

Exploring Parenting Attitudes and Parental Risk of Child Maltreatment among Youth
Aging out of Arizona's Foster Care System

by

Jennifer Mullins Geiger

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved April 2014 by the
Graduate Supervisory Committee:

Elizabeth A. Segal, Chair
Karen E. Gerdes
Cynthia A. Lietz

ARIZONA STATE UNIVERSITY

May 2014

ABSTRACT

There are a number of factors known to influence the occurrence of child maltreatment, including parental history of child maltreatment. Youth aging out of the foster care system have been shown to experience a number of challenges associated with the transition to adulthood, including early unintended pregnancy and parenting. However, despite the presumed risks associated with being in foster care and having a history of child maltreatment, very little research has been conducted to examine the parenting attitudes among youth aging out. This study explored the parenting attitudes and parental risk of child maltreatment among youth aging out of foster care in Arizona and examined the relationship between relational support and parenting. Foster youths' parenting attitudes and parental risk of child maltreatment across five constructs: parental expectations, parental empathic awareness of children's needs, beliefs regarding the use of corporal punishment, parent-child roles, and children's power and independence were assessed. Linear regression analyses were conducted to assess the relationship between youths' perceived social support from friends, family, and significant others and their parenting attitudes and youths' current living arrangements and their parenting attitudes. Findings indicate that youth had lower than the median normed sample scores on two out of the five parenting constructs, parental empathic awareness of children's needs and parent-child roles. Overall, 17% of youth in the sample were considered high risk of child maltreatment as parents, while 79% were considered medium risk. Perceived social support from friends was significantly associated with higher scores regarding youths' attitudes about the use of corporal punishment and children's power and independence.

Youth living with foster parents had significantly higher scores than youth living on their own across three out of the five parenting attitude constructs. Youth living with relatives had higher scores than youth living on their own on the empathic awareness of children's needs parenting construct. Findings suggest that youth may rely on friends for social support and may develop more nurturing parenting attitudes if residing with foster parents or relatives. Implications for policy, intervention, and practice are discussed.

ACKNOWLEDGMENTS

There are many people to thank who have helped this dissertation and degree come to life. I want to thank my AMAZING dissertation committee who has supported me every day for the past 5 years. My most wonderful chair, Liz Segal has been the best mentor anyone could ask for over the last 10 years. She has been my advocate, my support, my source of inspiration, my teacher, and model for who I want to be when I grow up. She is responsible for my intellectual development, my confidence, my successes, and my drive to continue. Cindy Lietz is my go to person for almost everything who has taught me responsibility, integrity, dedication, patience, and shown me how to be genuine. You are an amazing teacher, researcher, and mentor. Thank you for showing me how to balance life, keep boundaries, and work hard for what you believe in. A big thanks to Karen Gerdes who is the most real person I've ever met. You are an honest, open, kind, generous, and thoughtful person. I admire you for your ability to always work hard, look out for others, and do whatever it takes to help others out.

My dissertation study was funded in part by the Doris Duke Fellowship for the Promotion of Child Well-Being. I want to thank DDAS for being a sounding board, offering advice, and being my support for the last few years. I am lucky to have Lisa Schelbe, Kerri Raissian, Carly Dierkhising, and Tamara Hurst as friends and colleagues.

This study was also funded in part by the ASU Graduate College Preparing Future Faculty Emeriti Faculty Association Fellowship and an ASU Graduate College Completion Fellowship. There are several people in the community who supported me and this study and allowed me into their worlds to better understand our system and the youth it serves.

Huge thanks to all of you who work with our most vulnerable group of kids and youth and do an amazing job every day: Pam Harris, Shannon Clayton, Yasmin Barker, Bev Kroll, Barbara Guillen, Mary Shraven, Greg Dicharry, Beth Rosenberg, Megan Conrad, and Simon and Elizabeth Kottoor. Thank you for sharing your time, resources, and wisdom with me. Thank you to my family at AFFCF, Kris Jacober and Tamera Shanker. You are such powerful women with the biggest hearts. You do so much for others and work hard every day to make sure the needs of other are met and that every child has a chance to be happy, comfortable, and achieve their potential of greatness. I admire you and can only hope to make the difference you have made in the lives of children over the years. I wouldn't have ventured into this study had it not been for the youth in Arizona's foster care system. I saw first-hand the struggles and wanted to do what I could to bring awareness to the cause and help to make changes and hopefully to make it better. I thank all of those youth who participated in the study, who were willing to share their lives and experiences and to those who are survivors, champions, and warriors.

Many students have been on this journey with me and shared in the trials, tribulations, joys, and celebration. I have been surrounded with some great minds and proud to share my time at ASU with you – Andrea Cimino, Heidi Adams, Jonel Thaller, Elisa Kawam-Martinez, Megan Lindsay, and Megan Hayes. I could not have made it through without Alex Wagaman, who listened to me complain, cheer, and cry. Thank you to Stephanie Ayers for being my stats go to person and always making me laugh.

I wouldn't be where I am if it were not for my dad and my surrogate parents along the way. Thank you for instilling in me the importance of education and hard work. You

have given me the opportunity to learn, to grow intellectually, and seek out knowledge and experience. Thanks to my brother, Kevin who has always cheered me on and made me just as proud of him as he is of me. I thank my surrogate parents over the years. I have been fortunate enough to have been loved by several caring and supportive adults who have always encouraged me to achieve my potential. I am forever grateful to Stan and Lorelee Pomeroy who are two of the most caring, kind, and giving individuals I have ever met. I learned kindness, unconditional love, and solid parenting skills from them.

I thank my newest family, the Geigers for taking me in as one of their own and showing me what a great family is. I especially enjoy our family trips and the intellectual stimulation. Kathy, Sean, Jacqui, Paul, Mary, Patrick, Jennifer, Ella, Martha (and Baby Boy A, Baby Girl B), you have all made my life more enjoyable and interesting.

I thank my friends who have supported me, encouraged me, and pretended to understand why I spend so much time in school. My best friend who has been there through it all, Misty Pavlovic – nobody knows me better than you. I am so lucky to have you in my corner and for our kids to grow up together. Kelly Ross, you are my rock. We are such different people on the surface, but you are my soul sister. You are a strong, courageous woman who I look up to and admire. I thank Emily Greatwood for giving me great friendship and life to one of the most important people in my life, Lily. Lily, you are truly my greatest inspiration who is too school for cool. I have no doubt that you will grow up to be a kind, strong, intelligent force to be reckoned with and I can't wait to be a part of it. I have the greatest friends who have kept me grounded and helped me to enjoy

life throughout this journey. Special thanks to the Dave and Camille Rockwell, our above average friends who know how to travel and have fun!

Finally, I want to thank my husband and the love of my life, Mike. You've given me life, love, happiness, and a family. Who knew that during the course of this PhD program, we'd get married, have a baby, and be expecting another? We have created an amazing life and family together. You have always encouraged me to keep going, to not give up, and I owe you so much for giving me the time, space, and support to finish my degree. You are such an amazing dad to our kids and they are so fortunate to have every opportunity to grow, learn, and love. I am fortunate to have a partner in life who challenges me and teaches me something new every day. Our boy is a constant reminder of why I do what I do. I am not sure I could love another human being as much as I love you, Z. You make me laugh, cry, and enjoy life so much more since you came into our lives. And, baby girl – we don't know you well enough yet, but we look forward to loving you and making the best life for you and your brother. Can't wait to meet you!

