2018

Influence of Poverty, Parental Substance Use, Ethnicity, and Employment on Reactivation Following Family Reunification

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Abstract

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MA, University of New Mexico–Albuquerque, 1993

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Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

Psychology

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Abstract

The maltreatment of children impacts individuals, communities, states, and societies. One response to the problem is the removal of children from their families, which can cause significant trauma for all involved. Moreover, the financial, legal, and emotional costs increase exponentially when subsequent re-removal, known as *reactivation*, occurs. Nationwide, the rate of reactivation averages just over 6%; in Arizona, the rate is significantly higher, with 11% of children being reactivated within 2 years of initial reunification. The purpose of this quantitative, non-experimental study was to determine whether poverty, ethnicity, parental substance use, parental employment, marital status, and number of children in the home is predictive of reactivation following reunification. The study was grounded in Bronfenbrenner's ecological theory and Brown's multiple risk factors model. Archival data of 627 family case files from a social service agency were analyzed using logistic regression. Results revealed that number of children was the only significant predictor, with fewer children resulting in higher reactivation rates. The lack of findings for the other predictor variables in light of extant research suggests that further research is needed to determine the unusually high rate of reactivations in this particular region. Further study may thus effect positive social change through findings that may impact educational and social welfare programs, legislative action, and enhancement of family skills training and resources.

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Dedication

I dedicate this dissertation to the children and families who in Arizona and across the country have been involved with behavioral health services and child welfare agencies. It is an honor to hear their stories and be part of their journey. Hopefully, this study will contribute to improving support and services for all families in need.

Acknowledgments

Many people have helped me through this process. It has been a humbling experience to complete this project. Many thanks go to Carol Punske, who connected me with resources and internship providers; she was always knowledgeable, connected, and an amazing friend. Thanks also to Patricia Treeful, who is a constant positive force in my life, and to my colleagues who have encouraged me to keep going when I did not want to.

I would like to thank Dr. Mitchell Hicks, who has patiently been on my committee from the beginning and did not forget about me. Many thanks to Dr. Tracy Marsh, who agreed to become the chair of my committee when a vacancy occurred; it has not been an easy task for her, but she was patient with her feedback and direction. Many thanks to Dr. Jill Plevell, who provided a unique internship opportunity and experience for me.

Thanks always to my nephews, John and Jacob, who keep me grounded in what is important and what is fun.

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Chapter 1: Introduction to the Study

Child maltreatment is generally defined as child abuse and neglect, which can range from emotional, physical, and sexual abuse and neglect to exploitation (World Health Organization, 2016). In the United States, the Federal Child Abuse Prevention and Treatment Act outlined the responsibility of caregivers to protect children from harm and exploitation, including emotional, physical, and sexual abuse (Child Welfare Court Improvement Project, 2013). There are approximately 3.5 million abuse and neglect reports on 6 million children per year in the United States (Childhelp Newsletter, 2013); these numbers do not, of course, include unreported cases.

Child abuse and neglect create challenges for children, families, and systems. Understanding the scope of the needs created by child maltreatment will help develop viable responses and treatment interventions. Arizona has a disproportionately large number of removals and reactivations per capita compared with other states (U.S. Department of Health and Human Services, 2014). In terms of actual statistics, in 2012, the state, with a population of approximately 6.8 million (U.S. Census Bureau, 2015), reported approximately 78,000 abuse calls (U.S. Census Bureau, 2013). In 2015, approximately 18,000 of Arizona's children were in out-of-home placements, accounting for approximately 22% of all abuse reports, meaning that nearly 1 in 5 abuse and neglect reports results in the removal of a child from his or her current caregiver (Children's Action Alliance [CAA], 2013). Arizona is one of only five states in which removals of children have consistently increased rather than declined in recent years (U.S. Department of Health and Human Services, 2014). By comparison, in Massachusetts and

Michigan, which have similar populations, approximately 9,000 children are in care in each state, and these figures represent reductions of some 15% over a 2-year period (U.S. Census Bureau, 2015; U.S. Department of Health and Human Services, 2014).

The ultimate goal of any child removal in any state is reunification. Nationwide, the average reunification timeframe is 15 months (U.S. Department of Health and Human Services, 2014), but in Arizona it is 20 months (Department of Child Safety [DCS], 2014). Reactivation occurs when children are removed again from the custody of their caregivers after having been reunited with them upon completion of their original case plans. The national reactivation rate for children returned to care within 2 years of reunification is 6%, while in Arizona it averages 11% and is closer to 13% in the county that is the subject of this study, more than twice the national average (DCS, 2014).

This study was designed to identify some of the factors associated with this trend in Arizona, though there may be similar systemic issues in other states. By identifying predictive variables associated with reunification and reactivations, my hope is that policies can be designed to ensure that fewer families will be involved in removals and that more proactive and positive services will be available to enable children to live safely with their caregivers. Such policies would result in significant emotional, social, and economic benefits. In this chapter, the nature of the study, definitions, and parameters are addressed.

Overview

It is generally accepted practice that abuse reports are investigated within timeframes that are determined by severity and risk, an approach often referred to as

differential response (DCS, 2013). Various decisions regarding dependency and services are made once an investigation has been completed. These decisions may result in the state taking guardianship of children and either removing them or leaving them in their current placement, in family members taking responsibility for guardianship and placement, or in closure of a case (DCS, 2013). The most favorable outcome for at-risk children who remain out of care is that services are implemented to assist vulnerable families and kinship placements before crisis situations can arise, thus heading off any further abuse and neglect and additional Department of Child Safety (DCS) investigation (DCS, 2013). In Arizona, budget cuts have significantly reduced DCS staff, service providers, and the overall availability of visitation and treatment services, limiting the options for helping families to remain together at home (Brodesky, 2012). In addition, the fact that 11 children died while under DCS guardianship in 2012 (Arizona Child Fatality Review Program, 2014) may be making DCS staff more likely to remove children rather than risk leaving them in the care of potentially abusive parents or other caregivers. In other words, because it is often difficult to decide whether children will be safe staying with their parents, removing often seems the safer choice to social workers (Chapin Hall Center for Children, 2015).

In the best case scenario, children are removed because of significant safety issues and their caregivers receive a variety of services that address the factors that led to the removal. In Arizona, support and resources for families in these situations include substance abuse treatment, financial assistance, therapy, parenting classes, and psychiatric services (DCS, 2014). The courts generally allow caregivers 12 to 18 months

to complete their case plans (*Child Safety*, ARS 2016 8-862). Reunification includes follow-up services which in the best case scenario means the family requires no further DCS involvement (DCS, 2013). Reactivations, by contrast, result when reunification fails and children must again be removed from their caregivers owing to further abuse and neglect (CAA, 2013).

There are many possible reasons for the disproportionately high rate of reactivation in Arizona. To begin with, the state ranks eighth in the United States in poverty (U.S. Census Bureau, 2012), and poverty is a key factor in most child neglect cases (Childhelp Newsletter, 2013). Then there is the issue of parental substance use, which is a factor in 75% of all child removal cases in Arizona (CAA, 2013; DCS, 2014). In such cases, parents must undergo extensive treatment before they can even begin to address case plans for reunification with their children. Accompanying substance use behaviors can be other underlying disorders, such as developmental delays, comorbid psychiatric disorders, and various forms of trauma (Hesse, 2009), which can further complicate treatment and delay the reunification that the treatment is intended to make successful. Distinguishing between factors that contribute to successful family reunifications and those that lead to increased reactivations represent an important step toward achieving better outcomes for children, youth, and families in Arizona.

Currently, Arizona spends $50 million annually on its DCS programs (CAA, 2016). The bulk of these funds are spent on out-of-home care for the over 18,000 children and youth who have been placed in a variety of out-of-home situations, including shelters, foster care, kinship homes, and group homes (CAA, 2013; DCS,

2014). In addition to being enormously expensive for the government, removals and reactivations impose other costs on individuals, families, and communities. There are social costs related to multiple transitions for children and youth; emotional costs related to multiple relationships, placements, schools, and service providers; and physical costs often related to physical and sexual abuse and neglect (CAA, 2013).

Background

Scholars in the field have conducted considerable research on the impact of removals on children, youth, and families (Kisiel, Fehrenbach, Small, & Lyons, 2009; Kletzka & Siegfried, 2008; Sinanan, 2011; Terling, 1999). As the literature has grown regarding the trauma involved with child removal, the child welfare system has become the focus of scrutiny, research, and debate regarding its practices on the local, state, and national levels. The Administration of Children and Families conducts bi-annual reviews of every state's child welfare programs. As a result, removals and reactivations are compiled in a national analysis of abuse reports, removals, and gaps in the provision of training and services (DCS, 2014. While Arizona has higher percentages of removals and reactivations than other states, there has yet been no definitive analysis of factors that may be contributing to the alarming numbers.

There has been no sentinel event review of this phenomenon. Moreover, while the deaths of children are investigated, there has been no comprehensive review of ways in which the child welfare system and other stakeholders might proactively change the system so that children are better protected. As noted, there were in 2015 over 18,000 children in the care and custody of the state of Arizona and not living with their

biological families, approximately 4,000 of whom were concentrated in one large southern Arizona county (Chapin Hall Center for Children, 2015; CAA, 2014). Owing to a shortage of positive, viable placement opportunities, children who are removed from home are often placed in congregate care or other kinds of temporary housing that can result in further trauma and create additional challenges (CAA, 2014). While the removal of children, even if necessary, creates trauma for them and their families, reactivations usually involve still greater trauma and confusion that can lead to hopelessness and the loss of family systems (Kisiel et al., 2009; Kletzka & Siegfried, 2008). Possible factors at play in this cycle need to be studied and analyzed. The statistics, at any rate, present a disturbing picture for the children, youth, and families of the southern Arizona county and the state as a whole. Indeed, the situation has deteriorated to the point that a class action lawsuit has been filed against DCS by a child advocacy group on behalf of all children in care in the state of Arizona citing inadequate care and lack of permanency planning (Children's Rights, 2015). An analysis of common variables will help to elucidate possible solutions on the individual, family, community, agency, and state levels.

