, 2004; U.S. DHHS, 2005).

This poor performance necessitated the development and implementation of improvement plans for child welfare. Both historically and currently, these plans have been directed toward reforming the system rather than directly assisting the children directly involved in child welfare (Administration for Children and Families, 2006). As a way of better understanding the impact of this system, we will need to focus on the direct implications it has on the children being served. By understanding the perceptions and experiences of children residing in foster care, more comprehensive developmental and mental health assessments could be utilized with this population as a way to better address these issues. These improvements would better improve a child’s mental well-being by allowing for more effective interventions that address the experiences and feelings of those entering the system (Bruskas, 2008).

Former Recipients of Foster Care

Even with the recent increase in studies examining the long term psychological well-being of former foster care recipients, the large number of variables involved in each case necessitates further research. Foster care placement has many complexities, such as the child’s age and developmental level at the time of placement, the length of stay, the foster care setting, and the number of placements while in care. One longitudinal study examining this transition for 141 former foster care individuals found that many
experienced challenges during their transition from foster care to young adulthood (Courtney, Piliavin, Grogan, & Nesmith, 2001). Many adolescents age out of foster care when they turn 18 years old and have little, if any, financial, medical, or social support (Bruskas, 2008). During this time, many of these individuals experience criminality and fail to function productively and autonomously in society (Bruskas, 2008). The number of different placements once in the foster care system was analyzed as a potential cause of psychological damage. Respondents indicated a feeling of loss with each move and reported that this made the ability to establish healthy bonds with their caretaker much more difficult (Unrau, Seita, & Putney, 2008). Many former recipients of foster care leave the system feeling alone, insecure, unprepared, and overwhelmed by the many challenges placed before them. A number of them transition with little support which undoubtedly affects the quality of their future success in adulthood (Bruskas, 2008).

The goal of much of the research being done with former foster care individuals has been to understand the core causes for their poor mental health outcomes. Cook-Fong (2000) concedes that a primary problem with this sort of research is that it fails to consider that conditions prior to foster care placement and conditions after placement are not adequately analyzed. Samuels (2009) examined the connection between psychological problems among former foster care recipients and the loss of permanence suffered by those who come from broken families. The author argued that by losing one’s parents or guardians, an individual also loses socio-emotional and psychological supports that come from this sense of family membership. This research was based on a small sample ($n=29$) of young adults who transitioned from foster care into adulthood
without legal permanence and found that addressing the interpersonal domains of family and therefore, of permanence, is essential to this population’s healthy identity and socio-emotional well-being into adulthood. Although there is not a lot of empirical data, the existing research appears to be in agreement that, without the support necessary to overcome the various challenges which former foster care individuals are confronted with, mental health outcomes may be severely impacted.

**Perceived Self-Efficacy**

Perceived self-efficacy involves set-perceptions and interpersonal skills that support the development of meaningful relationships as well as of significant life events. These skill sets can help move developing foster care individuals toward a level of maturity and healthy self-parenting sufficient to meet the numerous challenges of transitioning into adulthood (Holmes, Heckel, & Gordon, 1991). This competency, or one’s capacity to interact effectively with their environment, leads to feelings of self-efficacy.

Previous research has shown that trauma caused by being removed from one’s biological family and placed into foster care is associated with beliefs of perceived helplessness -which Bandura describes as the opposite of his concept of self-efficacy (Riggs et al., 2009). A significant positive relationship has been found between family stability and children’s self-efficacy, and other factors such as age, gender, and behavioral differences are important predictors of self-efficacy (Newton et al., 2000). Research has described the feeling of self-efficacy as being mediated by support within the foster family context. If support is unavailable, as in the case of many former foster
children, an individual is at risk for developing depressive symptoms, anxiety, lowered self-esteem and decreased feelings of perceived self-efficacy (Bandura et al., 1999; Denuwelaere & Bracke, 2007).

For many recipients, placement in foster care involves disrupting ties not only to family members but often to friends as well as school. Due to the impermanence of foster placement, research on former foster care recipients has found that this affects individual’s perceived opportunities to make new friends as well as to keep old friends (Unrau et al., 2008). Perceived social self-efficacy consists of one's belief in one's ability to make friends, pursue romantic relationships, be assertive, perform well in public situations, and give or receive help (Scherer et al., 1982). Furthermore, a number of studies have examined perceived self-efficacy as a common mechanism mediating psychological changes. Bandura (1982) explains that self-efficacy predicts the degree of change in diverse types of social behavior including phobic dysfunctions, stress reactions and physiological arousal, physical stamina, self-regulation of addictive behavior, achievement strivings, and career choice and development.

Bandura et al. (1999) analyzed self-efficacy pathways to childhood depression on 282 male \((n=148)\) and female \((n=134)\) children with a mean age of 11.5 years. Participants completed three sets of scales related to beliefs in their efficacy and were divided by gender. Children’s perceived self-efficacy was measured by 37 items representing seven domains of functioning: self-efficacy for academic achievement, self-regulation of learning, self-efficacy for leisure and extracurricular activities, self-regulation in resisting peer pressure, self-efficacy to meet others’ expectations, self-
assertive efficacy, and perceived social self-efficacy. Perceived social self-efficacy was assessed “by measuring children’s beliefs in their capabilities to form and maintain social relationships, work cooperatively with others, and manage different types of interpersonal conflicts” (Bandura et al., 1999).

A principal-components factor analysis was calculated to determine a three-factor structure. These factors included perceived academic self-efficacy, perceived self-regulatory efficacy, and perceived social self-efficacy. Items assessing the factor of perceived social self-efficacy included children’s perceived capability for peer relationships, for self-assertiveness, and for time spent in leisure social activities. In relation to these various socio-cognitive factors, depression was longitudinally examined for both male and female groups. The severity of depression was assessed using the Children’s Depression Inventory (Bandura et al., 1999).

Results indicated significant sex differences on several factors assessing self-efficacy. Girls showed a higher sense of academic efficacy, \(F(1,280)=17.52, p<.0001\) although had lower reports of perceived social efficacy \(F(1,280)=5.78, p<.05\). They were also more prosocial, \(F(1,280)=20.61, p<.0001\) and displayed fewer problem behaviors, \(F(1,280)=13.86, p<.001\). Compared to boys, girls showed greater academic attainments, \(F(1,280)=10.86, p<.01\). In the second time period of this study, girls rated somewhat more depression than that of boys however the difference was small and cannot be attributed to age or sex differences. Differences in depression between male and female gender is not common in mid-adolescence but rather can generally be found in late adolescence (Bandura et al., 1999).
The role that social self-efficacy plays in determining whether or not a foster care recipient is able to overcome the psychological challenges placed upon them will be important in understanding how this can be cultivated in foster programs. The belief in one’s social inadequacy is often reinforced by having to enter into foster care, and the absence of relatives for support throughout this difficult time may be related to a decrease in the perception of social self-efficacy (Denuwelaere & Bracke, 2007; Riggs et al., 2009). Having confidence in the ability to engage in social interactional tasks necessary to initiate and maintain interpersonal relationships will be important to maintain throughout a former foster care recipient’s adult life.

Riggs et al., (2009) demonstrate that foster care can be therapeutic in providing recipients with caretaker models that give the individual a positive sense of belonging within the family that can later be generalized to other important perceived social beliefs such as social self-efficacy. Without a sense that they can produce effects by their actions, former foster care individuals have little incentive to overcome difficult past experiences and future challenges. Current research on perceived social self-efficacy is limited by the existing instruments used for measuring the construct and I have found no studies to date which test this important belief in former foster care recipients.

**Caretaker Bonding**

Having a stable family context and caregiver is necessary to the healthy development of children. Most foster children are severely impacted by the separation from their attachment figure (Pecora, Jensen, Romanelli, Jackson, & Ortiz, 2009; Riggs et al., 2009; Schofield, 2002). The tremendous loss and separation from a primary
caregiver during developmental stages when an individual’s identity is being formed may be damaging for a child (Rosenfeld et al., 1997). Research suggests that children who are abused and who also exhibit disorganized attachment are more likely to end up troubled and demonstrate aggressiveness, negatively affecting their relationships with caregivers and peers (Riggs et al., 2009; Schofield, 2002). Foster children often perceive the adults in their lives as unavailable, unreliable, and retaliatory, making it even more of a challenge to establish a relationship and trust with their caretakers (Riggs et al., 2009; Rosenfeld et al., 1997; Schofield, 2002). These children need to be provided with permanent alternative attachment experiences in which child welfare should be responsible for (Samuels, 2009). By experiencing disrupted attachments, foster children may become hesitant or even incapable of attaching to alternative caregivers, resulting in extreme consequences (Bowlby, 1998).

Children and adolescents often experience the radical changes associated with foster care placement as a form of rejection that has the potential to interfere with their capacity to form intimate relationships later in life (Rosenfeld et al., 1997). Many foster recipients experience multiple placements while residing in care. Unrau et al., (2008) examined the impact of these moves and found that individuals remember these moves as a series of significant losses that negatively affect their emotional health. Research regarding the implications of multiple placements on former foster care recipients has shown that these individuals report difficulties with trusting others as well as with forming and maintaining relationships following these experiences (Unrau et al., 2008).

Research examining positive long-term outcomes of a child in foster care has
found that the single best predictor is their ability to form one good relationship with someone, particularly a caretaker (Rosenfeld et al., 1997; Schofield, 2002). Foster care providers can provide healthy parenting while simultaneously facilitating the development of meaningful relationships, thereby addressing two of the major difficulties which foster children face (Rosenfeld et al., 1997). Foster care recipients typically don’t have opportunities for positive interaction with both, or even one, parent. Caretakers can help the “normal” development of these social beliefs by sustaining a close, connected, warm relationship with their foster recipients (Riggs et al., 2009).