TABLE OF CONTENTS

	Page
LIST OF TABLES	xiv
LIST OF FIGURES	xvi
CHAPTER	
1 INTRODUCTION	1
Overview of the Research.....	2
Relevance of the Problem to Social Work.....	5
Purpose of the Current Research Study.....	8
2 LITERATURE REVIEW.....	10
Overview of Outcomes Related to Youth Aging out of the Foster Care System.....	10
Development of Parenting Attitudes and Behavior	12
Parenting Styles	13
Gender and Parenting	15
Early Childbearing, Young Parental Age, and Parenting.....	15
Sexual Activity, Pregnancy, and Parenting among Youth Aging Out.....	16
Living Arrangements Before and After Youth Age out of Foster Care	19
Placement Instability	25
Independent Living (IL) Skills Training	28
Social Support and Mentoring among Youth Aging out.....	29

CHAPTER	Page
Educational Experiences, Outcomes, and Aspirations among Youth Aging Out	33
Empathy and Parenting	36
Intergenerational Continuity of Parenting Attitudes and Behaviors	38
Intergenerational Transmission of Child Maltreatment	39
Knowledge of Parenting Strategies and Child Development	42
Child Maltreatment and Child-Related Factors	43
Contextual and Environmental Factors Related to Child Maltreatment	45
Literature Summary.....	45
THEORETICAL FRAMEWORK.....	46
Overview of Ecological Models	46
Relational-Cultural Theory.....	46
Risk and Protective Factors	47
Parenting and the Intergenerational Continuity of Maltreatment among Foster Youth Within an Ecological Framework	52
Uses and Critiques of Ecological Models	54
Research Questions	56
Hypotheses.....	56
3 METHOD.....	58
Research Design.....	58

CHAPTER	Page
Sample	58
Recruitment.....	59
Participant Protections.....	59
Data Collection	60
Survey Instrument and Measures.....	61
Parenting Attitudes	61
Parental Expectations	62
Parental Empathic Awareness of	
Children’s Needs	63
Beliefs in the Use of Corporal Punishment	63
Parent-Child Family Roles	63
Children’s Power and Independence.....	64
Perceived Social Support67
Empathy	68
Educational Experiences and Aspirations.....	69
Demographics	70
Foster Care Experiences	70
Data Handling and Storage.....	72
Variables.....	72
Power	73
Analytic Strategy.....	74
Missing Data	74
Research Question 1: Sten Scores and Child Maltreatment	
Risk.....	75

CHAPTER	Page
Research Question 2: Multiple Regression Analyses	75
Limitations	76
Summary.....	77
4 RESULTS	78
Descriptive Statistics	78
Educational Experiences and Aspirations	79
Foster Care Experiences	80
Pregnancy and Parenting Experiences	82
Perceived Social Support.....	83
Parenting Attitudes.....	83
Child Maltreatment Risk	84
Overall Risk	85
Bivariate Analyses	86
Analysis of Parenting Attitude Construct and	
Demographic Variables	91
Multivariate Analyses	91
Variables.....	91
Parental Expectations.....	92
Parental Empathic Awareness of	
Children’s Needs.....	93
Beliefs in the Use of Corporal Punishment.....	95
Parent-Child Family Roles.....	97
Children’s Power and Independence	99
Summary of Findings	100

CHAPTER	Page
5 DISCUSSION	103
Parenting Attitudes.....	105
Parent-Child Role Reversal	106
Parental Empathic Awareness of Children’s Needs	107
Beliefs in the Use of Corporal Punishment	108
Previous Research Related to Parenting Attitudes.....	109
Parental Risk of Child Maltreatment.....	111
Perceived Social Support and Parenting Attitudes	114
Youths’ Living Arrangements and Parenting Attitudes	118
Time in Care, Number of Placements, and Parenting Attitudes	120
Youth Aging out in Arizona	121
Study Limitations	122
Implications	123
Parenting Education	124
Recognition of Parental History of Maltreatment.....	126
Recruitment of Foster Families to Serve as Role Models for Adolescents.....	127
Support for Relative Care	129
Technology as a Resource	129
Building Relationships	129
Future Directions	130
Conclusion.....	131

	Page
REFERENCES.....	133
APPENDICES	153
A ASU INSTITUTIONAL REVIEW BOARD STUDY APPROVAL LETTER.....	153
B ARIZONA DEPARTMENT OF ECONOMIC SECURITY DIVISION OF CHILDREN, YOUTH, AND FAMILIES RESEARCH COMMITTEE APPROVAL LETTER.....	155
C STUDY INFORMATION LETTER	157
D STUDY QUESTIONNAIRE	159

LIST OF TABLES

Table	Page
1. Description of Study Participants.....	79
2. Means and Standard Deviations for Multidimensional Scale of Perceived Social Support	83
3. Means, Medians, and Standard Deviations for AAPI-2 Sten Scores	84
4. Level of Risk Distribution by AAPI-2 Constructs	85
5. Correlations of Perceived Social Support, Parenting Attitudes, and Control Variables.....	89
6. Correlations of Living Arrangement, Parenting Attitudes, and Control Variables.....	90
7. Perceived Social Support Predicting Parental Expectations.....	93
8. Living Arrangement Predicting Parenting Expectations	93
9. Perceived Social Support Predicting Parental Empathic Awareness Of Children’s Needs	94
10. Living Arrangement Predicting Parental Empathic Awareness Of Children’s Needs	95
11. Perceived Social Support Predicting Belief in the Use of Corporal Punishment	96
12. Living Arrangement Predicting Belief in the Use of Corporal Punishment.....	97
13. Perceived Social Support Predicting Parent-Child Roles.....	98
14. Living Arrangement Predicting Parent-Child Roles	98
15. Perceived Social Support Predicting Children’s Power and Independence.....	99

Table	Page
16. Living Arrangement Predicting Children's Power and Independence.....	100

LIST OF FIGURES

Figure	Page
1. Ecology of Parenting	51
2. Overall Risk of Child Maltreatment	87

Chapter 1

INTRODUCTION

There are over 3 and a half million reports of child abuse and neglect each year in the United States (U.S. Department of Health and Human Services, 2013). The negative impact child maltreatment has on development and psychosocial outcomes in adulthood is well documented (e.g. Belsky, 1993; Cicchetti & Toth, 1995; Egeland, 1997; Mersky & Topitzes, 2010; Scannapieco & Connell-Carrick, 2005). A variety of ecological factors influence the occurrence of child abuse and neglect, including poverty, maternal depression, poor mental health, financial problems, and a lack of social support (Stith et al., 2009; Zielinski & Bradshaw, 2006). Studies have shown that parents who have been abused themselves may be more likely to abuse and/or neglect their own children (Belsky, 1993; Berlin, Appleyard, & Dodge, 2011; Bert, Guner, & Lanzi, 2009; Cort, Toth, Cerulli, & Rogosch, 2011; Dixon, Browne, & Hamilton-Giachritsis, 2009; Egeland, Jacobvitz, & Sroufe, 1988; Kim, 2009; Li, Godinet, & Arnsberger, 2011; Pears & Capaldi, 2001; Valentino, Nuttal, Comas, Borkowski, & Akai, 2011). Although not all parents with a history of abuse will go on to abuse their own children, estimates are between 25% and 35% (Belsky, 1993; Kim, 2009).

When a report of child maltreatment is made to child protective services or law enforcement in the United States and an investigation is completed, approximately 20% of children are removed from their home and placed in non-relative foster care, relative placement, or a group home (U.S. DHHS, 2011). According to the preliminary 2013 Adoption and Foster Care Analysis and Reporting System (AFCARS) reports, there were 399,546 children in the child welfare system (U.S. DHHS, 2013).

Thirty-six percent of the children in the child welfare system are between the ages of 12-18 and an estimated 28,000 youth will “age out” of the child welfare system each year (U.S. DHHS, 2013). Youth from the child welfare system may be at a higher risk of abusing or neglecting their own children or have less nurturing parenting attitudes due to their experiences of child maltreatment, being in the child welfare system, a lack of social support, and a lack of preparation for parenthood (Budd, Heilman, & Kane, 2000). Despite this compounded risk, there is a lack of research related to the parenting attitudes of youth who are aging out and their potential risk of child maltreatment as parents. Further examination of the factors that may contribute to or prevent the intergenerational transfer of maltreatment among this group is critical. This line of research may then lead to the development of intervention strategies to prevent the cycle of child abuse and neglect among this population.