Problem Statement

In 2015, approximately 18,000 Arizona children were placed in the care and custody of DCS (Chapin Hall Center for Children, 2015), and the fact that many those children return to the care and custody of DCS within 2 years of family reunification is equally concerning (CAA, 2016). Returning to DCS care can further traumatize children, families, and systems, so the disproportionate numbers of Arizona families facing this

situation need to be analyzed to identify possible causes. In this study, I analyzed the variables of poverty, ethnicity, parental employment, and parental substance use as possible predictors of reactivation following reunification. Marital status at time of removal and number of children were analyzed as well. The results of this study are intended to provide guidance to DCS and other service providers in predicting the likelihood of removals and reactivations.

Purpose of Study

This study provided a quantitative analysis of variables that, as discussed, could play significant roles in most child welfare removals. The intent was to determine whether these variables can in fact be used to predict that a family is likely to face reactivation following reunification. The independent variables for this study were poverty, ethnicity, parental employment, and parental substance use; parental marital status and number of children were reviewed as well. The dependent variable of case plan status consisted of two components, namely families that were reactivated and those that were not.

Theoretical Framework

Bronfenbrenner's (1979) ecological-theoretical frame of reference can encompass the numerous variables that impact removals and reactivations. Bronfenbrenner postulated, as early as 1945, that there were layers of environmental factors that impact the psychological development of individuals and subsequently families, communities, and societies. These levels he termed the microsystem, mesosystem, exosystem, and macrosystem. The microsystem is the limited, immediate environment in which the child

lives, including his or her own biology (Kail & Cavanaugh, 2010). The ecological perspective may offer ways to predict child maltreatment through the interaction of protective and risk factors that impact individuals at the individual, family, community, and societal levels (Begle, Dumas, & Hanson, 2010). Ecological theory accounts for systemic factors, those beyond poor parenting, that contribute to child maltreatment and thus allows for extensive interventions and solutions (Harnett, 2008).

Brown's multiple risk factor theory offered another useful framework (Brown, Cohen, Johnson, & Salzinger, 1998). Brown et al. (1998) posited that that the number of risk factors that a child and family face correlates positively with the likelihood of child abuse and neglect. This theory takes into account multiple predictive variables that may ultimately help at-risk families receive beneficial targeted services and support. This supports the work of Felitti and Anda who concluded that adverse experiences in childhood are predictive of physical and mental health issues in adulthood and of shortened life expectancy in their ACES Study (Centers for Disease Control [CDC], 2012).

Nature of the Study

The subjects of this quantitative study were families in the DCS system in southern Arizona who had experienced removal, no reactivation, and reactivation. The data set was obtained from a review of archival records kept by a behavioral health agency that provides a continuum of care to children and families involved with DCS during removal and reactivation. Included in these records was demographic information regarding primary caregivers, including employment and poverty status and whether

substance use had been a factor in the removal. According to Creswell (2008), a quantitative design is preferable for research that involves the collection of data to support or negate relatively narrow hypotheses. For this study, a quantitative design was selected as the best way to analyze multiple independent variables to identify any significant trends in the rates of removals and reactivations. The working hypothesis was that there are indeed independent variables associated consistently with removal and with reactivations. A ranking of these variables suggested approaches to prioritizing the resources and efforts of the ACYF, the courts, the legislature, and service providers.

Research Questions and Hypotheses

The following hypotheses were examined during this study regarding factors that may predict reactivation of a child within 2 years of reunification.

Research Question 1: Do poverty, ethnicity, parental substance use, and parental employment predict reactivations of children within 2 years of reunification?

- $H_0$1: Poverty, ethnicity, parental substance use, and parental employment are not predictive of reactivations of children within 2 years of reunification.
- $H_1$1: Poverty, ethnicity, parental substance use, and parental employment are predictive of reactivations of children within 2 years of reunification.

Research Question 2: While accounting for poverty, ethnicity, parental substance use, and parental employment, to what extent do marital status and number of children predict reactivations of children within 2 years of reunification?

- $H_0$2: Marital status and number of children are not predictive of reactivations of children within 2 years of reunification.

- $H_1$2: Marital status and number of children are predictive of reactivations of children within 2 years of reunification.

Definitions

For the purposes of this study, the dependent variable was case plan status, which was two-tiered, including both reactivation of families that had been reunified within 2 years and families that were not reactivated. Given the complexities of the variables studied and the multiple meanings that they can have in various contexts, they were defined in the following manner for the purposes of this study (DCS, 2013).

- *Removal* occurs when it is determined that significant safety and child welfare concerns prevent children from remaining in current their placement.
- *Reunification* occurs when children are returned to the families from which they were removed, ideally after parents have completed their case plans and demonstrated the ability to care properly for their children.
- *Reactivations* occur when children are removed again from their current placement after having been reunified previously.
- *Poverty* was defined for this study in terms of whether household income met the Arizona definition of welfare supports and services, as participation in certain programs is determined solely by income level. Families were dichotomously coded if they qualify for those programs.
- *Ethnicity* of children was determined based on individuals' own identification within Arizona's six categories of ethnic classification, which are Hispanic

(Not Latino), Latino, American Indian, White, Asian, or Other. Families were also coded based on their own ethnic self-identification.

- *Parental substance use* was dichotomously coded if substance use was one of the recorded reasons for removal and reactivation.
- *Parental employment* was determined based on full-time employment status at the time of removal and/or reactivation as reported in the records and was then dichotomously coded.

Because the other independent variables mentioned, parental marital status and number of children, may also have an impact on the rate of reactivation within 2 years of reunification, they were also identified and recorded for each family at the time of removal and/or reactivation.

- *Marital status* was determined as to whether the caregivers at the time of removal were married or single.
- *Number of children* under 18 at the time of removal and reactivation was recorded. This included all children, including adoptive, kinship, and biological children, who were documented in the case record.

Assumptions

For the purposes of this study, it was assumed that the archival data were recorded accurately, though this assumption cannot be verified. It was further assumed that, across the population, the process of removal was consistent and that services were provided as documented and consistently. Another assumption was that parents wanted to reunify with their children, which is justifiable given that reactivations only occur when parents

have had their DCS case plans dismissed following fulfillment of their guardianship requirements.

Scope and Delimitations

The purpose of this study was to examine whether variables previously known to have predictive power regarding reactivation are evident within a specific population characterized by disproportionately high reactivation rates. Archival data that included circumstances surrounding reactivations were used to identify any significant variables that might lead to more proactive identification of and support for high-risk children and families. Assistance is needed particularly after reunification in the southern Arizona county studied here, because, as already mentioned repeatedly, this county suffers from nearly twice the national average of reactivations within 2 years of reunification. (DCS, 2014). The current data set contains comparable information about all removals and reactivations regarding poverty level, substance use, ethnicity, and employment status. Some zip codes and corresponding DCS units may have relatively higher removal rates, possibly resulting in a disproportionate number of removals involving these DCS units.

Given the variables selected for this study, my intent was that the results would be generalizable to other communities and states. Archival data have limitations, but this data set was chosen because it met the criteria for the study. As the number of children being removed from homes has consistently increased in Arizona while at the same time decreasing in most other states (CAA, 2016), identification of predictive variables could help providers to implement more proactive support and interventions.

Limitations

The information in the data represents categories of demographics and circumstances, and no individualized information or context was available that might have supplemented the picture of the situations that are particular to each individual and family. Thus, information in the data set was limited to the independent variables, which meant that some of the nuances of each case could get lost in the anonymity of the variables. Other potentially significant variables may not have been captured in the study because they were not mentioned in the data set or were not analyzed. Examples of such omissions revealed in the literature review include multigenerational trauma, which is often an aspect DCS removals (Kisiel et al., 2009; Perry, 2002) because many families have a long history with DCS, including parents who had themselves been removed as children (Harnett, 2008; Seery, Holman, & Silver, 2010). This and other factors were not documented, at least not completely, in the archival data set. Further, the data represented a southern Arizona county with a population of approximately 600,000 (U.S. Census Bureau, 2013). Given the diverse cultures and geography of Arizona, the results presented in this study may not be representative of national trends. For example, this county was situated on the border between Mexico and the United States and had a highly transient population (U.S. Census Bureau, 2012). A final consideration regarding generalizability is that the data were obtained from a behavioral health agency that works with DCS children and families; they provide, at minimum, access to the four independent variables, but do not include all cases of removals, reunifications, and reactivations in the state of Arizona.

Significance

One of the goals of clinical psychology is to identify interventions that can relieve the symptoms of people in distress (APA, 2017). It is undeniable that children and families involved with DCS are in distress. Given the disproportionately high rates of abuse and neglect and subsequent removals in the state of Arizona and in the county under study, the identification of predictive variables for removal and reactivation can help in the effort to make available better programs and resources that will assist families and DCS staff in reducing the need for removal and reactivation. Determining the relative risks associated with these specific variables will allow for the development and implementation of numerous clinical, social, economic, and legislative strategies for the betterment of children and families.

The results presented here may, then, help policy-makers and legislatures provide increasingly prosocial and proactive policies as they seek to reduce the number of children and families at risk for removal and reactivation. Success in this area will lead to the availability of more resources and support earlier in DCS cases and to greater confidence among DCS staff in deciding to leave families together. In cases in which removal is necessary, but the family can be reunified after completing its case plan, various forms of support and resources will be necessary to avoid reactivation.