A child’s resiliency is fostered as they form emotional bonds with a caregiver that nurtures trust, independence, and resourcefulness. Providing this important external support system reinforces foster recipients experiences while giving them a sense of wholeness. When foster care recipients form a unique supportive bond with their caretaker, these individuals can better overcome the various challenges throughout their lives (Riggs et al., 2009; Rosenfeld et al., 1997; Schofield, 2002). Existing research has found that children who are able to form a supportive relationship with their caretaker are better able to develop effective coping strategies which reduce the impact of their stressful life circumstances (Schofield, 2002). Perceived social support has benefits for personal adjustment in children and the adult-child relationship is a significant source of this support (Pierce, Sarason, & Sarason, 1996). By reinforcing caretaker bonding, foster parents can aid in decreasing their child’s emotional and behavioral problems which has been found to be an especially important aspect of resilience for foster care recipients (Denuwelaere & Bracke, 2007).
Each year, an estimated 20,000 adolescents “age out” of the foster care system in the United States. Many of these individuals are only 18 years of age and still need both services and support to help with this difficult transition. Statistics on foster children show that the number of adolescents each year who transition into adulthood without a legally permanent family system has increased 51%, from 17,310 in 1998 to 26,517 in 2006 (Samuels, 2009). Existing foster care alumni studies show that without a lifelong connection to a caring adult these former foster care recipients are often left vulnerable to a number of unfavorable situations (Fechter-Leggett & O’Brien, 2010; Stott & Gustavsson, 2010).

**Mental Health Symptoms**

The long term mental health outcome for former foster care recipients is a topic that has been receiving increasing attention from researchers. However, the research on the lifelong mental health of adults coming from foster care backgrounds remains sparse. One study found evidence to indicate that the rate of mental health problems may be higher for former recipients of foster care than for current foster care recipients (Pecora, White, et al., 2009). Another study found that 6 to 12 months after transitioning from foster care, 42% of former recipients reported feeling depressed and over half had not been able to maintain employment (Anctil, McCubbin, O’Brien, Pecora, & Anderson-Harumi, 2007). Clearly, these disturbing findings need further evaluation.

The Casey National Foster Care Alumni Study (‘Casey National Study’) collected data from case records and individual interviews about the life experiences, educational achievements, and current functioning of former foster care recipients (N=1087) from
across the country. Results of their reported symptoms of emotional and behavioral disorders present within the past 12 months were compared to adults from the general population (\(N=3547\)). This research examined the 12-month prevalence of eight mental health disorders in both groups. Researchers included participants who resided in foster care for 1 year or longer between 1966 and 1998, and individuals ranged from 20 to 51 years old. Participants were matched for age, gender, and race/ethnicity, and results found that mental health outcomes among former foster recipients were disproportionately poor as compared to the general population (Casey Family Programs, 2005; Pecora, 2005).

The 12-month rates were higher for every disorder that the Casey National Study included in their research of former foster care recipients. The rate of post-traumatic stress disorder (PTSD) among former recipients of foster care was almost five times that of the general population, at 21.5%. The 12-month rate of panic disorder was over three times greater than that of the general population. Furthermore, former foster individuals experienced alcohol dependence at almost two times the rate as well as drug dependence at over seven times the rate of the general population (Casey Family Programs, 2005; Pecora, 2005; Pecora, White et al., 2009). The higher rates of mental health disorders among former recipients of foster care compared to children and adolescents who are currently residing in care suggests that former recipients may be more at risk for mental health problems than youth still in care. The relevance of this could be due to the unresolved issues that surface in the years after transitioning from foster care, when young adults may not have the means or support to address them properly. More
information about the onset, course of treatment, and results of these mental health symptoms will be important to further consider in research.

In addition to mental health disorders, research has examined important psychosocial outcomes within this population. Fechter-Leggett and O’Brien (2010) reported findings which indicate that former foster children attain lower educational achievement, have higher rates of arrest and crime conviction, and struggle with more mental health problems that their matched comparison groups of children who were never placed into foster care. Research on this issue has also shown higher rates of unemployment and underemployment as well as significant rates of homelessness, which could be explained by these individuals having difficulty keeping a job due to mental and emotional problems (Courtney et al., 2001; Fechter-Leggett and O’Brien, 2010).

Recovery rates, or the percentage of former foster care recipients who had a lifetime disorder yet reported being symptom-free within the previous 12 months, indicate that this population is overcoming certain mental health disorders. As compared to the general population, these rates were significantly higher on five of the eight mental health outcomes that were tested. Results of the recovery rates in former foster recipients showed that these individuals are reporting lower rates of alcohol dependence (67.9%), drug dependence, (61.8%), and major depressive episode (51.0%). However, some of the more significant mental health disorders have persisted, with lower recovery rates than the general public found for generalized anxiety disorder (39.6%), social phobia (26.6%), bulimia (25.8%), and PTSD (15.7%) (Casey Family Programs, 2005; Pecora, 2005; Pecora, White et al., 2009).
Fechter-Leggett and O’Brien (2010) examined the effects of relative foster care on adult mental health outcomes of former recipients by using the Compositive International Diagnostics Interview (CIDI) as a way to assess respondent’s mental health. Researchers found in a sample of 1,068 former foster recipients, 46.3% met criteria for at least one clinically significant current mental health disorder, with 13.1% meeting the criteria for three or more. This study tested the relationship of relative placement to mental health and hypothesized that foster care with a relative would result in more positive mental health outcomes. Results of this study did not show significant effects that relative placements were related to any more preferable outcomes than foster placement with a non-relative. Findings from this research did, however, show that other factors may help to contribute to positive mental health outcomes in former foster care recipients, including preparation and resources for transitioning out of care, avoiding further maltreatment, and having access to educational services while residing in care (Fechter-Leggett and O’Brien, 2010).

Evidence for the detrimental impact of experiences in the foster care system upon mental health is complicated by various factors that are prevalent among those who are placed in foster care. Foster children have disproportionately high rates of both mental and physical disabilities which has been found to increase the likelihood of the onset of mental health disorders presenting later in life (Anctil et al., 2007; Kessler et al., 2008). Green et al’s., (2010) national comorbidity survey replication examined the joint associations of 12 retrospectively reported childhood adversities with the first onset of DSM-IV disorders. The lifetime prevalence of 20 DSM-IV anxiety, mood, disruptive
behavior, and substance use disorders were evaluated using the Compositive International Diagnostic Interview in a nationally representative sample ($N=9282$). Twelve childhood adversities occurring before 18 years of age were divided into clusters: 3 types of interpersonal loss (parental death, parental divorce, and other separation from parents or caregivers); 4 types of parental maladjustment (mental illness, substance abuse, criminality, and violence); 3 types of maltreatment (physical abuse, sexual abuse, and neglect); and 2 other types (life-threatening childhood physical illness and extreme childhood family economic adversity). Approximately 53.4% of the participants reported having at least one childhood adversity, the most common of which were parental divorce (17.5%), family violence (14%), family economic adversity (10.6%), and parental mental illness (10.3%). The childhood adversities examined by the authors were highly prevalent and intercorrelated, with a significant positive correlation (94%) established between most pairs of childhood adversities (Green et al., 2010).

Results of Green et al.’s.,(2010) study showed that childhood adversities having to do with maladaptive family functioning were the strongest correlates of disorder onset. Associations declined in magnitude over the life course and number of previous lifetime disorders, yet increased with length of recall suggesting the possibility of recall bias increasing these estimates. This replication suggests that childhood adversities are associated with 44.6% of all childhood-onset disorders and with 25.9 to 32.0% of later-onset disorders. As this study confirms, many childhood adversities that foster care recipients are experiencing have powerful and often additive associations with the onset of many types of primary mental disorders present throughout life (Green et al., 2010).
Low self-efficacy has been found to be a predictor for the development of mental health symptoms such as depression. In addition to depressive symptoms, Bandura’s et al., (1999) research on children lacking self-efficacy found an association with a variety of other negative mental health outcomes including anxiety, post-traumatic stress, anger, and aggression. In adults, a contributor of psychopathologies such as these has shared histories of parental absence. For many individuals, certain characteristics of psychopathology are strongly contextual. Holmes et al.’s., (1991) research related these pathologies to unhealthy family relationships and patterns, interactions with ineffective adult role models, and failure to move into appropriate peer relationships.

Previous research has also shown that many recipients of foster care had no distinguishable peer relationships, were strongly alienated from both their biological and foster families, and were extremely lonely (Bruskas, 2008; Holmes et al., 1991; Pecora, Jensen et al., 2009). In addition, a significant amount of these individuals also had tragic experiences with their peer groups, usually involving drug abuse or other anti-social behaviors (Holmes et al., 1991). As a result of these family and peer group experiences, foster care individuals have often presented with symptoms in an effort to deal with the internal and external chaos in their lives (McWey et al., 2010).

One study examining the mental health of current and former foster care recipients found that adolescents between the ages of 14-17 years were significantly more likely to have at least one lifetime diagnosis (63.3%) than compared to 45.9% of adolescents in the general population. Youth in this study were also significantly more likely to have three or more lifetime diagnoses (22.8%) than the general population
sample (14.7%) (Pecora, Jensen et al., 2009). The Midwest Evaluation of Foster Alumni (2011) found high rates of hospitalization in a sample of 596 former foster care recipients, with 13.6% having been hospitalized once during the past year, and 7.2% with two or more in the past year. Authors of this study also found similar patterns of incarceration, with 42.8% of former female foster recipients \((n=332)\) and 74.2% of former male recipients \((n=264)\) (Courtney et al., 2011). Although former foster recipient’s mental health symptoms can be better understood as unfortunate survival mechanisms and self-defeating attempts to deal with dysfunctional family situations and environmental failures (Holmes et al., 1991), evidence suggests that these symptoms are contributing to the difficulties seen within this already vulnerable population.