Overview of the Research

Research in the area of child maltreatment is abundant and continues to be an important and critical area of study across disciplines, including social work. There is a large body of research examining the factors that are believed to be related to parenting and child abuse and neglect (CAN). Based on this research, many interventions and programs have been developed to reduce factors associated with CAN among families that have been determined ‘at risk’ of child abuse and neglect (Barth, 2005; Daro, 2011; Ronan, Canoy, & Burke, 2009; Sanders, 2008).

Consistently, parental history of child maltreatment has been shown to be linked to child abuse and neglect (Belsky, 1993; Berlin et al., 2011; Bert, Guner, & Lanzi, 2009; Cort et al., 2011; Dixon et al., 2009; Egeland et al., 1988; Kim, 2009; Li et al., 2011; Pears & Capaldi, 2001; Thornberry, Knight, & Lovegrove, 2012; Valentino et al., 2011) However, having a history of child maltreatment is not the only predictor of subsequent perpetration of child maltreatment; many other psychosocial and ecological factors increase the risk, such as adolescent parenting (age), poverty, and low educational attainment (e.g. Belsky, 1993; Dixon et al., 2005; Egeland et al., 1988; Ronan et al., 2009). Variables such as positive social support from others, stability, and education are believed to buffer the risk between a history of child maltreatment and perpetrating child maltreatment as a parent (Li et al., 2011).

Research on parenting indicates that individuals develop a style of parenting based on many different factors (Belsky, 1993). Unfortunately, humans are not born with innate parenting skills and knowledge, and tend to make decisions regarding discipline and the care of children by drawing from personal experiences and the observed parenting models of others (Belsky, 1993). Parenting abilities are also influenced by internal and external resources and social networks, such as financial resources and the existence and level of social support, particularly among families considered “at-risk” (Byrne, Rodrigo, & Martin, 2012; Green, Furrer, & McAllister, 2007; Kotchick & Forehand, 2002; Lyons, Henly, & Shuerman, 2005; Rodrigo, Martin, Maiquez, & Rodriguez, 2007).

Although the etiology of intergenerational child abuse and neglect is still unclear, determinants of child maltreatment are generally attributed to characteristics related to the individual (parent), the child, and environmental or contextual circumstances. By definition, children in and from the child welfare system have been subjected to sexual, physical, emotional abuse and/or neglect by their caregivers/parents or their caregiver is unwilling to care for him/her. When removed from caregivers, children often experience instability in placement (Stott, 2011; Stott & Gustavsson, 2010), education (Allen & Vacca, 2010; Stone, 2007), and social groups and relationships (Ahrens, Garrison, Spencer, Richardson, & Lozano, 2011; Goodkind, Schelbe, & Shook, 2011; Jones, 2013; Scott, Moore, Hawkins, Malm, & Beltz, 2012). As a result, children who grow up in the child welfare system, particularly youth, may have inadequate or faulty models of family and parenting roles. These youth may also lack the necessary resources and social supports afforded to others who have not been in foster care. Youth who age out of the child welfare system face a variety of challenges associated with achieving independence and self-sufficiency (e.g. Courtney & Dworsky, 2006; Pecora et al., 2003). Poor psychosocial outcomes associated with being in foster care are highly correlated with child maltreatment risk factors, such as poor mental health, low educational attainment, unemployment, homelessness, instability and poverty (Courtney & Dworsky, 2006; Pecora et al., 2003). Additionally, youth aging out have been shown to have significantly higher rates of pregnancy (Dworsky & Courtney, 2010; King, Putnam-Hornstein, Cederbam, & Needell, 2014; Matta Oshima, Narendorf, & McMillen, 2013) than the general population and repeat pregnancies (Dworsky & Courtney, 2010).

The experience of abuse and/or neglect in childhood coupled with a lack of resources and support can lead to unhealthy and potentially abusive or neglectful parenting attitudes and practices. However, despite the presumed risks associated with being in foster care and having a history of child maltreatment, very little research has been conducted to examine the child-rearing attitudes and practices among youth aging out.

Relevance of the Problem to Social Work

This research project aims to create a better awareness and understanding of the risk of intergenerational child maltreatment among a sample of youth aging out of foster care. This study explored the parenting attitudes of youth aging out of foster care in Arizona and examined the relationship between relational support and parenting specific to youth aging out. This is a group in the United States and worldwide that has been described as vulnerable, at risk of a variety of poor psychosocial outcomes, and potentially at risk of maltreating their own children.

As the costs associated with child abuse and neglect surpass 80 billion dollars annually (Fang, Brown, Florence, & Mercy, 2012; Gelles & Perlman, 2012), and the social and financial losses related to negative outcomes for youth aging out of foster care persist, there is an increased need to examine opportunities for intervention with youth aging out to delay pregnancy and/or provide additional information and services regarding positive parenting practices. Maltreated children who have been in foster care have unique needs and it is currently unclear how many programs include pregnancy and parenting education as a part of independent living skills programs for youth aging out of foster care, despite the necessity. Many youth exit the child welfare system with little or no family or other social support, and may not have a positive parenting role model.

There are several practice and policy implications that can be deduced from this line of research; findings can be translated into state and local initiatives, as well as community practice. This research reinforces the need to focus more on pregnancy prevention among youth aging out and to provide services for those youth who are pregnant and parenting already to prevent child abuse and neglect and enhance parenting skills (Geiger & Schelbe, 2014). Currently, there are only a handful of programs that target the unique needs of pregnant and parenting youth who are aging out (Love, McIntosh, Rosst, & Tertzakian, 2005). Examining this specific group of young adults can provide valuable information drawing attention to the unique challenges and opportunities for youth aging out. This study aims to better understand the strengths and areas needing improvement related to parenting among youth aging out in an effort to prevent the intergenerational transmission of child maltreatment. It is critical to identify patterns that will help us understand how youth from the child welfare system will parent, interact with others, elicit social support, and navigate social systems in which they live (Geiger & Schelbe, 2014).

Youth from the child welfare system are the community's responsibility and by promoting their success, we hope to see individual and societal benefits. Social workers have an ethical responsibility to the broader society in promoting the general welfare of individuals and communities (NASW, 2006). Social workers are also encouraged to advocate for "living conditions conducive to the fulfillment of basic human needs and should promote social, economic, political, and cultural values..." (NASW, 2006, pg. 26-27).

As one of the most vulnerable populations in the United States, youth who are aging out of foster care require additional support in ensuring their basic needs and opportunities for success. Investments in this population may yield positive long term social and economic benefits with successful outcomes.

Social workers can and should play a large role in creating and implementing solutions. Legislation is helpful and necessary, but people need to be mobilized. Social workers need to identify youth in foster care who are in schools and address their needs in academics (Zetlin & Weinberg, 2004). Social workers who are advocates and policy makers need to create and make legislation for programming a priority for youth who are aging out (Collins & Clay, 2009). Social workers can educate policy makers and government officials about the need for action. Social workers who work with youth in the child welfare system need to be aware of their individual needs and the resources that can help minimize the risks associated with transitioning out of foster care. Case managers also need to support self-determination and encourage participation in case planning. Social workers in the healthcare field can help by encouraging preventive health and providing options about family planning and positive parenting. Social workers in behavioral and mental health fields need to provide additional support and care to youth aging out. Programs specifically addressing parenting skill development are critical in interrupting the cycle of child maltreatment among this group of youth (Budd, Holdsworth, & HogenBruen, 2006).

By identifying the risks and highlighting the strengths of youth in the child welfare system, creative and effective policies can be developed and implemented (Pecora & Harrison-Jackson, 2011).

It is imperative that we intervene with this population and provide the necessary skills and knowledge youth need in order to create healthy and competent parents. Many new multi-faceted parent training programs are being used to prevent child abuse and neglect through parenting skills development, reducing auxiliary risk factors, and creating a supportive network for parents (Barth, 2009; Sanders, 2008). These types of programs can be tailored to meet the needs of current and former youth from the child welfare system. This study aims to identify possible domains of relational support among youth from the child welfare system to inform the developers of intervention and prevention strategies that will promote positive parenting attitudes and emphasize areas of strengths that will lead to improved outcomes.