The policies and procedures currently being utilized in the identification of and response to the abuse and neglect of children and youth present challenges to DCS staff, service providers, and children and families. If predictive variables regarding DCS removals and reactivations can in fact be identified, policies and protocols can be altered

accordingly to be more effective, and various positive outcomes may follow: funding can be allocated more productively, programs can be targeted more specifically, and removal decisions can be made more consistently. Removals and reactivations are in some cases necessary for child safety, but better assessments could assist in better informed decisions by DCS regarding proactive services and support for vulnerable populations of children and families. The identification of variables that are associated consistently with reactivations will facilitate decision-making and the delivery of services, including more effective treatment interventions, more proactive case management decisions regarding initial removals and reunifications, more consistent policies regarding child safety and removals, and more efficient use of community resources for children, youth, and families in general. Even though most of the variables studied here were not found to be significant in reactivation cases despite the citations from the literature review, there are indicators further research is warranted and across several levels of the family system. This includes trends in the county under study and perhaps in the state of Arizona overall related to child welfare policy, in particular the training and supervision of DCS workers, and will subsequently allow for policy revision and procedural changes and the development of more proactive programming and resources to prevent removal and reactivations.

Summary

The safety and welfare of children is of paramount importance to communities. Toward this end, it is important that abuse and neglect be reported whenever and wherever they are observed. The removal of children should be a last resort, reserved for

situations in which there is no way to maintain a child's safety within the home. Many children in Arizona are determined to be in such situations and are removed (CAA, 2014), and many are returned to custody within 2 years of being reunified (CAA, 2016). The availability of ways to identify at-risk children and families could make it possible to supply services prior to removal, to craft more effective responses to children's specific circumstances, to provide more effective support following reunification, more effective DCS policies and procedures generally, and better allocation of resources. As a result, removals and reactivations could be reduced, thereby fostering increased family efficacy, safer communities, and the development and implementation of more targeted programs. In the review of the literature that follows, I define more narrowly the scope of the present study, the range and definitions of the variables, and possible outcomes with respect to the individual and the community.

Chapter 2: Literature Review

Purpose

The removal of children by the state is done to protect the welfare of children. As discussed, there are in Arizona approximately 18,000 children in state-sponsored placements, which is a high number given the population of Arizona (CAA, 2013). More distressing is the fact that, in Arizona, the number of reactivations, which, again, are removals that occur within 2 years of reunification, is more than twice the national average per capita (CAA, 2012). An explanation for these high rates could make possible more proactive services and treatment interventions for vulnerable families and evaluation of current policies and procedures by DCS personnel in regard to decisions affecting the safety of children.

Synopsis of the Literature

Various literature sources are of potential relevance when discussing child abuse and welfare that encompass social, therapeutic, racial, economic, and political issues. In terms of child welfare and DCS issues, the U.S. Department of Health and Human Services through the Administration for Children and Families, conducts comprehensive service reviews for every state every 2 years (DCS, 2014). These reviews are extensive and consistent across all states, despite varying program structures. States are required to maintain minimal standards for children, youth, and families within their purview and scope of services. The reviews often highlight strengths and deficits within states, across regions, and nationwide. Funding is also often tied to the results of these reviews, which can, therefore, impact legislation and policy decisions for states.

Given that the topics of child welfare, trauma, substance use, poverty, race, socioeconomic status, and census data touch on many academic domains, I used several databases to find relevant research, theories, and perspectives, including PyschArticles, Academic Search Premier, ERIC, SocioINDEX, and MedLine; governmental websites were also used to gather demographic data across states, regions, and the nation, including the U.S. Census Bureau, Department of Health and Human Services, Department of Labor, and the National Resource Center for Family Centered Practice. In addition, websites for the National Traumatic Stress Network, National Institute of Health, Centers for Disease Control and Prevention, and Substance Abuse and Mental Health Services Administration (SAMHSA) were accessed for statistical data and information. For most peer-reviewed articles, the publication years 2008 to 2013 were the focus of the literature review, while the census and socioeconomic information focused on the years 2010 to 2013. Seminal studies and background are included dating back to 1963.

I found no articles specifically addressing the disproportionately large reactivation rate in the county under study. Further, this county's numbers have often been merged with those for Maricopa County, where Phoenix is located. The comprehensive service reviews for state child welfare agencies enable comparison because the criteria and outcomes are the same for certain programs offered by child welfare systems across the country. Small-scale studies of these systems have been conducted in New York and California (Wells & Correia, 2012).

There has been an abundance of research literature from various perspectives and theoretical frameworks on the antecedents of and possible solutions to the child welfare crisis affecting millions of families. As noted, however, within this wide range of relevant research, the high reactivation rate in Arizona has not been evaluated in a manner that provided clinical direction or policy insight.

This survey of the literature begins with a review of the theoretical perspective chosen to approach the research questions. The various hypotheses proposed in the literature have addressed demographic variables such as race, socioeconomic status, and parental substance use. Trauma was also addressed, in particular the prevalence of multigenerational trauma associated with child welfare families (Hill, Kaplan, French, & Johnson, 2010).

Theoretical Perspective

Ecological systems theory, which entered the mainstream relatively late for a clinical perspective, in 1979, nevertheless provides the framework necessary to explain the often complex systems in which children, youth, and families live. Breakdowns in or challenges to these systems can result in abusive and neglectful environments from which children must be removed. Unless these systems are made healthier and safer, the likelihood of reactivation will remain (Marts, Lee, McRoy, & McCroskey, 2008; Pinel, 2009).

Psychologist Bronfenbrenner (1979), as observed earlier, developed ecological systems theory, to explain milestones in child development. Bronfenbrenner contended that individuals are impacted on a several levels by a variety of influences. His theory

initially identified four systems, and he later added a fifth to account for the evolution of these four systems over time (Bronfenbrenner, 1979). The systems are as follows:

- the microsystem, which includes the groups and institutions that directly and immediately impact the child, that is, church, school, family, and individual biology;
- the mesosystem, which includes how groups and institutions are connected in context and how they impact each other;
- the ecosystem, which includes activities, events, and social settings that impact the child, youth, and family without their direct participation;
- the macrosystem, which includes cultural aspects of the child, youth, and family such as race, ethnicity, poverty, and socioeconomic variables; and
- the chronosystem, includes the influence of events and transitions throughout an individuals' lives as well sociohistorical factors that influence their options and choices. (Bronfenbrenner, 1979)

This perspective allows for the identification of myriad factors impacting children, youth, and families as well as individual differences and outcomes (Stormshak & Dishion, 2002). According to Hardy and Darlington (2008), the ecological perspective recognizes the complex relationships and interconnectedness among various systems impacting a family and minimizes subjective interpretations of family functioning. Testa and Smith (2009) found that the variety of factors affecting families involved with DCS made it impractical, if not impossible, to identify and address a single one. This sociological perspective, however, facilitates recognition and understanding of

circumstances that can lead to more successful outcomes for families. For those involved with DCS, similar factors may affect their ability to stay out of DCS custody without ongoing support and resources. Recognizing and understanding these factors can therefore assist in the development of more effective treatment interventions, more proactive policies and procedures, and more ongoing support to ensure long-term success for families that have been reunified (Child Welfare Court Improvement Project, 2013). Leaving aside the issue of parents' personal responsibility for many aspects of DCS involvement, ecological theory addresses instead environmental factors that may shape individuals' personal options and choices. This study was designed to identify any factors that are particularly prevalent in families that are reactivated into DCS custody within 2 years of reunification.

Based on an extensive review of the literature, Brook, McDonald, Gregoire, Press, and Hindman (2010) identified what they called "predictors of reunification" (p. 395), and their results have been confirmed in several other studies. Among these factors, it was found that two-parent households reunified faster than single-parent households (Clemons et al., 2010). Several studies have reported that poverty has a negative impact on reunification (Brook et al., 2010; Hines, Lee, Osterling, & Drabble, 2007; Simmel, 2011). From an ecological perspective, poverty impacts vocational, medical, and safety options for children and families, limiting parents' access to care and opportunities for housing and employment, both of which are also critical factors in successful reunification. Reactivation is more likely when parents lack a viable income and

resources and opportunities to maintain their households and families in a safe manner (McDonald, Poertner, & Jennings, 2007).

According to Hines et al. (2007), ethnicity plays a role along with poverty as an indicator of successful reunification. Simply put, Caucasian children tend to be reunified sooner and more often than children of other ethnicities (Wulczyn, 2004). The complicated relationship between race and poverty has been explored in numerous studies and social discourses; particularly relevant here is the examination by Frederick and Goddard (2007) of the relationship between impoverishment as an adult and trauma and adverse experiences endured during childhood. These researchers argued that early trauma and abuse impact an adult's ability to maximize "human capital" (p. 323), thus leading to an adverse cycle of neglect and failure in many aspects of life. Wells and Correia (2012) reviewed several studies that seemed to indicate that African American children are returned to care at higher rates than Caucasian children.

There have been reports that younger children tend to be reunified sooner that older children (Kim, Tajima, Herrenkohl, & Huang, 2009). Thus McDonald et al. (2007), who included adoption and guardianship in their definition of permanency, found that younger children find permanency sooner than older children. In Arizona, however, children under the age of 6 represent the largest age group removed (CAA, 2014). Time in care may also serve as a predicator of reunification, in that children who have been in care for relatively long periods are relatively less likely to be reunified or to find any sort of permanency. The issue of the duration of care thus poses many challenges to DCS case managers, who must assess whether a child can be reunified safely while bearing in mind

that the chances for successful permanency decrease the longer a child is in care. The risk of reactivation, on the other hand, is increased when reunification occurs before the issues that led to removal have been resolved and the necessary ongoing supportive resources have been put in place (McDonald et al., 2007; Sledjeski, Dierker, Brigham, & Breslin, 2008).