Denuwelaere & Bracke (2007) examined the risk for children and adolescents residing in foster care in developing mental health symptoms. Results of this study show significantly greater rates of externalizing delinquent \(F(1.90)=6.20, \ p<.05\) and aggressive \(F(1.90)=17.12, \ p<.01\) behaviors and internalizing withdrawn \(F(1.90)=4.83, \ p<.05\) coping strategies in foster children as compared to children who have remained with their birth parents. Studies have shown that more than 60% of children in foster care exhibit emotional or behavior problems in the clinical range (Fechter-Leggett & O’Brien, 2010). Researchers have found that these trends persist into adulthood with significant mental health issues reported by former foster care individuals, including higher levels of depression, anxiety, substance use, and PTSD than in individuals from similar demographic backgrounds (Courtney et al., 2011; Fechter-Leggett & O’Brien, 2010; Pecora, Jensen et al., 2009).
The Northwest Study (2005) examined outcomes in \((N=479)\) former recipients of foster care. This study compared the mental health functioning of former foster care individuals, ages 20 to 33 years, who spent 1 year or longer residing in foster care as adolescents with individuals of similar age, gender, race/ethnicity in the general population. The Northwest Study assessed lifetime and 12-month prevalence rates using the Composite International Diagnostic Interview (CIDI). The researchers of this study found that over 54% of former foster care recipients who participated in their study had diagnosable mental health symptoms within the last 12 months, with over 25% meeting the DSM-IV criteria for PTSD--rates significantly higher than that of the matched controls who had never experienced placement in foster care (Casey Family Programs, 2005; Pecora, 2005).

Former foster individuals exhibited a high lifetime prevalence of mental health disorders, exceeding the general population on all \((N=9)\) mental health disorders assessed. The prevalence findings of lifetime PTSD was significantly higher among former foster recipients (30.0%) than among the general population (7.6%). The prevalence of major depressive disorder was also found to be significantly higher in former foster recipients (41.1%) than among the general population (21.0%). In addition to these clinical diagnoses, over one in five former foster care recipients had one or more of the following during his or her lifetime: panic syndrome, modified social phobia, or drug dependence (Pecora, 2005; Pecora, White et al., 2009). Other research examining former recipients of foster care also found that PTSD was the most prevalent diagnosis in this population, with 21.5% of individuals meeting criteria and rates indicating that
perhaps the greatest mental health challenges of former foster recipients is managing the long term effects of the trauma they have endured (Fechter-Leggett & O’Brien, 2010).

**Psychological Well-Being**

There is a growing concern that our society places a low priority on the psychological well-being of foster care recipients (Bruskas, 2008; Rosenfeld et al., 1997; Schofield, 2002). Foster children have pervasive mental health needs that do not get met, many of which are brought about by the system they enter into with child welfare. Many children entering into foster care have been “severely traumatized and have special medical, psychiatric, educational, and social needs that traditional child welfare and foster care services were not designed to address” (Rosenfeld et al., 1997). Recipients of foster care are at risk in a variety of other ways such as coming from and living in poverty, having limitations to their physical health, histories of trauma such as abuse, and experiencing emotional difficulties. Recipients who have histories of extreme physical or sexual abuse, severe neglect, multiple disrupted attachments to parental figures, or continual removals from a birth parent are likely to be associated with poor adaptation and functioning within the foster care system (Rosenfeld et al., 1997). Furthermore, the setting of foster care placement also has the potential to disturb positive functioning, putting many foster care recipients at risk by preventing them from attaining optimal psychological well-being (Bruskas, 2008).

Research has shown that foster care recipients generally have more risk factors than individuals who never enter the child welfare system (Bruskas, 2008; Cantos & Gries, 2010; Denuwelaere & Bracke, 2007). Individuals who are separated from their
parents, especially during childhood, have demonstrated the potential of experiencing
difficulty functioning throughout their lives (Rosenfeld et al., 1997). Foster care
recipients also often experience poverty and parental mental illness or addiction and, in
combination with the absence of protective factors which are common in most of this
population, are put at an even greater risk for negative psychological consequences
(Bruskas, 2008; Riggs et al., 2009; Samuels & Pryce, 2008). Additionally, individuals
who have severely deprived childhoods and are exposed to a variety of extreme stressors
have even greater risk for decreased psychological well-being as evidenced by
psychiatric disorders and adult criminality found in former recipients of foster care
(Anctil et al., 2007; Bruskas, 2008; Rosenfeld et al., 1997).

The positive functioning of foster care recipients during and after residing in care
is an issue that elicits further analysis. Current research shows that recipients are a high-
risk population with typically poor adult outcomes (Bruskas, 2008; Newton et al., 2000;
Pecora, Jensen et al., 2009). Those outcomes worsen with the increased presence of risk
factors, including the greater likelihood of mental health disorders and behavioral
problems across the lifespan (Anctil et al., 2007; McWey et al., 2010; Newton et al.,
2000; Pecora, Jensen et al., 2009). Research comparing the adult well-being of \(N=107\)
individuals raised in foster care placements to \(N=12,910\) adults who never experienced
foster placement found that the foster care individuals had poorer outcomes of
functioning on five out of seven measures of well-being. The data from this study shows
higher scores on depression, lower marital happiness scores, lower scores of intimate
parental relationships, and higher scores of social isolation than the adults who were never involved in the foster care system (Cook-Fong, 2000).

**Adoption from Foster Care**

Although there are a variety of placement settings for individuals in foster care, many recipients do not have permanency plans and therefore experience numerous placements. Research has found that these continual moves are troubling to foster children (Berrick, 1998). Permanency is often not stressed enough within the foster care system. This is partly because children who have continuing behavioral or health problems frequently experience multiple placements and thus are less likely to achieve stability. Evidence suggests that multiple placements are associated with disruptive behavior in children and with poor mental health outcomes (Bruskas, 2008; Unrau et al., 2008). Research suggests that after four years of placement, slightly less than half of the children placed in foster care are still awaiting permanency arrangements (Berrick, 1998). If foster placement remains necessary for an individual, permanency plans would ensure the means of recipients forming positive relationships with a caretaker and would also minimize the number of other abrupt changes for the child including their schools and social workers (Rosenfeld et al., 1997).

Since the implementation of foster care there has been a major shift from placements with non-relatives to placing recipients with their relatives. Berrick (1998) argues that this shift has allowed for the focus to be on the strengths of family members, instead of their deficits, and is often in the best interest of the child. In the 1980’s placements with relatives became even more common (Berrick, 1998). Data from The
U.S. Department of Health and Human Service (2012) Adoption and Foster Care Analysis Reporting System (AFCARS) shows, in addition to other placement settings, that 27% of foster care recipients are now living in foster placements with relatives (N=107,995). A number of other factors have contributed to the significant growth in relative foster care. For example, there have been a variety of changes in both the availability and demand for traditional foster care. Opinions have drastically changed about the roles government agencies and extended family members should perform by becoming more involved in protecting their foster care recipients and helping them to gain either informal or legal permanence with a relative (Berrick, 1998). Child welfare specialists have reported that relative caretakers are frequently more invested in a child than a non-relative (Fechter-Leggett & O’Brien, 2010). Researchers have hypothesized that the traumatic effects of placement into foster care can be minimized by placing the child with a relative, such as with relative adoption, which allows for the child to maintain family identity (Fechter-Leggett & O’Brien, 2010).

Berrick (1998) explored how foster children experience their placements while in foster care and found that a large majority of children in relative and non-relative homes reported feeling sufficiently protected by their caregiver. In this unique Illinois study surveying (N=300) children’s satisfaction with their placement while residing in foster care, the researcher compared self-reports of children residing with relatives, with foster parents, or in residential care facilities and found that children who were placed with a relative and foster family homes were equally likely to report that they felt “safe” with their caregiver (92%). However, those children placed with a relative were more likely
than children in other foster care settings to rate themselves as “happy” to “very happy” (70% in relative versus 59% in foster care), to describe themselves as “always [feeling] loved” (94% relative versus 82% in foster care), and to indicate themselves as being happy in 15 domains of life (Berrick, 1998).

Adoption by a relative offers other advantages, such as allowing the individual to remain connected to their cultural ties, biological families, and familial bonds. The experience of relative adoption has the ability to build on the strengths of a family as well as to offer foster children close relationships to their extended families when those with their birthparents are impaired. Relative adoption has a number of other clear advantages for children who cannot remain with their biological parents, including staying connected with their siblings and other family members, increased opportunities of visiting with their biological parents, and being more comfortable with their caretakers and environments (Berrick, 1998; Fechter-Leggett & O’Brien, 2010). When a foster recipient is adopted by a familiar trusted relative, the child’s extended family ties are able to be preserved. Although the research is limited, by exploring individuals’ experiences of adoption from foster care, child welfare specialists and researchers could better support policymakers in identifying new options for the legal meaning of permanence for foster recipients (Berrick, 1998).

Researchers have found that children who are cared for by a relative have fewer emotional and behavioral problems. Results of these studies show that children placed with a relative experienced decreased levels of further maltreatment (Fechter-Leggett & O’Brien, 2010). Few studies have previously explored the differences in adoption by
relatives as compared to that by a non-relative, therefore research examining the outcomes in adults who were formerly foster children is scarce. Very little is known about the long-term mental health outcomes of individuals who were adopted from foster care compared to those who didn’t experience adoption. Research seeking to discover if foster placement with relatives would mitigate the statistically poor long term psychological well-being of foster care recipients has been previously examined, however due to the large number of variables involved results have failed to determine if relative placement significantly improved mental health outcomes (Fechter-Leggett & O’Brien, 2009).

Extended family relationships are not always important to children whose conception of family is formed through relationships and over their lifetime. Therefore notions of whether placement with a relative supports family ties should be considered from the foster child’s perspective, as well as that of the parents and relatives. Placement with relatives is not always the best solution (Berrick, 1998). Therefore, it is important to consider the strengths and limitations of relative and non-relative foster care placements in their ability to guarantee that they have in mind a child and adolescent’s best interest. As a way to protect foster children, public policy can encourage adoption by a relative whenever it is in the best interest for the child. In many states, foster care with extended families has been the leading placement option for children and adolescents (Berrick, 1998).

Although relatives do not have a legal obligation, the number of foster care recipients being adopted by their relatives appears to be increasing in the United States.
The U.S. Department of Health and Human Services reports that there were 104,236 children and adolescents ($M=8$ years of age) whose parents’ rights had been terminated and were awaiting adoption in 2011. In that same year, of those foster recipients exiting foster care ($N=245,260$), 20% ($n=49,866$) were discharged from the system due to adoption. Data from the same report also shows that the number of children and adolescents adopted with public agency involvement was 50,516 ($M=6.4$ years of age), of which 31% ($n=14,462$) were adopted by a relative and 15% ($n=7,196$) by a non-relative. The data from this report appears to be in agreement with previous research, demonstrating that a significant number of children are now being adopted, particularly by a relative (Berrick, 1998; U.S. DHHS, 2012).