Purpose of the Current Research Study

The overall purpose of this study is to explore the parenting attitudes of youth in and from the child welfare system in Arizona. The study has two overarching goals: (a) to describe the parenting attitudes and the risk for perpetrating child maltreatment among youth aging out in Arizona , and (b) to examine the relationship between relational support (in the form of social support and living arrangement) and the parenting attitudes of youth aging out of foster care in Arizona.

There is very little research on parenting experiences and outcomes of youth aging out. It might be postulated that these youth may present as a high risk group of parents due to their history of maltreatment, high adolescent pregnancy and repeat pregnancy rates, and poorer psychosocial outcomes as adolescents and young adults. This study is extremely important in obtaining a better understanding of the needs and practices of youth from the child welfare system as current and future parents.

It will also provide greater knowledge about relational factors that might influence parental attitudes, and lead researchers and practitioners to develop potential preventive intervention strategies and policy changes among this group.

Chapter 2

LITERATURE REVIEW

The body of literature in the area of child maltreatment is well established and continues to be an area of interest and examination among scholars and practitioners. Research involving youth aging out of foster care continues to accumulate and evolve, however it remains underdeveloped and involves few longitudinal studies involving large and representative samples that are able to capture the experiences and outcomes among this group of young people. In addition, few studies have examined this population and their potential strengths and struggles as parents or the risk of maltreatment with their own children (Geiger & Schelbe, 2014). As this review will show, the literature indicates an elevated risk related to the intergenerational transmission of child maltreatment among youth aging out due to higher rates of early unintended pregnancy, fewer resources and support, poorer economic and educational outcomes, and potentially poor parenting knowledge and role models. This literature review will outline research outcomes and experiences of youth who are aging out of the foster care system, the development of parenting attitudes and behavior, the determinants of child maltreatment, and how these constructs may be experienced by youth who are aging out of the foster care system given the challenges they face and the resiliency many possess.

Overview of Outcomes Related to Youth Aging out of the Foster Care System

Nationally, there are an estimated 400,000 children in the foster care system as a result of child maltreatment (U.S. DHHS, 2013). Thirty-six percent are between the ages of 12 and 18. Given what is already known about the risks associated with the experience of child maltreatment, individuals who have been in the foster care system may be expected to be at higher risk of child maltreatment as parents due to the instability,

inconsistency, and isolation often experienced by youth in foster care. However, there is little known about the parenting attitudes and practices of former foster youth or those exiting the foster care system. In addition, despite an extensive search in the literature, little empirical research was found related to the incidence of child maltreatment and child welfare system involvement among foster youth as parents. Dworsky and DeCoursey (2009) conducted one study, an analysis of data from the Teen Parenting Service Network (from DCYF administrative data in Illinois) and reported 22% of the parents in the study were investigated for child abuse or neglect. Although there is no definitive proportion of children in the U.S. who are reported and investigated for child maltreatment, there are 3.5 million reports of child maltreatment and 74 million children in the U.S. (Kidscount, 2013); however, this may include multiple reports for one child.

Approximately 28,000 youth ‘age out’ of the foster care system in the United States each year (U.S. DHHS, 2013). Once foster youth reach the age of majority, they are expected to live independently with little supports from the state, family or community (Antle, Johnson, Barbee, & Sullivan, 2009). Studies have repeatedly shown that youth transitioning into adulthood from the foster care system experience significant difficulties in adjusting to independent living. They also have overall poorer outcomes related to psychosocial adjustment, physical and mental health, financial stability, early childbearing and pregnancy in addition to low educational attainment, homelessness and poverty than children who have never been in foster care (Courtney & Dworsky, 2006; Pecora, et al., 2003; Pecora, et al., 2006).

Development of Parenting Attitudes and Behavior

Becoming a parent is one of the most important roles one will assume in life. With that role comes a great deal of responsibility. Parenting, by definition, is a “purposive activity directed at ensuring the survival and development of children” (Hoghugui, 2004, p. 5). Biologically, humans have children to perpetuate the species; however becoming a parent biologically or by adoption is only the beginning of a complex transactional process that can shape a child’s survival and wellbeing throughout the lifespan. Parents have a major impact on a child’s psychosocial, physical, and developmental outcomes that can vary depending on the parents’ ability and willingness to nurture and care for the child. At its most basic level, the overarching goals of parenting are to promote the child’s welfare and well-being by meeting his or her basic social, emotional, and physical needs (Hoghugui, 2004).

The development of both nurturing and harmful parenting attitudes and behaviors can be attributed to a variety of influences, including factors related to each parent, their history and models of parenting, the child’s disposition, and environmental factors (Belsky, 1984; Kotchick & Forehand, 2002). Individual factors such as cognitive readiness, the developmental history and psychological status of the parents, knowledge, and ability are not the only factors that influence parental functioning. Social-contextual factors that shape parenting include the child’s characteristics, personal stress, inter-parental stress, social support and interaction, and the broader social context in which parents and their relationship are embedded (Kotchick & Forehand, 2002).

Parents are an essential component in how their children develop and function and many of the skills children acquire are fundamentally dependent on their interactions with their caregivers and the broader social environment. The quality of parenting a child receives is considered the strongest potentially modifiable risk factor that contributes to the behavioral and emotional problems in children (Sanders, 1999). There are a number of threats to successful parenting and how these threats are managed by the parent can lead to positive or negative outcomes.

Moreover, many individual characteristics, life circumstances and environmental factors can influence a parent's tendency to abuse, neglect and/or place his or her child(ren) at risk. Many of these parents have been abused themselves as children, have had poor parenting role models (Egeland et al., 1988), find themselves struggling with mental illness (De Bellis et al., 2001) or substance abuse problems (Young, Boles, & Otero, 2007) or a combination of these factors.

Parenting Styles

Children spend the majority of their time with their caregivers and are overwhelmingly raised by their parents. Therefore, parents' strategies for discipline, level of nurturance, communication styles, and expectations have a major influence on a child's development. Beginning in the 1960s, psychologist Diana Baumrind conducted interviews and naturalistic observation of children and their parents to determine how parenting styles or behaviors impact child development. Baumrind (1967) identified three distinct parenting styles: authoritarian, authoritative, and permissive. Maccoby & Martin (1983) later added a fourth parenting style: uninvolved. Authoritarian parenting is characterized by parents' high and often unrealistic expectations and strict rules, which

when are not met, are followed by punishment. Authoritarian parents often fail to explain the reasoning behind these rules and are too focused on status and obedience (Baumrind, 1991). It is believed that authoritarian parenting styles may result in children who are obedient, but less happy and socially competent. Authoritative parenting involves setting appropriate rules and guidelines in a democratic way for children to follow. Authoritative parents tend to be responsive, nurturing, and forgiving. Baumrind (1991) suggests these parents monitor children's behavior and when expectations are not met, are assertive and supportive – not punitive. Children raised by authoritative parents tend to be happy, successful, and capable (Maccoby, 1992). Permissive parents have few demands of their children, rarely monitor or discipline their children, and are overly lenient. Although permissive parents are generally nurturing and communicate with their children, they tend to take on more of a friend role than one of a parent (Baumrind, 1991). Children with parents who are more permissive in their parenting style may have lower self-regulation and may experience challenges with authority. An uninvolved parenting style is characterized by low responsiveness, little communication and monitoring by parents. Some uninvolved parents are able to meet the basic needs of their children but are mostly unavailable and detached from their children. In some cases, this parenting style leads to neglectful parenting behaviors. It is believed children with parents with an uninvolved parenting style lack self-esteem, self-control, and are overall less competent.