Conceptual Framework

Reactivation of families by the Arizona Child Protective Services is a complex decision that involves legal, social, and cultural, economic, and clinical factors. While every family's situation is unique, the identification of any common denominators can be expected to facilitate informed decision-making and proactive service delivery. Despite the disproportionately high number of reactivations in Arizona (CAA, 2016), the situation in the state or any part of it has not been the subject of a dedicated study. Perhaps as a consequence, there have been no significant changes in DCS policy and procedures, and clinical service support and implementation have been inconsistent. Nationally, according to Sledjeski et al. (2008), as many as half of all DCS families will be subjects of further DCS reports made after reunification. These researchers, while recognizing that child safety is the primary rationale for parents losing custody of their children, proposed using a risk assessment that covers myriad factors to assess risks to children in their specific environments. Courtney (1995) and Terling (1999) outlined six factors that seem indicative of increased reactivation, including children being reunified within 3 months of initial removal, families receiving welfare benefits, children suffering from health issues, children being placed in nonrelative placements, children having

endured multiple placements prior to reunification, and being African American. This study represents an initial step in the process of evaluating the current reactivation practices and outcomes. The literature review covered research studies and outcomes on a national level with a focus on children, youth, and families involved in child welfare systems. Factors that may be predictors of continued DCS involvement are compared to equivalent factors in the general population.

Literature Review

Substance abuse affects many people in the United States and around the world. There are many studies on the effects, both physical and mental, of drugs on individuals, families, communities, and larger systems. According to the SAMHSA (2012), 23 million people in the United States abuse drugs and that a further 100 million are impacted by it. The associated medical, legal, and human costs are estimated at over $300 billion annually, with mental health and substance use treatment expenditures topping $172 billion in 2009 (SAMHSA, 2012). Marsh and Smith (2011) estimated that at least 50% and as much as 80% of parents involved in child welfare agencies suffer from a diagnosable substance use disorder. These numbers were corroborated by Correia (2013) in a Casey Family program review of state child welfare systems. In Arizona, over 75% of all DCS removals of children involve some form of substance use (CAA, 2013; DCS, 2014), including actual use and abuse by the parents and drug trafficking and distribution. Nationally, anywhere from 50% to 79% of all children in foster care may have had some sort of exposure to substance use (Testa & Smith, 2009; SAMHSA, 2012.

Numerous studies have addressed the challenges, causes, costs, treatment strategies, and outcomes associated with substance use. Among these, a few have linked parental substance use with child maltreatment (Brook et al. 2010), referring to a cycle of drug use, poverty, and learned helplessness that can plague generations of families. Many families involved with child welfare agencies often have multigenerational substance use histories, but there is no significant individual link between substance use and child maltreatment (Child Welfare Information Gateway, 2012a). Other factors, such as poverty, domestic violence, parental mental illness, and trauma history, often co-occur with substance use, so it is useful to assess as many variables as possible to provide families with the best possible chances of a successful outcome from DCS involvement. There is research indicating that substance abuse treatment independent of other factors fails to produce sustained successful outcomes and that, of every 100 parents with substance use issues involved with DCS, only 13 complete treatment (Oliveros & Kaufman, 2011). The review by Brook et al. (2010) includes a variety of statistics relating to substance abuse treatment and successful outcomes, among them the finding that an average of four rounds of treatment precede sustained sobriety, which suggests that the timeframes for reunification—an average of 20 months in Arizona—may be unrealistic in cases in which parental sobriety is an issue (Oliveros & Kaufman, 2011). According to Correia (2013), parents who have recently reunified with their children experience an increased likelihood of relapse; thus continued substance abuse treatment is recommended after reunification. Hohman and Butt (2001) outlined a developmental model of addiction recovery in an effort to provide DCS workers with a framework for

assessing whether and when reunification has a reasonable chance of success based on the parents' positions. Green, Rockhill, and Burrus (2008) emphasized the importance of interagency collaboration for substance-using families within the DCS system in terms of goals, treatment, and outcomes. Collaboration often ensures the parents' needs are better met; provides support for parents; can improve service delivery and quality; and provides hopefulness for parents (Green et al., 2008; Singh, Thornton, & Tonmyr, 2011). Hardy and Darlington (2008) found that parents reported benefitting from formal and informal support services that continued after reunification. This finding was confirmed in a qualitative study by Lietz, Lacasse, and Cacciatore (2011) in which parents in successful reunification cases listed the support that they considered most useful in their reunification case plans and described the support that they continued to require. Spath, Werrbach, and Pine (2008) studied social services agencies that had had successful reunification outcomes and contended that the effective programs emphasized collaboration with families and the sharing of responsibilities among system partners and families.

While poverty and other socioeconomic factors seem to be contributing factors in child maltreatment, researchers have been careful to insist that being poor is not the sole determinant of child maltreatment, even if it does add stress to family systems and dynamics (Oliveros & Kaufman, 2008). Paxson and Waldfogel (1999) conducted an extensive study of child maltreatment that took into account such economic determinants as family income, use of government resources, family structure, and parental work threshold for Temporary Assistance for Needy Families (TANF) for a single-parent

family of three was approximately $7000 annually. TANF is a cash-assistance benefit for needy families that is often received in conjunction with Aid to Dependent Children and Families and can include food stamps and medical benefits, depending on the state (National Center for Children in Poverty [NCCP], 2012). Seven thousand dollars per year is not much money on which to raise a family in the United States. Benefits are altered in cases in which families receive other income, such as work income, disability payments or Social Security benefits (ACYF, 2012). In Arizona, these benefits reach their maximum per child after 5 years. Arizona has a poverty rate of approximately 21%, significantly higher than the national U.S. average of around 14% (U.S. Census Bureau, 2012). The poverty threshold is approximately $11,000 annually for a single individual, $17,500 for a single-parent household with two children, and $26,000 for a two-parent household with three children (NCCP, 2012). These are national averages; the thresholds have varying significances in different parts of the country.

There are also differences in the poverty threshold across ethnic groups. Poverty thresholds are higher on average for African Americans and Hispanics, being almost double the national average. Children are also over-represented in these statistics, with 22% of all of those under 18 in poverty (NCCP, 2012). Households headed by single women, especially African Americans or Hispanics, have a poverty threshold of over 31%, whereas single men have a 15% threshold and two-parent households over a 6% threshold (U.S. Census Bureau, 2012). Certain demographics are also more prevalent in the foster care system, which overwhelmingly serves those who are non-White and poor (Hines et al., 2007).

Poverty limits current and future choices and opportunities for families. It often limits where people live, work, and attend school and their access to resources and community support. Poverty can thus create a cycle of dependence and learned helplessness for generations of families (Frederick & Goddard, 2007). Any sustainable intervention must therefore include an economic component that provides parents with the means to support themselves and their children and to develop skills and move beyond their current level of functioning (Green et al., 2008; Hines et al., 2007; Simmel, 2011). Leaving poverty behind requires various kinds of support and resources on various levels, including immediate resources and concrete services, the development or enhancement of educational and vocational skills, and a living wage and benefits (Hines et al., 2007; Simmel, 2011). Once parents begin to feel some ability to manage their lives, they will need support to follow through with necessary life changes (Green et al., 2008). Walsh and Douglas (2009) asserted that families will never be truly safe and stable so long as the parents lack the capacity and opportunity to escape poverty, for which reason financial support must be a part of a reunification strategy if it is to be successful in preventing reactivations.

To review, child maltreatment encompasses physical, sexual, and emotional abuse and neglect, and the removal of children by DCS usually indicates that such abuse jeopardizes their safety (Frederick & Goddard, 2007; Stokes & Schmidt, 2011). Such trauma is more prevalent in people's lives than was once thought. For the purposes of this general discussion, trauma is defined as an overwhelming event, such as a threat to self or others, that causes intense feelings of fear, helplessness, or horror (Bloom, 1997). There

are many different types of trauma and responses to it. Trauma can result from chronic stress, which can be defined as an overwhelming external element that impacts an individual's sense of safety on a daily basis. Interpersonal trauma often involves reenactment, in which the survivor attempts to recreate the responses, behaviors, and consequences associated with trauma in subsequent relationships (Bloom, 1997). The Adversity Childhood Experiences study found that the frequency of traumatic events experienced over a lifetime correlates positively with the incidence of physical ailments, high-risk behaviors, and premature death (CDC, 2012).

Psychiatrist Perry (2002) has done extensive research on how the brain changes when it has experienced trauma, arguing that memories of trauma can influence behavior, for instance manifesting as posttraumatic stress disorder. Within the brain, the amygdala, more specifically this organ's lateral nucleus, controls how trauma and stress are processed, stored, and manifested (Pinel, 2009). Complex brain function occurs in the neocortex, including the processing of sight, speech, written language, and personality. In cases in which trauma and stress have occurred prior to the development of these higher functions, survivors are often at a loss to describe and explain what they have suffered (Perry 2002) and these functions may fail to develop properly (Becker-Weidman, 2005). Amid a growing body of research regarding how best to treat survivors, then, it must be kept in mind that adverse brain development impacts long-term physical health, cognitive learning capabilities, and socialization skills, particularly for those who are traumatized as infants or young children.

The consequences of trauma for individuals and families are significant. Over

time, in the absence of changes in the trauma or response to it, learned helplessness and symptoms related to posttraumatic stress disorder may manifest. According to Wolfe (2006), learned helplessness shapes the survivor's view of the world and is responsible for depression and abuse of self and others. This is one possible explanation for the cycle of abuse within family systems that can lead to DCS involvement, removal, and reactivation. Sprang, Stanton-Tindall, and Clark (2008) determined that parental substance use correlated with an increase in child abuse and was thus in part responsible for the large proportion of children in child welfare systems who have been exposed to trauma.