Triseliotis (2002) explains that many children being adopted from foster care have extremely specific needs (i.e. display behavioral and emotional problems, are older at placement and/or have physical or mental disabilities), causing various overlaps in characteristics and circumstances between these individuals and those who never experienced adoption from care. The researcher suggests that when it comes to the placement of children with special needs, adoption can have the capacity to help reverse the negative impact of early trauma. Children who are placed in lasting long-term foster care often also demonstrate considerable benefits. However, in this study comparing adoption to long-term foster care, the author argues that adoption is the best option for an individual to experience permanency. The researcher examines the evidence of six variables connected with the outcome of adoption and long-term fostering, including: stability of long-term fostering and adoption; adjustment; sense of security and
belonging; personal and social functioning; participants’ retrospective perceptions; and the substitute parents’ perspective. Both groups involved in this study were found to have high adjustment problems. However, the main pivotal difference found between these groups was explained in higher levels of emotional security, a stronger sense of belonging, and general well-being found in former recipients of foster care who were adopted as contrasted to those who were never adopted from foster care (Triseliotis, 2002).

**Summary**

Existing research on this topic is limited yet improving the mental health of former foster care recipients is reliant on the understanding of factors contributing to the role and performance of the child welfare system. Given the impact of foster care and the growing reliance on adoption, it is important to look at long-term outcomes in former foster recipients who previously experienced adoption by relatives versus those who were never adopted. The information found from this research has examined whether the experience of adoption is adequately supporting children who must be separated from their biological parents, and also if being adopted by a relative is helping to protect against the negative emotional impact that occurs when a child must be removed from home. Recognizing how foster children are at risk for poorer adult outcomes helps child welfare agencies to improve their approach to placing children in foster care. By providing services that are appropriate in addressing both the child and caretaker’s needs, including instilling social self-efficacy, child welfare agencies can provide mental health treatment that is necessary to becoming psychologically healthy in adulthood.
CHAPTER III

Statement of the Problem

Although outcome studies are limited, the available literature indicates a connection between children and adolescents placed in foster care and various negative outcomes in adulthood. The results of already mentioned studies and the fact that there were 400,540 recipients of foster care in 2011 (U.S. DHHS, 2012) lends support for this study. Across a wide range of outcome measures, including postsecondary educational attainment, employment, housing stability, public assistance receipt, and criminal justice system involvement, former recipients of foster care as a group are performing poorly (Courtney et al., 2011). According to The Department of Health and Human Services (2012) roughly 250,000 individuals either exited or entered foster care in 2011, supporting the need for further evaluation of this growing population. Between half and three-fourths of those entering foster care are in need of mental health services (Anctil et al., 2007; Bruskas, 2008; Samuels & Pryce, 2008). However the mental health needs of foster care recipients are greatly unmet (Pecora, Jensen et al., 2009; Rosenfeld et al., 1997).

For recipients to successfully transition from foster care and become psychologically well-adjusted adults, they must be provided with the services and support to successfully meet their major developmental milestones (Bruskas, 2008; Denuwelaere & Bracke, 2007). Literature examining former foster care outcomes is limited yet necessary to our understanding of the development of mental health symptoms from childhood to adulthood. The existing studies previously cited provide evidence that
psychological and social-environmental variables are concurrently related to negative mental health outcomes in former recipients of foster care. However, the relationship of these factors to experiences of adoption from foster care has received minimal attention. All of the abovementioned studies have one common conclusion: that more information and research is necessary. Finding predictors for the negative mental health outcomes that are so prevalent among those who were placed in the foster care system could potentially help thousands of people live better, happier, more productive lives.

Providing foster children with supportive caretakers should be a priority for the child welfare system. Children need to feel nurtured by their caretaker in order to develop a coherent sense of self-efficacy. Many children enter foster care with emotional and/or behavioral issues that may cause them to have difficulty bonding with their caretaker. Fechter-Leggett and O’Brien (2010) found that for former recipients of foster care not having a close relationship with an adult was predictive of poorer outcomes. They found that, for the many persons who enter care as racial and ethnic minorities, not having a caretaker who is able to support the development of their racial and ethnic identity is an additional negative predictor for adult mental health outcomes. The evidence maintains that those who do build a strong connection with their caretaker where they feel accepted and supported have a greater advantage in their development as psychologically healthy adults (Pecora, White et al., 2009; Stott & Gustavsson, 2010; Triseliotis, 2002).

The existing evidence shows that caretaker bonding is more likely to occur with relatives; therefore, it is necessary to compare the outcomes between persons who were
adopted from care by a relative, those who were adopted by a non-relative, and those who were never adopted from foster care. The purpose of this study was to examine former foster care recipients’ reports of caretaker bonding, ratings of current perceived social self-efficacy, and reports of current psychological well-being. The present study further examined individuals’ experiences of adoption from foster care by exploring the connection between substance use and psychological problems. The importance of this study was that it has expanded on research of mental health outcomes in former recipients of foster care as well as incorporated factors that related to their adaptations, experiences, and feelings of perceived social self-efficacy.

Hypotheses

Hypothesis 1. It was hypothesized that ratings of positive caretaker bonding would be significantly higher in former foster care recipients who had been previously adopted by a relative than those who were not adopted by a relative, and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly higher than those who were never adopted out of foster care. Relatedly, it was hypothesized that ratings of negative caretaker bonding would be significantly lower in former foster care recipients who had been previously adopted by a relative, and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care.

Specifically:

Hypothesis 1a) Former foster care recipients who were previously adopted by a relative (AR) would report higher PBI Female caretaker Care scores than former foster
care recipients who were previously adopted by a non-relative (ANR), who would report higher PBI Female caretaker Care scores than former foster care recipients who were never adopted out of foster care (NA).

**Hyp 1a:** PBI Care (from female caretaker)   AR > ANR > NA

Hypothesis 1b) Former foster care recipients who were previously adopted by a relative (AR) would report higher PBI Male caretaker Care scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report higher PBI Male caretaker Care scores than former foster care recipients who were never adopted out of foster care (NA).

**Hyp 1b:** PBI Care (from male caretaker)   AR > ANR > NA

Hypothesis 1c) Former foster care recipients who were previously adopted by a relative (AR) would report lower PBI Female caretaker Overprotection scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report lower PBI Female caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care (NA).

**Hyp 1c:** PBI Overprotection (from female caretaker)   AR < ANR < NA

Hypothesis 1d) Former foster care recipients who were previously adopted by a relative (AR) would report lower PBI Male caretaker Overprotection scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report lower PBI Male caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care (NA).

**Hyp 1d:** PBI Overprotection (from male caretaker)   AR < ANR < NA
**Hypothesis 1 Rationale**

Legal statutes require that adoption be considered as the first alternative to a legally permanent situation for foster children who are unable to reside with their parents. When relationships with their biological parents cannot be maintained, adoption from foster care by a relative allows for the possibility to build upon family strengths while offering children and adolescents bonds to their extended families. Although the present study did not include ratings of foster recipients who returned to their biological parent, the findings demonstrates that individuals who are placed in care with a relative are more likely than those in other settings to rate themselves as feeling happy in various domains of their life. In addition, individuals in relative care indicate feeling more love and support from their caregiver as their family connections are able to be both reinforced and maintained (Berrick, 1998).

How foster care recipients experience their placement and whether they feel that they belong to their family are both necessary aspects to consider for their future development (Riggs et al., 2009). Those individuals who are adopted from foster care by a relative are typically provided with secure nurturing environments that “provide continuity, lessen the trauma of separation, preserve family ties, and offer growth and development within the context of a child’s culture and community” (Berrick, 1998).

**Hypothesis 2**

It was hypothesized that ratings of social self-efficacy would be significantly higher in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those
former foster care recipients who were adopted by a non-relative would be significantly higher than those who were never adopted out of foster care (NA).

**Hyp 2: Social Self-Efficacy AR >ANR > NA**

**Hypothesis 2 Rationale**

The development of efficacy as social competency is a technique which can be utilized in the prevention of conduct disorders and other types of mental illness, having specific applicability to development. Self-efficacy develops in the context of an individual’s family, particularly through interaction with caretakers (Riggs et al., 2009). Well-adjusted individuals from healthy families use their peer groups to help them separate from caretakers and to provide a bridge for the transition into adulthood. Foster care recipients who are adopted by a relative have their family to help them throughout this process. Unfortunately, individuals who do not have their families to help play this role tend to unsuccessfully separate from their foster families, and typically have faulty peer group experiences (Rosenfeld et al., 1997).

The proposed research will examine former foster care recipients’ belief in their ability to form satisfying relationships and to seek out the necessary assistance and social support that may help to protect them from further negative development. This investigation will expand upon the current literature on former foster care recipients who have been adopted from foster care while adding to the current literature on former foster recipients’ perceived social self-efficacy.
Hypothesis 3

It was hypothesized that ratings of depression would be significantly lower in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care (NA).

Hyp 3: Depression  AR < ANR < NA

Hypothesis 3 Rationale

Foster care is a social service that has been directed towards children and adolescents who have experienced stressful life events which have resulted in many of them having severe emotional, behavioral, and psychological problems. There are various reasons for foster care placement including domestic violence and the hospitalization or death of a primary caregiver. The most common reason for placement into foster care, however, is child maltreatment (Cantos & Gries, 2010; Bruskas, 2008). Individuals who are victims of child abuse or neglect often experience serious social and physiological difficulties as a result of their trauma (Cantos & Gries, 2010; Riggs et al., 2009; Woolf, 1990). In response to experiencing trauma and difficult life events, former foster recipients are susceptible to a variety of behavioral and mental health symptoms (Riggs et al., 2009) which have severe consequences to their psychological well-being.

The goal of foster care is to develop the capacity to cope; in spite of which prevalence rates of psychopathology among recipients of foster care are high. This can be explained by the numerous risks and non-existence of protective factors that many of
these individuals encounter. Research has found that approximately half of individuals placed in foster care experience at least one or more clinically significant mental health disorders while residing in care, the majority of which do not receive treatment for their health problems (Bruskas, 2008; Pecora, Jensen et al., 2009). Losses caused by either temporary or permanent separation from biological parents, siblings, neighborhoods, and cultural ties all have negative impacts on the psychological well-being of a child placed in foster care. The presence of psychopathology and trauma followed by the separation of attachment figures often leads to feelings of hopelessness and fear (Bruskas, 2008). Psychiatric problems that go untreated normally do not improve over the life span and are able to get worse with time, therefore lessening one’s psychological well-being.