Gender and Parenting

Perceived nurturing behaviors are more often associated with mothers rather than fathers. In western cultures in the past century, traditional gender roles generally place women or mothers as the primary caretaker for the children in a family and are often perceived to be more affectionate, nurturing, and empathetic than men or fathers. In a study of parents in Australia, Craig (2006) found that, overall, mothers, as compared with fathers, spend more time with their children, spend more time alone with their children, and have more overall responsibility for managing care of their children. Conrade and Ho (2001) found that mothers were perceived by females to have more authoritative parenting styles, while males perceived more permissive parenting styles by mothers. Fathers, on the other hand, were perceived by males to have more authoritarian parenting styles. When actual parenting styles were measured by an observer and reported by an adolescent child, however, there were no differences found between mothers' and fathers' parenting styles (Simons & Conger, 2007).

Early Childbearing, Young Parental Age, and Parenting

The parent's developmental stage and psychological resources are also linked to parental functioning. For example, early childbearing, adolescent parenting, and young maternal/paternal age have been identified as risk factors related to child abuse and neglect potentially due the lack of educational attainment and social development young parents typically lack (Brown, Cohen, Johnson, & Salzinger, 1998; Dubowitz et al., 2011; Dukewich, Borkowski, & Whitman, 1996; Fundudis, Kaplan, & Dickinson, 2003; Mersky, Berger, Reynolds, & Gromoske, 2009; Sidebotham, Golding, & The ALSPAC Study Team, 2001).

In addition, young parents may not have appropriate expectations of a child's capabilities or may have skewed beliefs about child development and appropriate discipline (Huang, Caughy, Generro, & Miller, 2005; Dukewich et al., 1996). Maternal depression and psychiatric illness have also been associated with neglect and poor child outcomes (Dubowitz et al., 2011; Kelleher, Chaffin, Hollenberg, & Fischer, 1996; Sidebotham et al., 2001), while marriage and higher levels of social support have been shown to reduce the risk of child maltreatment (Li et al., 2011).

Sexual Activity, Pregnancy, and Parenting Among Youth Aging Out

Pregnancy and early parenting among youth aging out of foster care continue to be of great concern. The precise number of pregnancies among foster youth and former foster youth who have recently exited the system is largely unknown. Although the United States has the highest rate of adolescent pregnancy among developed countries, there are a number of studies reporting an even higher rate among foster care youth than their same age peers. For example, findings from The Casey National Alumni Study indicated double the rate of pregnancy among foster youth in their sample than in the general population (Pecora et al., 2003). A study conducted with approximately half of New York City's foster youth revealed that 1 in 6 were mothers or pregnant (Gotbaum, 2005). The Utah Department of Health Services conducted a study over 5 years with youth age 18-24 who had left foster care. Their findings indicated that these young adults had three times the birth rate of young adults in this age group in Utah and that 32% had at least one child (Utah Department of Human Services, 2004). In a recent study in Arizona with foster youth age 18-21, Stott (2009) found that 31% of youth in the sample exhibited risky sexual behavior and 54% had been pregnant.

King et al. (2014) also found that female youth in California had higher birth rates than the general population and girls who were in foster care for less time or experienced more placement instability had higher birth rates. Matta Oshima et al. (2013) examined early pregnancy risk and protective factors among youth age 17 to 19 in Missouri and found that female youth who were not sexually active at age 17 were less likely to become pregnant, but that both females who were using birth control and those who were not were equally likely to become pregnant. Male youth who left the foster care system before the age of 19 were more likely to make someone else pregnant (Matta Oshima et al., 2013). Dworsky & Courtney (2010) also found higher rates of adolescent pregnancy (51%) and repeat pregnancies (46%) before the age of 19 with youth in the Midwest Study sample (Wisconsin, Illinois, and Iowa) when compared with youth in the general population (20%, 34%). They also found that by the time former foster youth reach the age of 23/24, over 77% of females reported ever being pregnant at some point and 42% reported being pregnant over 3 times. Approximately 60% of males report getting someone pregnant by the age of 24. Two-thirds of women and about ½ of men had at least one child by this time (Courtney et al., 2009). Although nearly all of these children were living with at least one of their parents, 17% of the females reported having a child that was not living with them. Of those children of young former foster care mothers, most were living with grandparents or relatives, or adoptive and foster placements (Courtney et al., 2009).

Budd, Holdsworth, and HoganBruen (2006) examined variables associated with short term outcomes with a small sample of adolescent mothers in the foster care system. Findings indicate that parenting variables such as childrearing beliefs, quality of parent-child interactions, and risk of physical abuse predicted later parenting stress. In addition, educational status and social support predicted parenting stress, although the number of childbirths did not. The authors suggest that parenting stress may be related to unrealistic expectations of their children, which could lead to child maltreatment.

Dworsky and DeCoursey (2009) prepared a comprehensive report on the needs and experiences of pregnant and parenting foster youth participating in a supportive program in Chicago, Illinois. Qualitative findings from interviews with foster youth and child welfare professionals outlined the services the parents were receiving and lacking as well as other concerns related to placement, education, and preparation for youth to live independently. The authors emphasized the vulnerability foster youth present as parents. Twenty-two percent of their sample was investigated for abuse or neglect of their child, suggesting the need for support and intervention post-partum (Dworsky & DeCoursey, 2009).

Courtney et al. (2009) surveyed former foster youth regarding their parenting resources and role models. They asked youth to identify individuals who provided information about parenting and who taught them to be a 'good parent'. Despite potentially fragmented relationships with their biological parents, 29% of youth credit their biological mothers with providing them with information about parenting. Youth also identified their foster mother (11.7%), a grandparent (13%), friend (9.3%), and books/magazines (2.7%).

When asked about who taught them to be a ‘good parent’, youth identified their biological mother (25.6%) the majority of the time, foster mother (13%), grandparent or other relative (28%), and friend (3.9%) of the time.

As mentioned, foster youth are more than twice as likely to become parents as adolescents than youth who have not been in the foster care system (Dworsky & Courtney, 2010). In an attempt to delineate some of the possible factors contributing to this disparity, researchers have recently explored the experiences of youth as parents as well as the motivations and circumstances that may be related to early pregnancy and parenting (Pryce & Samuels, 2010; Rolfe, 2008). Findings from Pryce and Samuels’ (2010) study suggest that the experience of motherhood may help foster youth in exploring their own identity and purpose while providing an opportunity to begin healing from their pasts. During interviews, participants also discussed the influence of the relationship with their own mother on their parenting intentions as well as their determination to overcome the obstacles associated with early motherhood and experiences of foster care. The authors suggest that foster youth who become parents early may in some way be trying to create the family they themselves did not have and perhaps attempt to be a very different parent than the one they had.

Living Arrangements Before and After Youth Age Out of Foster Care

Children who are in the foster care system have a unique experience in that they are being raised by one or more individuals who are not their biological parents. There are a variety of living situations experienced by children placed in out of home care including foster and relative/kinship homes, group home care, institutional/residential care, and shelter.

It is important to understand where a youth is or was living during time in care and after he or she ages out to fully capture the youths' experiences, role models, relationships, and support.

Many child welfare agencies have been putting forth efforts to seek out close and distant relatives to care for children when removed from their parents' care. Kinship caregivers can be described as relatives, members of a tribe/clan, godparents, stepparents, or other adults with close family ties. As with all placements, however, there are advantages and disadvantages to living with relatives/kin. Being placed with relatives can reduce the trauma experienced by children when placed with adults they don't know. Children may have a sense of familiarity and can be exposed to their own culture and similar living environments, but relatives may also have a harder time separating the legal processes with personal interactions with parents. Relatives may also have a more difficult time financially supporting placed children with fewer resources and support offered by the state to relatives compared with family foster families (Dubowitz, 1994; Farmer, 2009; Roberts, 2001). There is also a documented disparity regarding policies related to the assessment, certification, support, and monitoring of kinship caregivers (Ayala-Quillen, 1998; Leos-Urbel, Bess, & Geen, 2002).

Congregate care or group home settings also pose many strengths and limitations for the children placed there. Congregate care is often an alternative placement for children and youth who cannot be placed in family foster care and kinship care settings for various reasons such as emotional and behavioral problems. This type of living situation is often unstable with youth moving from home to home several times a year.