The National Child Traumatic Stress Network (2010) estimated that 1 in 58 children has experienced some form of trauma and that many experience complex trauma, which is defined as multiple types of maltreatment and significant disruption in healthy functioning across several of life's domains. There have accordingly been calls for more immediate and comprehensive trauma assessments to provide trauma-informed practices and services (Kletzka & Siegfried, 2008). Seery et al. (2010) further argued that many children in DCS custody suffer from cumulative trauma, since it is rarely the case that families face only one challenge to their ability to maintain stability. Recognizing the extent and sources of trauma will enable better policy decisions, legal orders, treatment interventions, and follow up resources (Kisiel et al., 2009). According to Gillingham (2006), most risk assessments used in child welfare cases are too general and subjective to assess the risks of maltreatment consistently and accurately. A growing body of research suggests that early intervention programs help stem the tide of generational

trauma and overall child maltreatment and accelerate the healing process. A study by Asawa, Hansen, and Flood (2008) of various aspects of early intervention programs, including location of service, service provision, and staff qualifications, found that such programs were more successful when carried out before removal in terms of parental engagement, motivation, and participation in curricula and interventions.

As noted several times already, there appears to have been no analysis as yet of the rate of removals, reunifications, and reactivations in Arizona or across the country despite growing concerns that reunification with parents or some other form of permanency for children is taking ever longer to achieve (McDonald et al., 2007; Talbot, 2008). There have been studies on predicting recurrent abuse using various family variables. Thus Sledjeski et al. (2008) found that the period prior to DCS involvement was one of the best predictors of continued child abuse; families without a prior DCS history but with a history of domestic violence were likely to have experience incidents of child maltreatment.

Other work has focused on behaviors that lead to DCS involvement. Lussier, Laventure, and Bertrand (2010) identified maternal substance use as one of the best predictors of DCS involvement and recommended treatment as well as parent support programs that provide mental health services, concrete services, and long-term availability of resources. Morton and Konrad (2009) also argued that substance-abusing parents require an extensive positive social network in order to remain sober and keep their families together and safe. McCann et al. (2010) stressed the need to provide financial resources to DCS families but also to work to decrease dependence on the DCS

system and build autonomy for future family development. More and more research is documenting the significant stress that poverty causes for individuals, families, communities, and systems (Wadsworth et al., 2008; Walsh and Douglas, 2009). Thus Green et al. (2008) have recommended making available extensive social and community support and resources to maintain the safety of children and families.

Other researchers point to systemic issues as key factors in reactivations. The inexperience and subjectivity of caseworkers can undermine the equity and consistency of decisions regarding reunification (Crea, Crampton, Knight, & Paine-Wells, 2011; Marts et al., 2008; Stokes & Schmidt, 2011). Variations in the training and supervision of DCS case managers and investigators from state to state can also lead to inconsistencies (Lietz, 2008; Sinanan, 2011). While the relevant legal issues should be clear, interpretations and standards often differ among jurisdictions, even within the same state. It is also often difficult to track families that move and thus to maintain their access to benefits and services and to monitor children for abuse and neglect (Child Welfare Information Gateway, 2012a; Crea et al., 2011; Marts et al., 2008).

Arizona, as discussed, has witnessed increases in child removals, particularly following the death of children under DCS protection (Brodesky, 2012; CAA, 2012; Talbot, 2008). The Arizona legislature has mandated lowering DCS caseload sizes in hopes of increasing staff retention, increasing the consistency with which policies are implemented, and generally improving outcomes for children and families (CAA, 2012). Nationwide, numerous position papers issued by various child welfare organizations have called for improvements in investigative protocols and practices in order to ensure

consistency and equity across economic, racial, and social lines (Hohman & Butt, 2001; Pence, 2011; Rivaux et al., 2008). Given the prevalence of trauma involved with DCS-identified families, better screening and assessment tools are needed, particularly in the area of trauma, as well as an awareness that treatment is often not time-limited but requires ongoing support (Asawa et al., 2008; Chemtob, Griffing, Tullberg, Roberts, & Ellis, 2012; Romanelli et al., 2009).

There has also been much discussion of the role of child welfare staff in the reunification and reactivation cycle and the need for better training and supervision of case managers (Conradi, Wherry, & Kisiel, 2011; Hendricks, Conradi, & Wilson, 2011; Lietz, 2008; Sinanan, 2011). Further, while training programs and curricula may initially be sound and comprehensive, there is a need for ongoing supervision, training, and support as workers encounter issues in the field. As noted earlier, better collaboration between service providers and DCS workers can improve the delivery to families of the necessary support, both formal and informal, for success with their case plans (Hendricks et al., 2011; Jensen, Pine, Spath, & Kerman, 2009; Lietz et al., 2011; Spath et al., 2008). In many studies, parents themselves indicated the need for better follow-up support in order to facilitate successful reunification in the long term, including financial, social, and treatment resources (Flemons et al., 2010; Green et al., 2008; Jack & Gill, 2010). Finally, numerous studies have taken into account such global systemic issues as racism, poverty, and sexism from psychological, sociological, economic, and political perspectives (Hines et al., 2007; Mangold, 2007; Wadsworth et al., 2008; Walsh & Douglas, 2009).

Chapter 3: Research Method

A statistical analysis was conducted using archival data from DCS cases of children who were removed, reunified, and in some cases reactivated in the period from 2009 through 2011. A logistic regression analysis was used to identify any statistically significant relationships between the independent variables and the dependent variable. This form of analysis is appropriate for classifying categorical and dichotomous independent variables. The population, samples, instruments, and ethical considerations are discussed in this chapter.

Research Design

A quantitative study was conducted with the aim of identifying patterns involving several variables in relation to the rate of reactivation. Findings from the literature review identified ethnicity, poverty level, employment, and parental substance use as variables associated with increased rates of child welfare removals and therefore with the likely of reactivations as well. Other factors, including marital status and number of children involved, may also be predictive of reactivations but have not been well researched.

The dependent variable family status has two levels, namely reactivated (children again removed from home) and nonreactivated (still reunified following removal). Previous research suggested that after 2 years, a great many possible factors that could impact family functioning such as maturational and environmental changes are at play (Hines et al., 2007; Terling, 1999), so the desire to limit the number of factors was the rationale for selecting the 2-year window for analysis of reactivations.

From among the many potential independent variables involved in a DCS removal case, for the purposes of this study, poverty, ethnicity, parental employment, and parental substance use were selected for analysis. The U.S. Census Bureau (2012) ranked Arizona eighth in the country in terms of poverty. Parental unemployment is associated with poverty and has been linked to higher incidents of child maltreatment (Gillham et al., 1998; Slack, Holl, McDaniel, Yoo, & Bolger, 2004). Wells and Correia (2012) reviewed numerous studies that showed disparities in terms of poverty levels and ethnicities, including child maltreatment reports and children in care. As noted earlier, substance use is a factor in over 75% of child welfare removals (CAA, 2013; DCS, 2014).

This study describes the current state of child removals in Arizona. While the rest of the country has seen a reduction in child removals and an increase in family support services, Arizona has experienced the opposite regarding both these trends (U.S. Administration for Children and Families, Office of Family Assistance, 2013), as well as a large percentage of children returning to care (CAA, 2012). Identification of predictive factors could thus inform the provision of services and interventions designed to enable families to remain safely at home together.

The main hypothesis behind this study was that the predictor variables discussed above would be able to predict the likelihood of reactivation. There were no time constraints that impacted data collection nor were interventions required, as this study involved sing archival data and historical information. Logistic regression also helped prioritize the independent variables in terms of their significance for the dependent

variable (Gravetter & Wallnau, 2009). The findings from this analysis are intended to lead to the adoption of better policies and procedures regarding removals and reactivations for DCS and to help providers implement treatment interventions and support that addresses the needs and concerns of these children and families, including more prevention services designed to avoid the initial removals.

Methodology

Population

The population for the study was children and families that have experienced being removed, reunified, and/or reactivated in the period from 2009 to 2011 in the state of Arizona, during which approximately 14,000 children were removed across the state (13,346 children from 2009 to 2010 and 7,146 in 2011; CAA, 2012). Some 8,000 of these children were removed in the selected southern county 978 of them in 2011;DCS, 2014).

Sample

Archival data were gathered from a behavioral health agency in southern Arizona that enrolls approximately two thirds of removals in the area. The criteria for inclusion were families that have been removed, reunified, and, in some cases, reactivated, in the period from 2009 to 2011. A total of 628 records of families met the stated criteria and were reviewed, with the expressed written permission of the chief executive officer of the responsible behavioral health agency. The criteria for removal and reunification are consistent throughout Arizona, and the variables defined and studied here were ones that could be analyzed in each of the state's counties; thus, in further research, the variables used in this study could be analyzed elsewhere. Only data relevant to the stated variables

were reviewed and coded for the study. Any identifying information was removed prior to coding the data set to preserve the anonymity of the families.

Operationalized Definitions

Given the complexities of the variables and the multiple meanings they can have, they were defined in the following manner for the purposes of this study (DCS, 2013).

- *Removal* was defined as a child removed from their biological parent between January 1, 2009, and December 31, 2011.
- *Reunification* was defined as a child being returned to a biological parent between January 1, 2009, and December 31, 2011, and not subsequently reactivated during this period.
- *Reactivation* was defined as a return to state custody after being removed and reunified within 2 years of reunification between January 1, 2009, and December 31, 2011.
- *Poverty* was defined as the child being enrolled or eligible for enrollment in the Arizona Medicaid program at time of removal.
- *Ethnicity of the child* was coded by a person's own identification within Arizona's six categories of ethnic classification, namely Alaskan/Native American, Hispanic, Asian, African American, White-not Hispanic, and Other.
- *Parental substance use* was dichotomously coded depending on whether substance use was one of the recorded reasons for removal.