The transition from foster care to adulthood is often difficult for former recipients of foster care. Adolescents age out of foster care when they turn 18 years old, having little financial, medical, or social support. Many of these individuals feel insecure and overwhelmed with loneliness. Research has shown that former foster care recipients often experience criminality, substance abuse, homelessness, and mental illness at increased rates, with some studies having also found 54.4% of these individuals had clinically significant mental disorders including depression, PTSD, anxiety disorders, and social disorders (Casey Family Programs, 2005).

**Hypothesis 4**

It was hypothesized that ratings of substance use would be significantly lower in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those former foster
care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care (NA).

**Hyp 4: Substance Use AR < ANR < NA**

**Hypothesis 4 Rationale**

Existing research agrees that, among other difficulties, former foster care recipients often experience substance abuse and dependence at increased rates as compared to individuals who were never involved in the foster care system (Casey Family Programs, 2005; Courtney et al., 2011; Pecora, White et al., 2009). Authors of The Midwest Study found that 16% of participants who reported having at least 12 drinks over the previous 12 months met the DSM-IV criteria for alcohol abuse and 13% met criteria for alcohol dependence. In the same study, 25% of participants (N=592) reported using at least one substance during the previous 12 month period, with marijuana being the most commonly used. Approximately 23% of participants who reported using substances during the previous 12 months met the DSM-IV criteria for substance abuse, and 20% met the criteria for substance dependence (Courtney et al., 2011). Although current trends in the literature show that individuals in the general population also struggle with substance abuse and dependence, those individuals previously residing in foster care have reported higher lifetime rates for alcohol dependence, drug abuse, and drug dependence as compared to those who were never placed in foster care (Pecora, White et al., 2009).
CHAPTER IV

Methods

Participants

Participants were 185 former foster care recipients who were once residing in foster care placements in group homes, single and multiple family settings, settings with nuclear families, and transitional living settings for a minimum of 1 year. Participants ranged in age from 19-51 years old ($M = 31.28, SD = 7.71$). As seen in Table 1, 27.6% of the respondents identified as male ($N = 51$), and 72.4% identified as female ($N = 134$). 73% of participants in this study identified as never being adopted from foster care ($N = 135$) while 10.3% of individuals experienced relative adoption ($N = 19$) and 16.8% were adopted by a non-relative ($N = 31$). Participants also varied in their race, socioeconomic level, mental health diagnoses, and clinical characteristics of reasons for placement.

A total of 185 participants completed the demographic questionnaire, 176 completed the social self-efficacy subscale of the General Self-Efficacy Scale, 155 completed the female caretaker form of the Parental Bonding Instrument- Foster Care, 114 completed the male caretaker form of the Parental Bonding Instrument- Foster Care, 161 completed the Hamilton Depression Inventory, and 159 completed The Substance Use Inventory. Factors such as time constraints or participation fatigue may explain the attrition.

Instrumentation

Data were collected using a demographic questionnaire (see Appendix B), the Social Self-Efficacy Subscale of the Sherer et al., (1982) perceived Self-Efficacy Scale
Table 1
Frequency Distributions of Participant Demographic Information

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<tr>
<td>Divorced</td>
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<tr>
<td>Separated</td>
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<td>2.2</td>
</tr>
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<tr>
<td><strong>Education Level</strong></td>
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<td>Less than high school</td>
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<tr>
<td>High school graduate/GED</td>
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<td>11.4</td>
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<tr>
<td>AA Degree</td>
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<td>9.7</td>
</tr>
<tr>
<td>Some College</td>
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<tr>
<td>BA/BS Degree</td>
<td>45</td>
<td>24.3</td>
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<tr>
<td>MA/MS Degree</td>
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<tr>
<td>Phd/MD</td>
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<td>3.2</td>
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<tr>
<td><strong>Adopted From Foster Care</strong></td>
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<td></td>
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<tr>
<td>Not Adopted</td>
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</tr>
<tr>
<td>Adopted by Non-Relative</td>
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<td>16.8</td>
</tr>
<tr>
<td>Adoption by Relative</td>
<td>19</td>
<td>10.3</td>
</tr>
</tbody>
</table>
(see Appendix C), the Parental Bonding Instrument- Foster Care (Parker et al., 2011) (see Appendix D), the Hamilton Depression Inventory (Reynolds & Kobak, 1995) (see Appendix E), and the Substance Use Inventory (Reynolds, 2002) (see Appendix F).

**Perceived Self-Efficacy.** The Sherer et al., (1982) social self-efficacy subscale of the General Self-Efficacy Scale (SGSES) was used to assess adults’ self-report of their perceived social capability to effectively produce results by their actions. This instrument contains 6 items and uses a 14-point Likert scale (1= strongly agree, 14= strongly disagree) to measure an individual’s social competence in their ability to affect the world around them in order to gain a desired result. The sum of item scores reflects an individual’s general perceived social self-efficacy. The higher the total score, the more self-efficacious the respondent was. Examples of items include: “It is difficult for me to make new friends”, “When I’m trying to become friends with someone who seems uninterested at first, I don’t give up easily”, “I have acquired my friends through my personal abilities at making friends”.

Sherer et al., (1982) developed the General Self-Efficacy Scale to measure a set of expectations that an individual transfers into new situations. This measure has been the most widely used general self-efficacy measure. The SGSES was primarily developed for clinical and personality research and has more recently been used in organizational settings. Chen et al., (2001) found internal consistency reliabilities of SGSES to be moderate to high (α= .76 to .89). In two of their studies using samples of university students and managers, the authors of this research reported high internal consistency reliability (α=.88 to .91 respectively). Although these researchers obtained a low test-
retest estimate \((r = .23)\) across 3 weeks, they found significant test-retest reliability \((r = .74\) and \(.90)\) when including this scale in their study. The results of the current study found high internal consistency reliability \((\alpha = .85)\).

**Caretaker Bonding.** For the assessment of bonding, adult’s self-reports of caretaker bonding was assessed using the Parental Bonding Instrument- Foster Care (PBI-FC; Parker et al., 2011). This is a 25-item instrument used to measure the self-report of both maternal and paternal caretaker dimensions of protection and care. The PBI was modified for this study so that “mother” is described as “female caretaker” and “father” as “male caretaker.” The item responses are scored on a 4-point Likert scale based on the perceived attitudes and behaviors of caretakers. The results of this questionnaire were assigned a point value which generated caretaker care and protection scores, being analyzed individually.

The usefulness of this measure is reliant on the demonstration of psychometric characteristics. Research using the PBI has supported valid evaluations of actual, rather than perceived, characteristics of caretaker bonding. One study examining the psychometric properties of the PBI suggests good reliability and validity (Parker et al., 2011). This research further showed the PBI to have satisfactory construct and convergent validity and to be independent of mood effects. In this study by Parker et al., (2011) the PBI possessed good internal consistency and test-retest reliability. Results of the current study showed high internal consistency reliability for PBI Care ratings of male and female caretaker bonding \((\alpha = .83\) and \(.96\) respectively). For ratings of Overprotection in male and female caretakers, results of this study showed low internal
consistency reliability ($\alpha=.40$) for male caretakers and good reliability for female caretakers ($\alpha=.89$).

**Depression.** The Hamilton Depression Inventory (HDI; Reynolds & Kobak, 1995) was used to assess adults’ self-reports of depressive symptoms as described by the DSM-IV. This is a 23-item measure based on responses to 38 questions that evaluate a wide range of symptoms of major depression. Studies assessing the reliability of the HDI from the perspective of internal consistency reliability using Cronbach’s coefficient alpha and test-retest reliability show high levels of internal consistency reliability ($\alpha=.91$ to $.94$) and test-retest reliability ($.95$ to $.96$). Research examining the HDI’s reliability and validity supports the measure’s effectiveness as a self-report of severity of depression with high levels of validity including content, criterion-related, construct, and clinical usefulness (Reynolds & Kobak, 1995). In the current study the internal consistency reliability of the HDI was $\alpha=.90$.

**Substance Use.** The Substance Use Inventory (Reynolds, 2002) was used to assess adults’ self-reports of substance use over the past 12 months. This instrument contains 12 items and uses a 6-point Likert scale (0= never or almost never, 5= several times a day) to measure how often individuals use various substances, including: marijuana, alcohol, cocaine, and pain killers. The sum of item scores reflected an individual’s substance use. The higher the total score, the more substance use the respondent reported over the previous 12 months.
Procedure

Former recipients of foster care were recruited through an online survey (using SurveyMonkey) and were linked through various organizations related to foster care that supported this research, including Foster Youth in Transition (FYIT), Foster Care Alumni of America (FCAA), California Youth Empowerment Network (CAYEN), and the Pacific Northwest Alumni of Foster Care (PNAFC). All participants were given informed consent procedures. The study procedures and instrumentation was approved by Humboldt State University’s Institutional Review Board #12-180. Participation in this study was anonymous and took approximately 35 minutes. Participation was voluntary, with adults having the right to withdraw at any time. The rights of all participants were protected throughout the duration of this study, including ensuring confidentiality and anonymity for participants. Debriefing was provided to all participants following data collection. Participants who experienced either concerns or distress as a result of their participation in this study were provided with contact information for the researcher, faculty supervisor, and The Humboldt State University’s Institutional Review Board. SPSS was used to analyze the results.