Group homes are also often staffed with paid employees who work shifts and who do not live in the home. Youth may not have the opportunity to witness how a typical family interacts or peer relationships occur which may be detrimental to relationship development, fewer interpersonal relationships, and opportunities to develop long lasting and close relationships with their peers and adults who can provide stability (Barth, 2002).

Family foster care homes are described as placements that include at least one adult caregiver, often two parents and other children, in a community home setting. Family foster care providers are typically licensed by their resident state to provide temporary and/or permanent foster care to children. Their homes and family members have been assessed and they have undergone training with a provider regarding legal, financial, and social care for the children placed with them. In general, there are fewer restrictions placed on children's daily activities when placed with family foster care providers. For example, compared with children placed in residential and group home settings, children in foster homes are more able to be a part of recreational activities, obtain and retain personal items, and have access to typical family activities.

Compared with younger children in foster care, significantly fewer youth age 13 to 17 are living with relatives (18% compared with 28%) or with foster families (27% compared with 47%), and many more are living in group homes (24% compared with 6%) and residential facilities or institutions (13% compared with 9%) (U.S. Department of Health and Human Services, 2013). In addition, youth ages 13-17 are more likely than any other age group to live in a shelter placement more than 21 days.

According to the 2012 Arizona Department of Economic Security (DES) report on child welfare, 29% of the children in the care of Arizona Child Protective Services were age 13 and older (3640 youth). Thirty-six percent of the children in the foster care system in Arizona live with relatives, 44% are cared for by foster families, 9% reside in group homes, and 5% live in residential treatment facilities. However, of youth age 12-17, these numbers differ greatly. Significantly fewer youth in this age group are living with relatives (18%) or with foster families (27%), and many more are living in group homes (24%) and residential facilities (13%). In addition, youth aged 13-17 were more likely than any other age group to live in a shelter placement more than 21 days. Youth were also more likely to leave care due to reaching the age of majority, rather than due to adoption, reunification, or guardianship.

Many studies have compared short and long term outcomes among children in out of home placement. Most policymakers and practitioners will agree that the least restrictive placement option is preferred to institutional or residential care. Least restrictive placements typically involve a family foster care setting or children living with relatives. Studies have shown that in most situations, children placed in congregate care tend to have poorer outcomes compared with family foster homes (Lee, Bright, Svoboda, Fakunmoju, & Barth, 2011). For example, youth living in family settings had fewer moves, had overall less time in out of home care, and an increased likelihood of being placed with siblings (Lee et al., 2011). DeSena and colleagues (2005) conducted a study comparing group care settings and family foster care and found family foster care settings were more cost effective, had fewer changes in placement in the following year, and children were more likely to be placed with siblings.

Ryan, Marshall, Herz, and Hernandez (2008) reported that adolescents placed in group care settings in child welfare were more likely to be arrested in the next 5 years. Barth, Greeson, Guo, Green, Hurley, and Sisson (2007) compared outcomes among child welfare system involved youth living in group care and those in family-based intensive in-home services and found favorable outcomes regarding stability with family, educational progress, legal trouble, and out of home placement in the next year post-discharge among youth receiving intensive in-home services. Children who spend the majority of their time in care in group care settings have also been found to complete fewer years of school, have poorer school achievement, and lower academic aspirations than children not placed in group care settings (Mech & Fung, 1999). In a nationally representative study comparing female youth living in family foster care settings and kinship care settings with a comparison group found that youth in foster homes had a lower age at first conception, and a greater number of sexual partners than the comparison group and youth in kinship care settings had similar results in addition to a younger age at first intercourse (Carpenter, Clyman, Davidson, & Steiner, 2001). There were no differences between the kinship and foster home groups on the variables in this study.

Child welfare agencies rely on relatives and kinship care providers when placing children in out of home care due to a shortage in foster care placements and federal legislation placing a preference on placements with relatives for children removed from their parents' care. Overall, when comparing kinship and non-kinship family placements, findings have generally favored kinship placements.

Studies have shown that children placed with kinship caregivers have fewer emotional and behavioral problems (Grogan-Kaylor, 2000; Holtan, Ronning, Handegard, Sourander, 2005), have a lower risk of maltreatment, placement disruption, and length of placement than children placed in non-kin placements (Belanger, 2002; Berrick, Barth, & Needell, 1994; Winokur, Crawford, Longobardi, & Valentine, 2008; James, 2004). Children living with kin versus those who are not have been shown to be less likely to be involved in the juvenile justice system, were more likely to achieve reunification (Winokur et al., 2008), were more likely to live in their local community and have more contact with biological parents (Holtan et al., 2005). In a study conducted in the UK comparing kin and non-kin caregivers and children placed in both settings, Farmer (2009) found that kinship caregivers were more likely to be lone caregivers, have health problems, living in overcrowded conditions, and experiencing financial difficulties than non-kinship placements. When children placed with non-kinship foster families were matched with children placed with kin, children in non-kinship foster homes showed higher risk for initial placement disruption but no difference in rates of instability within a year (Koh & Testa, 2008). Overall, the children in both settings were similar with the exception of placement length, which was longer for kinship placements, and children with multiple health problems and whose parents had been in care themselves were more likely to be placed with non-kinship caregivers (Farmer, 2009).

Studies show that in general, children placed in less restrictive placements such as family foster care and kinship placements as compared to group care and residential treatment facilities tend to fare better on various outcomes in addition to being more cost effective (Barth, 2002).

However, children's needs and safety must be considered as well as the availability of family care settings when choosing a placement for children placed in out of home care.

Placement instability.

Placement instability (multiple and frequent moves) is much more common among youth in out of home care compared with their younger counterparts (Wulczyn, Kogan, & Harden, 2003). Placement instability has consistently been associated with behavioral problems, low educational achievement, low self-esteem, substance use and abuse, and relationship disruption (Barber & Delfabbro, 2003; Dore & Eisner, 1993; Herrenkohl, Herrenkohl, & Egolf, 2003; Newton, Litrownik, & Landsverk, 2000; Stott, 2009). In a recent study in California, placement instability was associated with higher pregnancy and birth rates among female youth in foster care, many of whom gave birth within 12 months of placement (King et al., 2014). In addition, studies have also noted patterns of isolation, pervasive loss, and loneliness among youth who are aging out of care due to placement instability (Hyde & Kammerer, 2009; Lee & Whiting, 2007; Samuels & Pryce, 2008; Unrau, Seita, & Putney, 2008). Across the United States, youth in foster care experience lengthier stays and more total placements while in care compared with younger children. For example, a study in Alaska with youth who had exited care had spent on average seven years with an average of 13 placements (Williams, Pope, Sirles, & Lally, 2005). In the Midwest Study, over one third of youth had been in four or more foster home placements (Courtney, et al., 2009). In Arizona, youth from foster care had been in care for almost 4 years on average with an average of 8 placements (Stott, 2009). In Washington, among youth preparing to leave care, a third had been in ten or more placements (English, 2003).

As youth experience changes in living arrangements, they also experience changes in schools, social networks, places of worship, medical providers, mental health providers, therapists, and employers. Children often leave items behind or are unable to bring personal items with them to their new home. Frequent changes in schools have also shown to affect youths' performance in school. Youth must continually adapt to new caregivers, rules, and surroundings.

Upon reaching the age of majority, many youth return to the homes of their biological families while a few are able to remain in their current foster or group placement (Collins, Spencer & Ward, 2010). According to the 4th wave of Midwest Study Adult Functioning of Former Foster Youth (youth age 23 and 24), a longitudinal study of foster youth making the transition to adulthood in Illinois, Wisconsin, and Iowa, 49% of foster youth no longer in care were living in their 'own place', 7% were with biological parents, 14% with relatives, and 3.8% were with foster parents (Courtney, Dworsky, Lee, & Raap, 2009). Only 1% reported being currently homeless, however 37% reported being homeless or 'couch surfing' at some point since exiting care. In fact, 39% of participants reported having 2-3 placements since exiting care, 36% reported 4-6 placements, and 13% reported seven or more placements.