- *Parental employment* was measured by employment status at time of removal and/or reactivation as reported in the records and was dichotomously coded. (Part-time/full-time employment was not coded because this information was not consistently indicated in the case records.)

Because the independent variables of parental marital status and number of children may also have an impact on the rate of reactivation within 2 years of reunification; they were identified and recorded for each family at the time of removal and/or reactivation.

- *Marital status* was coded as to whether the caregivers at the time of removal were married or single.
- *Number of children* indicated the number of children under the age of 18 living in the home at the time of removal and reactivation, including adoptive, kinship, and biological children.

Data Analysis Plan

The literature review indicated that poverty, ethnicity, parental substance use, and parental employment figure prominently in child welfare removals and reactivations across the United States. This study was designed to determine whether the presence of these factors increased the probability that children would be removed and reactivated within 2 years of reunification. Thus, in reviewing the archival data, removal dates reunification dates and reactivation dates were noted.

Research Question 1

Do poverty, ethnicity, parental substance use, and parental employment predict reactivations of children within 2 years of reunification?

- $H_0$1: Poverty, ethnicity, parental substance use, and parental employment are not predictive of reactivations of children within 2 years of reunification.
- $H_1$1: Poverty, ethnicity, parental substance use, and parental employment are predictive of reactivations of children within 2 years of reunification.

A logistic regression equation was calculated from the subsequent data to determine whether the independent variables of poverty, ethnicity, parental employment, and parental substance use had a significant effect on the dependent variable, which included reactivated and nonreactivated families. Descriptive statistics were obtained to provide a profile of the sample and thus to determine whether there was a linear relationship between the independent and dependent variables and to calculate the correlation coefficient for each relationship between the variables. The logistic regression analysis used SPSS for Windows, 17.2 Revisions (SPSS, Inc. 2009). The alpha level was set at .05; the effect size of .20 with a power of .75 indicated a sample size of at least 695 participants (Ellis, 2010).

Research Question 2

While accounting for poverty, ethnicity, parental substance use, and parental employment, to what extent do marital status and number of children predict reactivations of children within 2 years of reunification?

- $H_0$2: Marital status and number of children are not predictive of reactivations of children within 2 years of reunification.
- $H_1$2: Marital status and number of children are predictive of reactivations of children within 2 years of reunification.

As with the previous independent variables, a logistic regression equation was calculated for each from the subsequent data. Descriptive statistics were obtained to provide a profile of the sample. The relationship between the independent variables of marital status and number of children and the status of reactivated or nonreactivated families of the dependent variable were assessed to determine whether a linear relationship existed between the independent variables and the status of the dependent variable and to calculate the correlation coefficient for each relationship between the independent and the dependent variables. A logistic regression analysis, specifically a hierarchical regression using SPSS for Windows, 17.2 Revisions (SPSS, Inc. 2009), was accordingly conducted. The alpha level was tested at .05. An effect size of .20 with a power of .75 required a sample size of at least 695 participants (Ellis, 2010).

For each variable, the relationship between the independent variables was assessed to determine the strength of the correlation through a correlation coefficient matrix. A regression equation was calculated from the subsequent data, and measures of validity, including variance and standard deviation and correlation of the dependent variables, were performed (Gravetter & Wallnau, 2009).

Threats to Validity

There were no readily identifiable threats to external validity, at least in terms of the guidelines established by Campbell and Stanley (1963). Because the study used archival data and no instrumentation, there was little risk of issues relating to statistical regression, maturation, testing, instrumentation, mortality, or contamination effects. There was, however, a selection bias, because the data were obtained from a single agency, for which reason the results may not be representative of all children removed in the state of Arizona. There were also delimitations that could limit generalizability. To begin with, because the population was a convenience sample selected based on involvement with one organization, child welfare, the generalizability of the results to the larger population again cannot be asserted. All children in this organization who met the reactivated and nonreactivated criteria during the study timeframes could be selected to be in this sample.

A potential further limit on the generalizability of the study is the small portion of the total number children removed in Arizona represented by the sample. There are in addition the possibilities that some of the families may have been reactivated at or received services from other organizations, for such information was not included in the records analyzed for this study, and that some no longer reside in Arizona; in either circumstance, the records would not be able to provide a complete picture of these families' involvement with DCS.

Ethical Considerations

No data were collected or reviewed until approval was obtained from the Walden University Institutional Review Board (Approval number 12-05-16-0147144). The information was part of the behavioral agency's medical record of services, and identifying information was, as noted earlier, coded to ensure the anonymity of individuals; coding for statistical analysis ensured further anonymity. The resulting data set was password protected and will be maintained for 5 years on a protected device. Because this was an archival study, there were no participants per se. The American Psychological Association (2002) Code of Ethics 8.05 regarding informed consent was therefore not applicable.

Summary

The purpose of this study was to determine whether the expected independent variables of poverty, ethnicity, parental employment, and parental substance use could predict reactivations of reunified families. The statistical significance of each independent variable was determined using logistical regression, a research method that allowed for the consideration of other possible predictive variables, and parental marital status and number of children were studied as well. Archival data were used to allow for greater anonymity, though this approach may have limited the sample size and generalizability of results. It was the intent of the study to develop viable recommendations and further areas of research aimed at reducing the number of families reactivated in Arizona.

Chapter 4: Results

The purpose of this study was to identify if specific variables were predictive of reunification. The simple fact is that, absent greater emphasis on reducing removals and improving the success of reunifications, reactivations will continue to occur. In Arizona, approximately 20% of reunified families are reactivated, a statistic that compares unfavorably with the national average of around 6% (DCS, 2014).

Research Questions and Hypotheses

The literature review indicated that parental substance use and a family's level of poverty, including employment at time of the children's removal, figured prominently in child welfare removals and reactivations across the United States. In addition, a disproportionate number of children from the nondominant culture are removed nationally as well as in Arizona (Mangold, 2007). The purpose of this study was to determine if the presence of certain conditions and factors increase the probability that children will be reactivated within 2 years of reunification. This study focused on analyzing the independent variables of poverty, ethnicity, parental employment, and parental substance use. The dependent variable has two levels, reactivated and not reactivated. The following hypotheses were developed for analysis:

Research Question 1: Do poverty, ethnicity, parental substance use, and parental employment predict reactivations of children within 2 years of reunification?

$H_0$1: Poverty, ethnicity, parental substance use, and parental employment are not predictive of reactivations of children within 2 years of reunification.

$H_1$1: Poverty, ethnicity, parental substance use, and parental employment are predictive of reactivations of children within 2 years of reunification.

Research Question 2: While accounting for poverty, ethnicity, parental substance use, and parental employment, to what extent do marital status and number of children predict reactivations of children within 2 years of reunification?

- $H_0$2: Marital status and number of children are not predictive of reactivations of children within 2 years of reunification.
- $H_1$2: Marital status and number of children are predictive of reactivations of children within 2 years of reunification.

Data Collection

This study received Walden University's Institutional Review Board approval on November 28, 2016 (Approval number 12-05-16-0147144). Recording of the data began on December 4, 2016 at a behavioral health agency in southern Arizona that was receiving approximately two thirds of referrals for children removed by DCS in the area. Analysis was based on archival data entered by a variety of treatment staff working with children and families at this agency on its standard demographic referral form. The review period covered families that had experienced removal, reunification, and/or reactivation in the period from January 2009 through December 2011. The review included physical charts as well as electronic medical records. I was the sole data collector.

Analysis Plan

An Excel spreadsheet was created from the archival data that included identification of the independent variables of parental substance use (coded *yes* or *no*), parental employment (coded *yes* or *no*), poverty level indicated by coverage under Arizona Health Care Cost Containment System AHCCCS system (coded *yes* or *no*), and ethnicity based on the four categories within the Arizona AHCCCS system (coded *White not Hispanic*, *Hispanic*, *African American*, and *Other*, which includes African American, Asian, and American Indian). Parental employment for the purposes of this study was narrowly defined as having any paid full-time employment (coded *yes*). During the data recording, it was determined that part-time and/or volunteer employment was not consistently documented and therefore was coded as *no*. Only the number of children living in the home at time of the removal and reactivation was noted. In the data set, *married* or *single* were the only data recorded by the behavioral health staff at the time of intake. In the record, references to same-sex living arrangements, cohabitation, and married parents not living together were inconsistent and therefore not measurable; such situations were therefore coded as *no*. Consequently, for this study, marital status was documented as either married or single at time of removal. Dates of removal, reunification, and reactivation were also recorded.

Preliminary and exploratory analyses were first conducted to assess the state of the obtained data, to test the statistical assumptions of the primary analyses, and to run descriptive analyses on the obtained sample. Primary analyses were then tested using binary logistic regression to predict key outcomes from theorized predictors. All analyses

were conducted using SPSS v. 17, and significance was determined at the .05 level. Research questions were evaluated by examining the omnibus (chi square) test of the logistic regression model, and the significance of each predictor was examined using the Wald statistic for each individual predictor. The effect size for the omnibus model was Naglerke's R^2, and odds ratios were used as the effect size for individual predictors.

Sample

The sample for this study was selected from all children who had been removed and assigned to a behavioral health agency in a southeastern Arizona county between January 1, 2009, and December 31, 2011. As noted earlier, this agency was receiving approximately two thirds of the families that were removed in this county. Of the 1,032 families that were removed from January 2009 through December 2011, 627 were reunified, and of these 195 were reactivated within 2 years of reunification. The sample appeared representative of the demographic composition of Arizona, with White non-Hispanic (54%) and Hispanic (38%) ethnicities being the most common (U.S. Census Bureau, 2012). African American, Asian, and American Indian ethnicities, which together made up 8% of the sample, were combined for the purposes of the statistical analyses owing to their small individual percentages. There are limitations to bundling these three ethnicities in this manner, in that they have inherently differing experiences and perspectives that may extend to child welfare and distinctive cultural attitudes regarding treatment and definitions of successful outcomes. Table 1 illustrates the sample composition for all the variables in this analysis.