Data Analyses

Planned comparisons and analyses of variance (ANOVA) were used to answer the research hypotheses. Comparisons examined between-group differences of adults’ ratings. Effect size statistics were also examined between individuals who were previously adopted by a relative, those who were previously adopted by a non-relative, and former recipients who were never adopted from care.
Hypothesis one was tested using Bonferroni comparisons of caretaker bonding ratings in former foster care recipients who had been previously adopted by a relative, in those former recipients who were previously adopted by a non-relative, and in those individuals who were never adopted out of care. Hypothesis two was tested using Bonferroni comparisons of ratings of perceived social self-efficacy in former recipients of foster care who were previously adopted by a relative, in those individuals who were previously adopted by a non-relative, and in former recipients who were never adopted from foster care. Hypothesis three was tested using Bonferroni comparisons of HDI scores of former foster care recipients who were previously adopted by a relative, in former recipients who were previously adopted by a non-relative, and in those recipients who were never adopted. Hypothesis four was tested using Bonferroni comparisons of substance use in former recipients of foster care who were previously adopted by a relative, in those individuals who were previously adopted by a non-relative, and in former recipients who were never adopted from foster care.

**Benefits, Potential Risks, and Management of Risk**

Management of risk included maintaining the confidentiality and anonymity of collected data. Potential risks involved in this research included the participants feeling less secure about their perceived abilities after completing the measures, therefore a debrief form (see Appendix G) was provided to those individuals who participated in this study. The benefits of this research involved the contribution to the field of psychology and to the understanding of foster care recipients. It added to the general literature base, and provided useful data for the foster care system. Lastly, current foster care providers
may have developed greater insight into areas that help them nurture positive mental health outcomes in their foster recipients.
CHAPTER V

Results

The goal of the current study was to examine former foster care recipients’ reports of previous caretaker bonding, ratings of current perceived social self-efficacy, and reports of current psychological well-being. This study further examined individuals’ experiences of adoption from foster care by exploring the connection between substance use and psychological problems. This was achieved by using participant responses on the Parental Bonding Instrument-Foster Care, the Social Self-Efficacy Subscale of the Sherer’s perceived Self-Efficacy Scale, the Hamilton Depression Inventory, The Substance Use Inventory, and demographic information.

Hypothesis 1

It was hypothesized that that ratings of positive caretaker bonding would be significantly higher in former foster care recipients who had been previously adopted by a relative than those who were not adopted by a relative, and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly higher than those who were never adopted out of foster care. Relatedly, it was hypothesized that ratings of negative caretaker bonding would be significantly lower in former foster care recipients who had been previously adopted by a relative, and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care.

Specifically:

Hypothesis 1a) Former foster care recipients who were previously adopted by a
relative (AR) would report higher PBI Female caretaker Care scores than former foster care recipients who were previously adopted by a non-relative (NAR), who would report higher PBI Female caretaker Care scores than former foster care recipients who were never adopted out of foster care (NA).

As indicated by their scores on the PBI-FC, a significant main effect was found \[ F(2, 152) = 20.38; p < .001; \eta^2 = .21 \]. Former foster care recipients who were previously adopted by a relative reported higher \( p < .01 \) PBI Female caretaker Care scores \( M = 33.88, SD = 2.09 \), than former foster care recipients who were previously adopted by a non-relative \( M = 22.14, SD = 12.59 \) who reported higher \( p < .01 \) PBI Female caretaker Care scores than former foster care recipients who were never adopted out of care \( M = 15.61, SD = 11.51 \). See Tables 2 and 3.

**Hyp 1a: PBI Care (from female caretaker) AR > NAR > NA**

**Hypothesis 1b**) Former foster care recipients who were previously adopted by a relative (AR) would report higher PBI Male caretaker Care scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report higher PBI Male caretaker Care scores than former foster care recipients who were never adopted out of foster care (NA).

As seen in Table 3, it was found that former foster care recipients who were previously adopted by a relative reported slightly lower PBI Male caretaker Care scores \[ F(2, 111) = 1.90; p < .001; \eta^2 = .03 \]. However, Bonferroni comparisons showed no significant difference found in PBI Male caretaker Care scores between these three groups of individuals.
Table 2

*Means and Standard Deviations for Study Measures Total Sample*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBI Female Caretaker- Care</td>
<td>155</td>
<td>18.72</td>
<td>12.49</td>
</tr>
<tr>
<td>PBI Female Caretaker- Overprotection</td>
<td>155</td>
<td>17.04</td>
<td>9.51</td>
</tr>
<tr>
<td>PBI Male Caretaker- Care</td>
<td>114</td>
<td>19.06</td>
<td>3.16</td>
</tr>
<tr>
<td>PBI Male Caretaker- Overprotection</td>
<td>115</td>
<td>24.07</td>
<td>4.88</td>
</tr>
<tr>
<td>HDI Depression</td>
<td>161</td>
<td>16.39</td>
<td>14.31</td>
</tr>
<tr>
<td>Social Self-Efficacy Scale</td>
<td>176</td>
<td>49.48</td>
<td>20.85</td>
</tr>
<tr>
<td>Use of Drugs</td>
<td>159</td>
<td>2.82</td>
<td>3.03</td>
</tr>
</tbody>
</table>
Table 3

*Measures by Group Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adopted by Relative</th>
<th>Adopted by Non-Relative</th>
<th>Not Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>PBI Female Caretaker- Care</td>
<td>33.88</td>
<td>2.09</td>
<td>22.14</td>
</tr>
<tr>
<td>PBI Female Caretaker- Overprotection</td>
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<td>17.52</td>
</tr>
<tr>
<td>PBI Male Caretaker- Care</td>
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<td>1.75</td>
<td>18.27</td>
</tr>
<tr>
<td>PBI Male Caretaker- Overprotection</td>
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<td>21.59</td>
</tr>
<tr>
<td>HDI Depression</td>
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<td>14.47</td>
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<tr>
<td>Social Self-Efficacy Scale</td>
<td>75.79</td>
<td>14.48</td>
<td>51.94</td>
</tr>
<tr>
<td>Use of Drugs</td>
<td>3.17</td>
<td>2.79</td>
<td>2.97</td>
</tr>
</tbody>
</table>
**Hypothesis 1c)** Former foster care recipients who were previously adopted by a relative (AR) would report lower PBI Female caretaker Overprotection scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report lower PBI Female caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care (NA).

As indicated by their scores on the PBI-FC (See Table 3), it was found that former foster care recipients who were previously adopted by a relative reported lower PBI Female caretaker Overprotection scores \( F(2, 152) = 16.91; \ p<.001; \ \eta^2 = .18 \) than former foster care recipients who were previously adopted by a non-relative Bonferroni \( p<.01 \) who reported lower PBI Female caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care Bonferroni \( p<.01 \). Scores on the PBI Female Overprotection among individuals who were adopted out of care by a non-relative were relatively equal to those individuals’ scores who were never adopted, therefore no significant difference was found between these two groups.

**Hypothesis 1d)** Former foster care recipients who were previously adopted by a relative (AR) would report lower PBI Male caretaker Overprotection scores than former foster care recipients who were previously adopted by a non-relative (ANR), who would report lower PBI Male caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care (NA).

As summarized in Table 3, it was found that former foster care recipients who were previously adopted by a relative reported lower PBI Male caretaker Overprotection scores \( F(2, 111) = 1.89; \ p<.001; \ \eta^2 = .03 \) than former foster care recipients who were
not adopted Bonferroni \( p < .01 \). Males adopted by non-relatives reported lower PBI Male caretaker Overprotection scores than former foster care recipients who were never adopted out of foster care Bonferroni \( p < .01 \). However, the difference between adopted by relatives and adopted by non-relatives was not significant.

**Hypothesis 2**

It was hypothesized that ratings of social self-efficacy would be significantly higher in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly higher than those who were never adopted out of foster care (NA).

Using Bonferroni comparisons of perceived social self-efficacy in former recipients of foster care, it was found that ratings of social self-efficacy were significantly higher in former foster care recipients who had been previously adopted by a relative \([F(2, 173) = 22.98; p < .001; \eta^2 = .21]\) than persons who were not adopted by a relative Bonferroni \( p < .01 \). Ratings of those former foster care recipients who were adopted by a non-relative were not significantly higher than those who were never adopted out of foster care \( p > .05 \). Ratings of adopted by relative were significantly higher Bonferroni \( p < .0 \) than persons never adopted. See Table 3.

**Hypothesis 3**

It was hypothesized that ratings of depression would be significantly lower in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those former foster
care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care (NA).

Bonferroni comparisons of depression in former foster care recipients showed that ratings of depression were significantly lower in former foster care recipients who had been previously adopted by a relative \( (p<.01) \) \( [F(2, 158) = 15.72; p<.001; \eta^2 = .17] \) than persons who were not adopted by a relative and those persons never adopted \( p<.01 \).

As indicated in Table 3, ratings of former foster care recipients who were adopted by a non-relative were not significantly different \( (p>.05) \) than those who were never adopted out of foster care.

**Hypothesis 4**

It was hypothesized that ratings of substance use would be significantly lower in former foster care recipients who had been previously adopted by a relative (AR) than persons who were not adopted by a relative (ANR), and that ratings of those former foster care recipients who were adopted by a non-relative would be significantly lower than those who were never adopted out of foster care (NA).

Bonferroni comparisons of substance use found that ratings of total drug use were not significantly different between groups \( [F(2, 156) = 0.21; p = ns; \eta^2 = .003] \). See Table 3.
CHAPTER VI

Discussion

Introduction

Improving the mental health of former foster care recipients requires an analysis of the factors that contribute to long-term outcomes in this vulnerable population of individuals. Given the increasing reliance on adoption, this study attempted to better understand these factors in those who previously experienced adoption by relatives and non-relatives as compared to those who were never adopted. The information found from this research has examined whether the experience of adoption is adequately supporting foster children, and also if being adopted by a relative is helping to protect against the negative emotional impact that occurs when a child must be separated from their biological parents. By providing services that are appropriate in addressing both the foster child and caretaker’s needs, child welfare agencies can provide children with mental health treatment that is necessary to becoming psychologically healthy adults. The purpose of this study was to examine mental health factors including substance use, depression, caretaker bonding, and social self-efficacy among the three groups of individuals who previously resided in foster care. The present study used a nationally representative sample of adults which allowed for comparison of outcomes between individuals formerly in foster care who experienced adoption to those who were never adopted out of care.
Primary Study Results

Hypothesis 1. When looking at the results of hypothesis one, the current study yielded both expected and unexpected findings. Support was found in the ratings of positive female caretaker bonding which were significantly higher in those former recipients who were previously adopted by a relative than in those who were adopted by non-relatives and individuals who were never adopted from care. Ratings of positive male caretaker bonding, however, yielded an unexpected finding in results that show no significant difference between the three groups.