Little research has been conducted to evaluate parenting outcomes among youth from the foster care system based on their living situation while in out of home care. One might assume there are advantages and disadvantages to each type of placement as it relates to parenting competency.

For example, one could hypothesize that living in a foster family setting or a relative placement might be more conducive to youth going on to have a more stable family environment due to having more support or positive role modeling, however, there are many factors to be considered when evaluating outcomes related to parenting outcomes among youth aging out.

Having a safe and affordable living arrangement is the foundation to be able to achieve overall life success and satisfaction. Although there is limited research on the topic, youth aging out who are pregnant and parenting need reliable, safe, and affordable housing for themselves and their children. Youth in foster care are at an elevated risk of homelessness and housing instability (Courtney et al., 2009; Courtney & Dworsky, 2006; Pecora et al., 2006). As parents, they may qualify for additional financial and housing benefits; however, many youth continue to experience housing instability and rely on living with family, friends, and relatives to make ends meet. Not having stable housing can result in negative consequences for the children. With the high cost of housing, youth may not be able to provide the necessary items for their child, and might not be able to keep their child's items as they move from place to place. This may result in child welfare involvement due to others' perceptions of neglect or an inability to adequately care for a child. Because of the lack of affordable safe housing, youth aging out may only be able to afford housing in neighborhoods which are unsafe with limited community resources and employment opportunities. These may not be the best environments for children to be raised.

Independent Living (IL) Skills Training

Independent living (IL) programs comprise a wide array of services including but not limited to financial management, transitional housing, mentoring programs, life skills training, educational services, and employment services. In 1985, the Federal Title IV-E Independent Living Initiative (P.L. 99-272) was passed, amending the Social Security Act to provide federal funds to states to establish independent living skills programs for youth in foster care (Collins, 2004; Collins & Clay, 2009; Courtney & Dworsky, 2006; Samuels & Pryce, 2008). The goal of independent living skills (ILS) programs is to increase youths' ability to live independently and achieve self-sufficiency by teaching life skills such as cooking, money management, shopping, educational/vocational training and maintaining housing (Antle et al., 2009).

Research has shown that youth participating in life skills training have significantly better outcomes than those receiving no formal training at all (Collins, 2004). Lindsey and Ahmed (1999) collected data from former foster youth 1-3 years after leaving care and found that youth who participated in life skills training were more likely to live independently and had a higher level of educational attainment than those that did not participate in the training.

IL skills are not only important to the youth aging out in order for them to care for themselves and be successful, but also for them to be successful parents and caregivers. Although, not all youth will go on to be young parents, statistics show a large proportion will, and the majority will become parents at some point in their lives.

Additionally, if youth do not have their own biological children, they will be around other children- partners' children, stepchildren, relatives' children, friends' children, or work in a setting with children. As youth aging out may experience unstable housing, there may be a chance of living temporarily with children even if they are not parents themselves. Understanding child development and acquiring parenting skills are important in effective parenting and interpersonal relationships. The basic life skills necessary to be an adult (i.e. budgeting, paying bills, obtaining a job, finding housing, and interpersonal communication) are also necessary to be a parent.

Social Support and Mentoring Among Youth Aging Out

Overcoming difficulties and achieving success involves the support of friends, family, and other significant people in one's life. Foster youth, more likely than not, do not have access to such social support. Without a parent or support network, foster youth often experience the transition into adulthood without the necessary skills, resources or positive role models to establish independence. This transition can be particularly difficult when compounded by experiences of trauma and abuse, isolation, emotional and social instability and disillusionment with the 'system'.

Levels of social support among families at risk of child maltreatment have been studied extensively and as expected, higher levels of social support have been shown to act as a protective factor that might buffer the incidence of child maltreatment or moderate the outcomes (Kotch, Browne, Dufort, & Winsor, 1999; Lyons et al., 2005; Pepin, & Banyard, 2006).

Formal and informal social support can be especially valuable to young and new parents (Green et al., 2007; Nath, Borkowski, Whitman, & Schellenbach, 1991) and youth transitioning from the foster care system (Courtney & Dworsky, 2006; Greeson & Bowen, 2008; Osterling & Hines, 2006).

Recent studies on resilience in former foster youth and other at-risk groups point to the presence of a mentor or a supportive and caring adult in their lives (Greeson & Bowen, 2008; Osterling & Hines, 2006; Shin, 2003). Resilience research has identified various protective factors or buffers that help mediate poor outcomes. Oftentimes, youth in foster care have high levels of self-reliance and resilience that lead to premature “growing up” and a struggle between independence and interdependence upon emancipation (Samuels & Pryce, 2008). This self-reliance can also lead to an inability to seek help and a disconnection with social supports willing to help (Samuels & Pryce, 2008). Without a parent, foster youth often turn to a mentor or other significant adult whom they can trust during their transition to adulthood who can teach them independent living skills and positive parenting skills, act as a positive role model, motivate and help develop emotional and social stability (Hass & Graydon, 2009; Osterling & Hines, 2006; Packard et. al., 2008). Therefore, it is important to allow foster youth to identify social support from multiple sources, such as family (however that is defined by the youth), friends, and significant others. Two forms of mentoring relationships can exist: informal (natural) and formal. Natural mentoring develops in the community and from an existing relationship, whereas formal mentoring is arranged and structured through a community program or agency (Munson & McMillen, 2009).

Research has shown the presence of a mentor leads to positive psychosocial outcomes among foster youth, higher levels of self-efficacy and specific skills related to their self-sufficiency in addition to providing a positive example of a healthy relationship. (Munson & McMillen, 2009). Youth also reported feeling more competent and motivated to complete their education. (Greeson & Bowen, 2008; Munson & McMillen, 2009; Osterling & Hines, 2006). Having support while leaving care is necessary for youths' successful transition and providing social support to youth aging out can increase the likelihood of their future success (Collins, 2001). Oftentimes, youth aging out of foster care lack established supports with caring adults due to their history in the foster care system. Mentors are individuals youth can trust and who can teach them life skills, act as a positive role model, motivate and help youth develop emotional and social stability (Munson & McMillen, 2009; Packard et al., 2008), but mentors may not be directly addressing parenting with youth, which can be a major missed opportunity.

Furthermore, social support as a parent is also extremely valuable. Social support (tangible and emotional) has been shown to be related to parenting practices (Kotch et al., 1999) and is one of the strongest protective factors against child maltreatment (Stith et al., 2009). Parenting a child can be stressful, and for parents raising children alone, on a fixed income and living in poverty, meeting the basic needs of the child can often be difficult. Research on social support with parents has shown that parents who receive sufficient amounts of social support (received and perceived) tend to exhibit better parenting skills and have better relationships with their children (Abidin, 1992; Andresen & Telleen, 1992). Therefore, a lack of social support from family, friends and significant others may contribute to child maltreatment.

Parents who abuse/neglect their children have been shown to be isolated and therefore have limited support from friends, neighbors and family (Daro, 1988).

New and young parents may lack the knowledge and experience needed to appropriately care for an infant or toddler. Without the necessary social support and guidance from family, friends or professionals, a child may be at risk of harm. Young parents may also be isolated from their own family or peers and experience greater life stresses such as financial problems and resources (Sidebotham et al., 2001). Foster youth tend to experience multiple placements, are often disconnected from family and do not have the consistent, positive support from others as they transition out of the foster care system. Foster youth also have been shown to have extremely higher pregnancy and early parenting rates during their adolescent years (Dworsky & Courtney, 2010) and have a history of abuse and/or neglect as children, therefore suggesting they may require additional supports.

The fact that youth were in the child welfare system influences their experience as parents. As youth aging out have reported challenges with interpersonal relationships (Goodkind et al., 2011), negotiating being new parents can be complicated by the relationships with the child's other parent and other people in their lives. The relationship youth have with his/her child(ren)'s parent(s) can be complicated by multiple pregnancies with different partners and having a current partner who is not the parent of the child. Having a partner who is not the child's parent in the home or caring for the child can also increase the risk of child maltreatment (Radhakrishna, Bou-Saada, Hunter, Catellier, & Kotch, 2001; Stiffman, Schnitzer, Adam, Kruse, & Ewigman, 2002).