Table 1

Sample Demographics

		Reunified		Reactivated	
		N	%	*N*	%
Poverty					
	Yes	450	84	78	85
	No	84	16	14	15
Substance Use					
	No	110	21	15	16
	Yes	425	79	77	84
Married					
	No	396	69	64	70
	Yes	166	31	28	30
Employment Status					
	No	278	52	55	60
	Yes	257	48	37	40
Number of Children					
	1	154	29	36	39
	2	176	31	25	27
	3	117	22	15	16
	4+	88	16	16	17
Ethnicity					
	Other	43	8	7	8
	Hispanic	200	37	41	43
	White	292	55	44	49

Assumptions

In the formulation of both research questions, assumptions were made prior to the statistical analyses. For all logistic models, the focus was on predicting reactivation (rather than reunification). Predictors in the model included substance abuse (compared to no substance abuse), married (compared to unmarried), employed (compared to unemployed), number of children (treated as continuous), and ethnicity. All participants participated in the study only once per original data collection. The dependent variable of reactivation was coded on a dichotomous scale. The independent variables were categorical, being either ordinal or nominal variables. The dependent variable had two levels that were mutually exclusive and exhaustive. It was assumed that there were sufficient cases in which the families were reunified and reactivated (> 10%) to differentiate between the independent and dependent variables. Multicollinearity occurs when two linear items are too strongly related (hence the *co-* in *collinearity*). Bivariate relationships were tested among all categorical predictors, and the results did not indicate relationships strong enough to raise concerns regarding multicollinearity.

Research Question 1

A binary logistic regression was conducted for Research Question 1 to investigate whether ethnicity, poverty, parental substance use, and parental employment had an impact on the reactivation of families within 2 years of reunification. The possible predictor variables were poverty, ethnicity, parental employment, and parental substance use. Reactivation within 2 years of reunification, then, was the outcome of interest. According to the model, these independent variables were not significant ($p > .05$).

A summary of the model predicting reactivation within 2 years based on key demographics is outlined in Table 2. As shown, the overall model was not significant (χ^2 (4) = 1.00, p = .909; Naglekerke R^2 = .007), indicating that the set of predictors could not account for a significant amount of the variance (< 1%) in reactivation rates. The overall model correctly predicted 54.4% of all cases. Furthermore, none of the individual predictors proved to be significant (all ps > .05), indicating that no one predictor could reliably determine the likelihood that an individual would be reactivated within 2 years. The analysis is illustrated in Table 2. Therefore, the null hypothesis was retained.

Table 2

Summary of the Model Predicting Reactivation from Key Predictors

	Unstandardized β	S.E.	*OR*	Wald	*p*
Ethnicity	-1.640	.230	.848	.511	.475
Poverty	.071	.403	1.074	.031	.860
Employed	.049	.293	1.050	.028	.867
Substance Use	-.227	.379	.797	.358	.550
Constant	.218	.671	1.244	.106	.745

Note. Model summary: χ^2 (4) = 1.00, p = .909; Naglekerke R^2 = .007

Research Question 2

For Research Question 2, a logistic regression was conducted, controlling for the same four independent variables, on the variables marital status and number of children once the previous predicator variables were considered. The overall regression model was significant (χ^2 (2) = 6.74, p = .034; Naglekerke R^2 = .052), indicating that the sets of predictors could in fact account for a minimal amount of the variance in reactivation

rates. The model correctly predicted 54.4% of all cases, but the overall effect was small as indicated by Naglekerke R^2. Evaluation of the individual predictors indicated that number of children was significantly associated with reactivation (*OR* = .726, *p* = .020), indicating that families with more children were less likely to be reactivated within 2 years. None of the remaining predictors were significant as illustrated in Table 3. These results thus provide partial support for the research hypothesis.

Table 3

Summary of the Model Predicting Reactivation from Additional Covariates

	Unstandardized				
	β	S.E.	*OR*	Wald	*p*
Ethnicity	-2.070	.235	.813	.777	.378
Poverty	.019	.412	1.019	.002	.964
Employed	.087	.299	1.091	.085	.771
Substance Use	-.333	.386	.717	.743	.389
Married	.358	.311	1.431	1.332	.249
Number of Children	-.321	.138	.726	5.383	.020
Constant	.857	.786	2.356	1.190	.275

Note. Model summary: χ^2 (2) = 6.74, *p* = .034; Naglekerke R^2 = .052

Summary

This study examined six different independent variables that have been reported to play significant roles in child welfare removals. All variables were accounted for in this study, though only one of the six, number of children, was found to play a significant role in the reactivations of the 195 families in this study. This was not the expected outcome given the present state of scholarship as revealed in the literature review in

Chapter 2. More specifically, this study found that the number of children present in the home at the time of removal correlated inversely with the likelihood of reactivation within 2 years of reunification. Possible explanations for this finding will be explored in the following chapter along with implications for further research given these outcomes.

Chapter 5: Discussion, Conclusions, and Recommendations

Overview

The purpose of this study was to identify if a specific set of variables increased the likelihood of reactivation for children and families in the DCS system after their reunification. According to several studies, poverty and employment status play significant roles in child welfare removals, and census data suggested that a disproportionate number of minority children are being removed in most states (U.S. Administration for Children and Families, Office of Family Assistance, 2013; U.S. Census Bureau, 2013). Parental substance use has continued to be a factor in approximately 80% of all child removals across the country (Marlowe & Carey, 2012). This study focused on these and additional factors leading to reactivations in a southern county in Arizona that has had twice the national average of reactivations measured within 2 years of reunification. Based on this analysis, I had hoped to provide some recommendations to increase child safety and perhaps prevent initial removals. When removal must occur to protect the safety of a child, quality therapy services should be made available, both during and after care, to facilitate reunification within a reasonable amount time (ACYF, 2012). Reactivations should be rare and should occur only when the safety of children cannot be maintained even with all the available support and services.

The identification of consistent variables associated with reactivations is intended to assist in making decisions and providing services that can lead to more positive outcomes, including effective treatment interventions, proactive case management decisions regarding initial removals and reunifications, consistent policies regarding child

safety and removals, and efficient use of community resources by children, youth, and families.

Findings

This study used archival data from a behavioral health agency that works with families involved in the DCS system. Families were included from which children had been removed during the period from January 1, 2009, through December 31, 2011. These families were coded either removed and not reunified, reunified, or reactivated within the timeframe of the study. Based on a survey of the literature, the independent variables of poverty, ethnicity, parental employment, and parental substance use were selected for analysis in relation to reactivation rates in the sample. The dependent variable of family status had two levels, reactivated and nonreactivated. The first research question was developed to determine whether these four independent variables were predictive of reactivation, but within the limited time parameters of this study, the results of the analysis indicated that none were. As a result, the null hypothesis for this research question was retained.

A second research question was developed to determine whether the independent variables of marital status and number of children were predictive of reactivations in the same sample after controlling for the first four independent variables. This analysis revealed that latter variable, number of children, did indeed have such predictive power, so the null hypothesis for this question was rejected. Specifically, there was an inverse relationship between the number of children in a family and the likelihood of

reactivation: fewer children correlated with an increased likelihood of reactivation and more children with a decreased likelihood of reactivation.

Interpretation of Findings

This study identified only one independent variable, number of children, that had any statistically significant relationship to the dependent variable. While the other independent variables were present to varying degrees in all the cases, none were significant. This finding contradicted much of the research discussed in the literature review. Regarding substance use, SAMHSA (2012) included extensive research documenting the significant emotional, social, economic, and human costs involved, and Marsh and Smith (2011) have asserted that substance use is a factor in 50% to 80% of all child welfare removals across the country at the initial removal, but there have been few studies analyzing if substance use continued to be a factor at time of reactivation, which is a limitation of this study as well. Poverty and ethnicity are also disproportionately documented in child welfare cases nationwide (Child Welfare Information Gateway, 2012b; Hines et al., 2007). It is additionally worth observing that almost 31% of all families in the Arizona county studied here were reactivated, which is over 5 times the national average (DCS, 2014). While these statistics were not part of this study, they are an indication of the magnitude of the reactivation problem in the state.

Research Question 1

The literature review indicated that poverty, ethnicity, parental substance use, and employment were significant factors in most child welfare removal cases. In this study, poverty and substance use seemed to have been aspects of many cases on the two levels

of the dependent variable, namely children who were reactivated and those who were not. The first logistic regression analyzed whether the influence of the factors of poverty, ethnicity, parental substance use, and parental employment was statistically significant in removals and reactivations within 2 years of reunification.

As observed, the finding in this study that none of independent variables in Research Question 1 were statistically significant contradicted earlier literature. Substance use was prevalent in homes from which children were removed, and poverty and parental employment can certainly increase stress on and risks for vulnerable families (Slack et al., 2004). Some disparity is apparent among ethnic groups regarding removals (U.S. Administration for Children and Families, Office of Family Assistance, 2013; U.S. Census Bureau, 2013). In any case, the inconsistency between the findings presented here and the findings discussed in the literature review points to the need for further study to determine if this study was designed in a way to capture the true significance of the variables analyzed for the first research question. This study with its limited definition of variables and time parameters may not accurately capture the full picture of the variables' impact on reactivation.

Research Question 2

On the other hand, as just stated, one of the two independent variables analyzed for the second research question was statistically significant: there was an inverse relationship between the number of children and the overall likelihood of reactivation. This finding seemed inconsistent with certain widely-held assumptions regarding the impact of the number of children in a family; for the increased strain on family resources

that comes with more children in the home would seem to create more, not less, favorable conditions for reactivation (Harnett, 2008; Lietz et al., 2011; Simmel, 2011).