The findings were further supported for ratings of negative caretaker bonding among former foster care recipients who participated in the current study. As predicted, negative female caretaker bonding scores were significantly lower in former foster care recipients who were adopted by a relative than in individuals who were adopted by a non-relative. Individuals who were adopted by a relative also reported significantly lower negative male caretaker bonding scores than their counterparts who were never adopted out of care. However, there was no significant difference found between the ratings of individuals who were adopted by relatives and non-relatives. An unexpected finding was seen in a gender difference between male respondents previously adopted by non-relatives who reported significantly lower negative male caretaker bonding scores than individuals who were never adopted.

As previous research findings show, an individual’s resiliency is fostered as they form emotional bonds with a caretaker that nurtures trust, independence, and resourcefulness. Foster care individuals can better overcome the various challenges
throughout their lives when they are able to have a close bond with their caretaker (Riggs et al., 2009; Rosenfeld et al., 1997; Schofield, 2002). By having an established bond with their caretaker, these children are better able to develop effective coping strategies to help them reduce the impact of their stressful life circumstances (Schofield, 2002). The experience of relative adoption offers children this important support.

As previously mentioned, relative adoption offers many advantages. Berrick (1998) found that children in foster care who are placed with a relative were significantly more likely than children in other settings to rate themselves as being happy and also to describe themselves as always feeling loved. The experience of relative adoption has the ability to build on the strengths of a family while offering foster children close relationships to their extended families when those with their birthparents are impaired (Berrick, 1998; Fechter-Leggett & O’Brien, 2010). Relative adoption has a number of other clear advantages for children. The findings of this research add to the existing literature in showing that adopted individuals who are more comfortable with their caretakers and environments have the best ability to form increased positive, and decreased negative, bonds with their caretakers. These results are consistent with previous findings which point to a similar trend of positive caretaker bonding in former foster individuals who have successfully incorporated a sense of belonging and permanency into their adult identities (Bruskas, 2008; Riggs et al., 2009).

**Hypothesis 1a)** A statistically significant difference was found in the PBI-FC Female caretaker Care scores of those former foster care recipients who were previously adopted by a relative. As expected, the results of the present study indicate that
individuals who experienced relative adoption reported significantly higher Care scores than those former foster care recipients who were adopted by a non-relative. A significant difference was also found between the Female caretaker Care scores of individuals who experienced non-relative adoption as compared to those individuals who were never adopted out of foster care.

**Hypothesis 1b)** Although the results of PBI-FC Male caretaker Care scores were slightly lower in former foster care recipients who were previously adopted by a relative as compared to those individuals who were adopted by a non-relative and individuals who were never adopted out of care, Male caretaker Care scores were not statistically significant between the three groups of former foster care individuals. This may be due to the low-internal consistency reliability of this scale.

**Hypothesis 1c)** As expected, reports of PBI-FC Female caretaker Overprotection scores were significantly lower in former foster care recipients who were previously adopted by a relative than in individuals who were previously adopted by a non-relative. The results also show lower scores among those individuals who were adopted by a non-relative as compared to those who were never adopted from foster care, however these findings were relatively equal, therefore no significant difference was reported in Female caretaker Overprotection scores.

**Hypothesis 1d)** Former foster care recipients who were previously adopted by a relative reported significantly lower PBI-FC Male caretaker Overprotection ratings than their counterparts who were never adopted out of care. Findings also show that male respondents who were previously adopted by non-relatives reported significantly lower
scores as compared to former recipients who were never adopted. Unexpectedly, there was no statistically significant difference found in Male caretaker Overprotection ratings between groups of former foster care individuals who were adopted by relatives and non-relatives.

**Hypothesis 2.** The results in the present study show a statistically significant difference in ratings of social self-efficacy. Individuals who were previously adopted by a relative reported significantly higher ratings of social self-efficacy than persons who were not adopted by a relative as well as persons never adopted. The ratings of those former foster care recipients who were adopted by a non-relative, however, were not significantly higher than those individuals who were never adopted out of foster care.

The present research reinforces previous findings on the mental health outcomes of former foster care placement. Previous research has shown that trauma caused by being removed from one’s biological family and placed into foster care is associated with decreased perceived self-efficacy (Riggs et al., 2009). Furthermore, the feeling of self-efficacy has been described as being mediated by support within the foster family context. Since this support is often unavailable, many former foster children become at risk for developing depressive symptoms, anxiety, lowered self-esteem and decreased feelings of perceived self-efficacy (Bandura et al., 1999; Denuwelaere & Bracke, 2007).

Former foster care individuals are better able to overcome difficult past experiences and future challenges when they believe that they can produce successful effects by their actions. The present study reflects previous findings of increased rates of social self-efficacy seen in foster care recipients who are provided with a positive sense
of belonging within their family (Riggs et al., 2009), such as with relative adoption. Foster children need to feel loved and nurtured in order to develop a coherent sense of self-efficacy. The results of this research are evidence to the importance of providing recipients with the experience of adoption by relatives, when possible, rather than disrupting their family connections. As seen in the findings of this research, those individuals adopted by relatives have the highest reported feelings of social self-efficacy.

**Hypothesis 3.** Support for this hypothesis was found in the ratings of depression among the three groups of former foster care recipients. As expected, individuals who were previously adopted by a relative reported statistically significant lower ratings of depression than those persons who were not adopted by a relative and also than persons never adopted. However, no significant difference was reported between depression ratings in former foster care recipients who were adopted by a non-relative as compared to individuals who were never adopted.

Bruskas (2008) found that the foster placement setting has the potential to disturb positive functioning, putting many foster care recipients at risk by preventing them from attaining optimal psychological well-being. The present study adds to preexisting literature in highlighting the importance of legal permanence through relative adoption. For many individuals, having a caretaker who is able to support the development of their racial and ethnic identity has been found to be a positive predictor for adult mental health outcomes (Fechter-Leggett & O’Brien, 2010). The results of this study demonstrate how adoption is essential to foster care recipients’ psychological well-being into adulthood as individuals who were adopted by a relative reported the lowest ratings of depression
among the three groups. Without the support necessary to overcome the various
challenges which foster care recipients are confronted with, mental health outcomes may
be severely impacted (Samuels, 2009). The present study adds to the existing literature
by providing evidence that those who are adopted by relatives and have a strong
connection with their caretaker have a greater advantage in their development as
psychologically healthy adults.

**Hypothesis 4.** When examining the scores on the Substance Use Inventory, an
unexpected result was found. Comparisons of substance use in former foster care
individuals found no significant difference in the ratings of total drug use between the
three groups tested. Previous research has found that former foster individuals
experienced significantly greater rates of both drug and alcohol dependence than the
general population (Casey Family Programs, 2005; Pecora, 2005; Pecora, White et al.,
2009). Although the present study used comparisons of former foster care recipients
only, results were found in low levels of total substance use which were relatively equal
among groups.

The results of the present study reinforce previous findings in regards to the
recovery rates of former foster care recipients. As compared to the general population,
recovery rates were significantly higher on five of the eight mental health outcomes that
were tested in former foster care individuals. Existing research shows that former foster
care recipients are reporting lower rates of drug and alcohol dependence and, therefore,
appear to be successfully overcoming mental health disorders related to substance use
(Casey Family Programs, 2005; Pecora, 2005; Pecora, White et al., 2009).
**Limitations**

There were several limitations to this research including much of the data being obtained through self-report and therefore vulnerable to recall bias of the individuals who participated in this study. Another potential limitation was that the majority of participants were female. This may be explained by males in general being less comfortable than their female counterparts with answering sensitive questions relating to certain moods, feelings, and experiences. This limitation may also have influenced the withholding of information relevant to the outcome measures in this study. Additionally, most participants identified as being Caucasian which further added to the difficulty of cross-culturally generalizing the results of this research.

Participants with a history of trauma or mental health symptoms may have had difficulty opening up about their experiences as this may have caused anxiety or interfered with the individual’s ability to trust the researcher. Some participants may have also under-reported symptoms or experiences because of cultural and societal norms about the sharing of such personal information. A further limitation of this research includes the exclusion criteria which did not take into account the individuals who were incarcerated or in mental institutions, both of which may be indicators of severe mental health conditions. Due to this limitation, results of this study may not be fully generalizable to other groups of former foster care recipients.

Another potential problem with this research and other similar research studies focusing on foster care is that these studies focus on the individual at one point in time. Without further information on the individual functioning prior to foster care placement,
it is difficult to draw conclusions as problems after foster care may be the result of the negative life events that preceded the foster care placement.

**Recommendations for Future Research**

The study findings have many implications for research, policy, and practice. Clearly, it is important to understand that more research is needed to investigate how adoption, whether by a relative or non-relative, is experienced by foster children. Further research to investigate which factors protect against or exacerbate the negative effects of placement in foster care is also necessary. It can also be argued that the study’s findings provide support for policy that seeks to keep adoption from foster care as a priority for foster children. The findings may provide a useful perspective for the child welfare system to understand in creating policy that not only seeks to encourage relative adoption but also to reduce the traumatic effects associated with placement in the foster care system.

Findings from this study indicates the need for future research on this topic which should assist with better understanding the influence that care providers have on their foster children as well as the role that foster families play throughout the lives of these individuals. There is a great need for research to further examine the effects of individuals who experience adoption out of foster care both by relatives and non-relatives. Further research inquiry is needed to compare the perspectives and outcomes of individuals who experienced adoption by a relative versus those who experienced adoption by a non-relative. Additionally, future perspectives studies should examine the barriers to adoption or placement with family members.
Future research should address the long-term outcomes of the foster care system and the services that are required in order for this population to achieve positive mental health and optimal functioning in society. Outcome studies of former foster care recipients has been a topic greatly overlooked by researchers, therefore future studies are needed in order to understand the various complexities and challenges that recipients of foster care are being faced with. Certainly, further research is needed to explore the consequences of foster care placement on later life adjustment. Areas of possible research may address the factors associated with foster care placements that may exacerbate the conditions prior to placements. Longitudinal research may be needed to better assess the factors of childhood foster care placement that impact individuals later in life.