There might be several reasons that the number of children had some significance in this study. Given that in Arizona during the study timeframe most children removed ranged from newborns to 1-year-olds (CAA, 2012), the parents may be younger and inexperienced parents. Having a young child as a new parent creates many stressors on a family. New parents can often be inexperienced and unequipped to deal with these new pressures as well as their own developmental tasks and milestones. Young children are totally dependent on parents for all their needs, which in turns creates many challenges for parents who are also trying to work, maintain a household, and take care of a baby (Asawa et al., 2008). This study did not address the age of the parents, which may be helpful in targeting services to specific age groups based on developmental needs. Often families with more children have systems of support and shared labor that can assist as more children are added to the family as well as having more experience in managing all the daily tasks of parenting (Crea et al., 2011)

Limitations of the Findings

The theoretical premises of this study seem aligned well with the research discussed in the literature review. Both Bronfenbrenner (1979) and Brown et al. (1998) have asserted that myriad factors have an impact on family functioning. The former's view of individuals is as products of themselves and beyond to families, neighborhoods, communities, cultures, and environments on the micro- and macrolevels, concepts that encompass the independent variables included in this study and more of which could be

the focus for further studies. The theory put forward by Brown et al. also focused on a variety of risk factors within families and communities. Within this framework, further research on the independent variables analyzed in this study together with others such as domestic violence and trauma could be informative. That is, there may be other variables that play more significant roles in removals and reactivations than the ones analyzed here.

The failure of this study to demonstrate any statistical significance for most of the independent variables in relation to the dependent variable can be explained in a few ways. Anecdotally, a great many of these variables seem to be present in the data set of this study. However, a clear limitation of this study is the fact that the sample was derived from a single behavioral agency; moreover, the medical record accessed was not the complete family file retained by DCS. The data set may not, therefore, be representative of the entire state of Arizona in terms of population, demographics, and information. The case files of other agencies could potentially provide other predictive variables that were not available for this study. Nevertheless, the data set used here did allow for a predictive study of factors identified in the literature.

For this study, the variables were coded in a very rigid manner. More specific delineation among them may be necessary to determine their statistical significance. Thus, for example, there were no codes for part-time employment or volunteer work. Poverty can be coded in monetary terms rather than in entitlement terms. This study defined poverty as qualifying for Medicaid benefits rather than other potential qualifiers. Other definitions of poverty could include more vulnerable families such living in public housing and receiving disability benefits. Further, three ethnicities were combined for

convenience in the data analysis, but doing so imposes limits regarding the perspectives and needs of each ethnicity, as there may be cultural differences among them relevant to child welfare and treatment. Another potential limitation concerns the coding of marriage status, which rather than be represented dichotomously could instead be further defined in terms of cohabitation, married but living apart, and various partner relationships. More detailed information of this sort has the potential to provide insight into other challenges for families as well as areas of possible support. The age of the mother, which was not coded in this study, might also be of some significance for removals and reactivations. Thus, a younger mother could be at relatively greater risk of child welfare involvement that an older mother, who may have acquired increased support, skills, and resources as she had more children and may thus have become less involved with child welfare (Hill et al., 2010; Jack & Gill, 2010).

While DCS policies should be uniform, differences may persist among DCS units across the state of Arizona with respect to which families undergo removal, reunification, and reactivation (ACYF, 2012). Inconsistencies may include definitions and tolerance levels for managing potential risks in families. Urban counties may have relatively more resources than rural ones with which to recognize and assist vulnerable families to forestall removals. Further research might be able to identify inconsistencies in the legal implementation of DCS policies that impact the rates of removal, reunifications, and reactivations.

Prior involvement with DCS may also be predictive of further involvement, in which case a family's previous history with DCS could be predictive of reactivation.

Benefits of being involved with DCS could also be studied to assess whether the its role is in fact constructive.

Implications for Social Change

The safety and welfare of children is paramount to the continued functioning of societies across cultures. Many factors are crucial to ensuring child safety, including coordination, collaboration, and commitment among various systems and providers. In Arizona, children continue to be removed in large numbers, with more returning to care within months of reunification. These issues need to be addressed on many levels, from individuals and communities to cities and states and nations.

The findings of this study have the potential to impact individuals, communities, service providers, and system partners. In particular, it has been shown that the number of children in a household has some significance for the likelihood of reactivation. Since fewer children correlated positively with reactivation, the age and background of the parents needs to be explored. For example, younger parents may require services and support keyed to their developmental levels as they learn to care for their children. A history of involvement with the DCS system on the part of parents, whether as children or adults, could be predictive of reactivation, so this variable should be analyzed in future studies. Teen pregnancies have declined in Arizona, but the ages of the parents were not assessed in this study, nor were the ages of the children (U.S. Census Bureau, 2013).

Increasing attention has been directed to early intervention services for children under the age of seven, and the Number of Children variable could be relevant here. Identifying developmental and environmental needs early in a child's life can promote

successful functioning later in life when the fulfillment of those needs is part of a holistic treatment approach (American Academy of Child and Adolescent Psychiatry, 2009). In Arizona, most of the children being removed are under the age of six, so particular attention needs to be directed to addressing the specific needs of this population (DCS, 2014). Many states around the country have reorganized their child welfare systems to provide better outcomes for children and families, and Arizona has undergone several audits and reviews of its system. Nevertheless, the number of children removed and placed into care continues to rise in the state, while other states have experienced a reduction. One reason for this situation is the pattern of significant and frequent changes in the DCS leadership, which has delayed the analysis, creation, and implementation of policies. As a consequence, significant numbers of children return to care within 2 years of reunification (CAA, 2014).

Given the contradictory results of this study, a further review of the salient findings regarding poverty and its impact on families, particularly minority families, and on individuals, families, communities, and societies is warranted. Poverty often limits the educational and employment opportunities available to families in terms of access, support, and technical assistance. Education and employment are critical for breaking the cycle of poverty at every level (Frederick & Goddard, 2007). Moreover, substance use continues to be a major social problem in the United States and a significant factor in a majority of child removals (SAMHSA, 2012). Further assessment of variables that are similar across regions and the country as a whole could also assist in determining the

generalizability of various trends and the needs of families whose children have been removed.

Again, a major new finding here is that, contrary to what was expected, the number of children in a family seems to correlate negatively with the likelihood of reactivation. As noted, though, the ages of the parents and children, which were not addressed in this study, could be explored further with respect to this finding. While more children would seem to increase the stress on the family, systemic limitations may make DCS more likely to leave larger families intact, in which cases the availability of family or kin placement options contrasted with limited system placement options for large families may be significant considerations. In sum, understanding why more children in a family correlate with a reduced likelihood of reactivation could provide the basis for recommendations concerning practice and care.

Recommendations for Further Study

Given that the findings of this study are inconsistent with much of the previous research in this area, further review and analysis is warranted, particularly with regard to the negative correlation between family size and reactivation. In future studies, researcher could assess:

- any differences between rural and urban populations in terms of perspectives, practices, and outcomes;
- outcomes at different, and especially shorter, intervals during a family's case plan;
- the impact, if any, of prior DCS involvement;

- the impact of the number of children in reactivations, especially in terms of the ages of children and parents;
- the definition of poverty and the many challenges that it creates for families various several domains;
- the generalizability of the results of this study to other areas of the country; and
- the services that are most effective in preventing child removals and keeping families reunified after they leave the DCS system.

Conclusion

This study generated unexpected results. The literature review identified a number of predictive variables that were purported to play significant roles in child welfare removals and reactivations. Within the data set for this study, however, only one independent variable that had any significance, and this finding seemed inconsistent with previous reports. The data did confirm that the rate of reactivation in Arizona was five times the national average (CAA, 2012). The failure of this study to support much of the research explored in the literature review and the confirmation of an alarmingly high reactivation rate are indicative of the pressing need for further study.

The safety of children is a priority for everyone, and everything possible needs to be done to support families. Any child returning to DCS care after being reunified represents a failure of the system. It is necessary to appreciate the challenges that vulnerable families face and to provide them with assistance that will make a difference. A better understanding of the factors that contribute to removals and reactivations can

provide the basis for proactive steps to ensure that vulnerable families have access to resources that will help them to become successful adults and parents.

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Appendix A: Data Use Agreement

This Data Use Agreement ("Agreement"), effective as of December 1, 2016 ("Effective Date"), is entered into by and between Judith Anne Cornell ("Data Recipient") and CEO, Casa de los Ninos ("Data Provider"). The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set ("LDS") for use in scholarship/research **in accord with laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.** In the case of a discrepancy among laws, the agreement shall follow whichever law is more strict.

1. Definitions. Due to the project's affiliation with Laureate, a USA-based company, unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the USA "HIPAA Regulations" and/or "FERPA Regulations" codified in the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.

   Data Fields in the LDS. **No direct identifiers such as names may be included in the Limited Data Set (LDS).** In preparing the LDS, Data Provider shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the project: List all datapoints that partner site will be providing: Date of removals/reunifications/reactivations; rationales for removal/reunification/reactivations; services provided through the case plan; age; gender; educational level; AHCCCS eligibility; prior DCS involvement; number of children; court reports; prior DCS involvement; previous/current court involvement .

3. Responsibilities of Data Recipient. Data Recipient agrees to:

   a. Use or disclose the LDS only as permitted by this Agreement or as required by law;

   b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

   c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

   d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

4. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS **for the present project's activities only.**

5. Term and Termination.

a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

6. Miscellaneous.

a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER

Signed: _____

Print Name: Susie Huhn

Print Title: CEO

Casa de los Ninos

DATA RECIPIENT

Signed: _____

Print Name: Judith Anne Cornell

Print Title: Researcher