Conclusions

The findings of this study are consistent with the available literature reporting general negative outcomes for former foster care recipients who were never adopted out of care. In this study we learned that adoption may serve as a protective factor for the later development of mental health symptoms, such as depression and decreased social self-efficacy. Furthermore, the experience of relative adoption may indeed help promote positive mental health factors in former recipients of foster care. Based on the findings, individuals formerly placed in foster care who were adopted do seem to report higher levels of adult well-being. This research has important considerations for the child welfare system in helping to promote adoption to families of foster children. The data
suggests that factors associated with adoption from foster care decrease the risk for later life difficulties, although causal inferences cannot be established from the data.

Results of this study suggest that addressing the issue of adoption, or permanence, can be central to this population’s healthy identity and psychological well-being into adulthood. While the sample size was a methodological weakness of the study, the message in the findings is strong. It seems reasonable to suggest that foster care practitioners must be equipped with strategies to help children process both the stresses and hopes associated with foster care placement and adoption. It appears that the task of the child welfare system is to simultaneously work to encourage the option of adoption, either by relatives or non-relatives, while developing strategies to reduce the negative impact when adoption from foster care does not occur. Application of these practices may serve as protective factors and help promote positive adaptations to placement in foster care, such as positive caretaker bonding and social self-efficacy, which last into adulthood.
REFERENCES


Reynolds, W. M. (2002). *Substance Use Inventory*.


Appendix A

Adult Informed Consent for Participation in Research

HUMBOLDT STATE UNIVERSITY
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH

CONSENT TO ACT AS RESEARCH PARTICIPANT

To be eligible for this study, I understand I must be between 21 and 45 years of age and have previously resided in foster care for at least 3 years. I hereby agree to participate in the following surveys conducted by Karly Mertz, a MA candidate in Counseling Psychology, for research purposes.

These surveys will take approximately 30 – 40 minutes to complete, and will be conducted anonymously online. The purpose of these surveys is to collect relevant information regarding self-efficacy, psychological well-being, caretaker bonding, and stressful life events for individuals.

I understand that participating in this study may involve the possible risk of emotional discomfort or anxiety as a result of exploring such personal topics as self-efficacy, psychological well-being, caretaker bonding, and substance use. Participating in this study has the potential benefit of collecting valuable information that may be relevant to more effective counseling of former foster care recipients as well as to gain a better understanding of positive mental health outcomes in former recipients of foster care.

I understand that Karly will answer any questions I may have concerning this investigation or the procedures at any time. I also understand that my participation is entirely voluntary and that I may decline to enter this study or may withdraw from participation at any time without consequence. I understand that the investigator may terminate my participation in the study at any time. I understand that Karly will provide me with a list of counseling resources, should I choose to seek therapy during or after participating in this research.

I understand that the results from surveys submitted online will be stored electronically in a password-protected filing system, and identifying information (such as name, phone number, e-mail address, etc.) will NOT be requested of me. My responses, therefore, will be anonymous to the researcher.

If I have any questions regarding the survey and/or my participation, or if I would like further references to counseling as a result of the nature of this research, I can contact Karly Mertz graduate student in Psychology, at kqm2@humboldt.edu or William M.
Reynolds, PhD and HSU Research Professor, at William.Reynolds@Humboldt.edu. I understand that I will be asked for non-identifiable demographic information and that this information will also be stored electronically in a password-protected filing system. If you have questions regarding this project, or any dissatisfaction with any part of this study, you may contact the IRB Chair, Dr. Ethan Gahtan, at eg51@humboldt.edu or (707) 826-4545. If you have questions regarding your rights as a participant, you may report them to the IRB Institutional Official at Humboldt State University, Dr. Rhea Williamson, at Rhea.Williamson@humboldt.edu or (707) 826-5169.

I hereby acknowledge that I have read and understand the implications of this research. By continuing on to the following surveys, I give my consent to participate, and therefore also declare that I am between 21 and 45 years of age and have previously resided in foster care for at least 3 years, and thus eligible for participation in this study.
National References for Counseling

24-Hour National Hopeline Network........................................1-800-784-2433

National
Suicide Prevention Lifeline.........................................................1-800-273-8255

Local References for Counseling (Humboldt County)

Humboldt State University Counseling and Psychological Services........(707) 826-3236

Open Door Community Health Centers
(all 4 clinics require referral from their MD or PA in order to be seen by their therapists)
   Arcata Open Door Clinic.........................................................(707) 826-8610
   North Country Clinic..............................................................(707) 822-2481
   Eureka Community Health Center..............................................(707) 441-1624
   McKinleyville Community Health Center.................................(707) 839-3068

Humboldt Family Services............................................................(707) 443-7358

Remi-Vista..............................................................(707) 268-8722

HSU Community Counseling Clinic............................................(707) 826-3921
Appendix B

Demographic Questionnaire

1) Age: ___________________         2) Gender: ___________

3) What is your highest achieved level of education?
   _____ Less than high school
   _____ High School/GED
   _____ AA or technical school degree
   _____ Some College
   _____ BA/BS degree
   _____ MA degree
   _____ Doctoral degree

3) Ethnicity (check all that apply):
   _____ Caucasian/White
   _____ Hispanic/Latino
   _____ Asian/Pacific Islander
   _____ African American/Black
   _____ Native American/American Indian
   _____ Other

4) Current relationship status:
   _____ Single- Unmarried
   _____ Single-Cohabitating
   _____ Married
   _____ Separated
   _____ Divorced
   _____ Widowed
5) Current living arrangement:

_______ Cohabitating with partner
_______ Living by self
_______ Living with roommate(s) in apt/house
_______ Living in dorm
_______ Living with family/relatives
_______ Living in shelter
_______ Homeless
_______ Other

6) Do you have any children? ______ Yes ______ No

6a) If yes, how many are living with you at present? ______

7) Did you attend any alcohol anonymous meetings in the past year? ______ Yes ______ No

7a) If yes, how many? ______

8) Do you smoke cigarettes? ______ Yes ______ No

8a) If yes, how many on average per day? ______

9) In an average week, how many of the following do you drink?

_______ Beer (12oz)
_______ Wine (6oz)
_______ Hard Liquor (2oz)

10) Are you currently employed? ______ Yes ______ No

15a) If so, how many hours (average) do you work per week? ______

11) Do you do volunteer work? ______ Yes ______ No
16a) If so, how many hours (average) do you volunteer per week? _______

12) Are you a veteran of the US armed forces? _______Yes _______No

12a) If yes, did you serve in active combat areas? _____Yes _____No

12b) If yes, how many years ago? _______

13) Are you:
   ______ Religious
   ______ Spiritual
   ______ Both
   ______ Neither

14) How many times in the past month have you had 5 or more "standard" drinks in a row (for men) or 4 or more in a row for women?_______

15) Please select (circle) the option(s) below that best describes your time (please enter months and years) and placement in foster care.

   A. In foster care ____mo. ____ years, then returned to parent(s) or other guardian(s).
   B. In foster care ____mo. ____ years, then adopted by relatives.
   C. In foster care ____mo. ____ years, then adopted by nonrelatives.
   D. In foster care ____mo. ____ years, in foster care home with relatives.
   E. In foster care ____mo. ____ years, in foster care home with non-relatives.
   F. In foster care ____mo. ____ years, in group home.
   G. In foster care ____mo. ____ years, in residential/institution.
   E. In foster care ____mo. ____ years, in other (describe)______________________.

16) How long did you reside in foster care (months and years)? ________________

17) At what age was your first foster care placement? ________________

18) How old were you when you left foster care? ________________
19) How many placements did you reside in while in foster care (total)?

20) Please circle the number that best describes your overall experience in foster care:

<table>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<tbody>
<tr>
<td>Very Bad</td>
<td>Bad</td>
<td>Neither Good or Bad</td>
<td>Good</td>
<td>Very Good</td>
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</table>

21) Were you ever legally adopted out of foster care?  

_______ Yes  

_______ No

21a) If yes, how old were you when you were adopted?  

21b) Were you adopted by?  

_______ A relative  

_______ A non-relative  

_______ Both  

_______ Other

21c) If you were adopted by a relative, who were your adoptive parents?  

___ a Mother & a Father  

___ Only a Mother  

___ Only a Father  

___ Two Mothers  

___ Two Fathers  

___ Other (describe) ____________________________
21d) If you were adopted by a relative, who were your adoptive parents?
___ a Mother & a Father
___ Only a Mother
___ Only a Father
___ Two Mothers
___ Two Fathers
___ Other (describe) ____________________________

22) Have you ever tried to kill yourself?  ____Yes  _____No

22a) If yes, how many times? ______

22b) When was the last time you tried?
___ Less than 1 month ago
___ 1 to 5 months ago
___ 6 to 12 months ago
___ 1 to 3 years ago
___ More than three years ago

22c) How did you try? ________

22d) How many times? ________

22e) Did you go to the hospital?  ____Yes  _____No

22f) At the time, did you really want to die?  ____Yes  _____No  _____Not Sure
Appendix C

Social Self-Efficacy Scale (Sherer et al., 1982).
Appendix D

Parental Bonding Inventory- Foster Care (Parker et al., 1979).
Appendix E

Hamilton Depression Inventory (Reynolds & Kobak, 1995).
Appendix F

Reynolds’ (2002) Substance Use Inventory.
Appendix G

De-Briefing Form

Dear Participant;

You are reminded that your original consent document included the following information: you do not have to participate in the research and you may choose to withdraw your participation at any time without any consequence. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

If you have questions about your participation in the study, please contact myself, Karly Mertz, at (530) 945-1537 or Kqm2@Humboldt.edu, or my faculty advisor, William M. Reynolds at William.Reynolds@Humboldt.edu.

If you have questions about your rights as a research participant, you may contact the Office for Research and Graduate Studies (707) 826-3949 or Humboldt State University’s Institutional Review Board at (707) 826-5165 or by e-mail at irb@humboldt.edu.

Please do not hesitate to contact the researcher or faculty advisor if you have experienced distress as a result of your participation in this study. Please remember that any cost in seeking medical assistance is at your own expense.

Please again accept our appreciation for your participation in this study.