Having children may be a time when youth aging out revisit their experiences, trauma, and relationships with their parents who were unable to care for them (Pryce & Samuels, 2010). It is also a time for youth to begin to form new identities for themselves and of family (Pryce & Samuels, 2010). Youth may also lack a positive parenting role model and may not have the resources generally afforded to others in areas of emergency care, respite, day care/babysitting, financial support, and social support (Egeland et al., 1988).

Educational Experiences, Outcomes, and Aspirations Among Youth Aging Out

In addition to foster youth often being ill-prepared to live on their own, to financially support themselves, they are also less likely to pursue post-secondary education (Courtney & Dworsky, 2006; Hook & Courtney, 2011). Foster youth may have difficulty achieving financial stability as a result of low educational attainment, lack of employment and overall independent living skill preparation (Hook & Courtney, 2011; Jackson & Cameron, 2012). Despite research indicating post-secondary aspirations of many foster youth, only 7-13% enroll in higher education, with less than 2% ever obtaining a bachelor's degree compared with 24% of the general population (Courtney & Dworsky, 2006). The known financial and social benefits of postsecondary education are well documented, however there are few programs promoting education among foster youth in the United States (Dworsky & Perez, 2010). Without education and adequate preparation to live independently, foster youth are at risk of living in poverty. Several promising programs promoting higher education and providing support for youth who are aging out of foster care while enrolled in post-secondary programming are underway (Batsche, Hart, Ort, Armstrong, Strozier, & Hummer, 2012; Kirk & Day, 2011).

The Midwest Study has compared educational outcomes of foster youth with peers of the same age. At age 23/24, 24% of foster youth had not received a high school diploma or GED compared with only 7.3% of their peers in the ADD Health Study. Only 2.5% had graduated from a 4-year college compared with 19.4%. At the time of the study, 23.1% of youth from the ADD Health Study were enrolled in school, whereas only 16.6% of foster youth were enrolled (Courtney, et al., 2009). Nearly 95% of participants in the study had ever held a job, however only 48% were currently employed at the time of the survey, compared with 75.5% of their counterparts. In addition, foster youth earned only \$10.14 hourly (annual average income of \$12,064) compared with \$13.94 (\$20,349) earned by peers of the same age. Three quarters of female foster youth in the study reported receiving at least one type of government benefit in the past 12 months. Disparities also existed regarding the economic hardships that youth reported when compared with their same age peers. For example, 28.5% of former foster youth reported having difficulties paying the rent and 8.6% reported being evicted. Approximately 7% of youth in the ADD health study reported difficulty with paying the rent and less than 1% reported being evicted (Courtney et al., 2009).

Education has been shown to be a viable protective factor in buffering poor outcomes among a variety of disadvantaged groups. However, many foster youth do not meet eligibility criteria required for postsecondary education enrollment due to inadequate educational preparation (Collins, 2004; Hernandez & Nacarrato, 2010; Pecora, et al., 2006) and continue to experience instability in placement and schools. Jackson and Cameron (2012) found that across five European countries, youth reported experiencing low expectations from their caregivers and social workers.

However, the youth also reported that their own strong motivation, support from close adults, placement (and school) stability, and financial assistance facilitated educational success. Post-secondary education, however, continues to be inaccessible to most foster youth despite funding for tuition being available. Pecora (2012) revisits the issue of maximizing educational success among youth in foster care and alumni and suggests strategies such as finding longer-lasting mentors, ensuring placement and school stability, and addressing and actively treating mental health conditions that may hinder classroom success.

Education level and knowledge about child development and care have also been shown to influence parenting and child maltreatment. In general, studies have shown that parents who graduate from high school (mostly mothers), are less likely to be reported for maltreatment (Budd, Heilman & Kane, 2000; Kotch et al., 1999; Li et al., 2011; Sidebotham et al., 2001). Educational achievement can influence income levels, health, and levels of unemployment (Bureau of Labor Statistics, 2007) and can equate to better resources and housing. On the other hand, the lack of education can limit employment opportunities, income, and child care options, having a marked influence on the potential for child maltreatment. For example, Dukewich et al. (1996) found that among several factors, a lack of preparation for parenting (including knowledge and attitudes about children's development) was the strongest predictor of the potential for abuse among a group of adolescent mothers.

Empathy and Parenting

Historically, empathy has been difficult to define and conceptualize, and therefore difficult to measure (Gerdes, Segal, & Lietz, 2010). *The Social Work Dictionary* describes empathy as “the act of perceiving, understanding, experiencing, and responding to the emotional state and ideas of another” (Barker, 2008, p.141.). This is a very vague definition that provides little insight into how empathy is formulated in brain processes, and does not distinguish between specific parts of empathy that are automatic and unconscious with parts that are based in cognitive skills and can be taught and developed (Gerdes, Segal, Jackson, & Mullins, 2011).

Empathy or the ability to understand what other people are feeling and thinking is an essential skill in facilitating social agreement and successfully navigating personal relationships (de Waal, 2009). Recent studies concur that empathy is critical for effective clinical practice and positive therapeutic outcomes (Elliot, Bohart, Watson & Greenberg, 2011; Gibbons, 2010; Neumann et al., 2009). There is also evidence that empathy is important in the development of healthy relationships (Toussaint & Webb, 2005), is related to positive moral development (Eisenberg & Eggums, 2009; Killen & Smetana, 2008), and promotes prosocial behaviors, particularly during adolescence (Batson, Håkansson Eklund, Chermok, Hoyt, & Ortiz, 2007; Batson, Chang, Orr, & Rowland, 2002; Laible, Carlo & Roesch, 2004; McMahon, Wernsman & Parnes, 2006). In addition, the lack of empathy has been associated with bullying, violent crime, spousal battering, and sexual offending (Covell, Huss, & Langhinrichsen-Rohling, 2007; Elsegood & Duff, 2010; Francis & Wolfe, 2008; Gini, Albieri, Benelli, & Altoe, 2008; Jolliffe & Farrington, 2007; Loper, Hoffschmidt, & Ash, 2001; Sams & Truscott, 2004).

It has also been suggested that a lack of parental empathy plays a role in the occurrence of child abuse and neglect (Bavolek, 2000; Wiehe, 1997). Children develop the capacity for empathy through interactions with others, most often with their parents. Many empathy related behaviors such as understanding, responsiveness, and unconditional positive regard are critical to healthy, successful parenting (De Paul & Guibert, 2008; De Paul, Perez-Albeniz, Guibert, Asla & Ormaechea, 2008; Hoffman, 2000; Moor & Silvern, 2006; Wiehe, 1997). Caregivers who model empathy by demonstrating attentiveness and attunement to their child's needs, as well as displaying positive affective response during infancy and early childhood, help create secure attachment (De Paul & Guibert, 2008; Goleman, 1995; Tempel, 2007; Wiehe, 1997). Research suggests that abusive parents tend to have lower displays of empathy compared with non-abusive parents and child maltreatment tends to occur when parents lack empathy, or they are unable to read the needs of their children accurately (Bavolek, 2000; De Paul & Guibert, 2008; De Paul, et al., 2008; Kilpatrick, 2005; Wiehe, 1997). Moor and Silvern (2006) found that child abuse and deficient parental empathy were strongly related to future psychological symptoms. Additionally, Tempel (2007) and Wiehe (1997) attribute the lack of empathy in abusive parents to exposure to significant stress in their home or community of origin, and the lack of a positive model for empathic behavior.

Intergenerational Continuity of Parenting Attitudes and Behaviors

Various factors related to the parent's history, personality, and knowledge can influence parenting attitudes and practices. There is strong evidence that parenting styles and practices are being transmitted across generations with parents parenting similarly to how they were parented as children (Belsky, Conger, & Capaldi, 2009). An early study by Caspi and Elder (1988) found that women growing up during the Great Depression who experienced hostile, angry, and aggressive parenting also exhibited similar angry and hostile behavior as parents 30 years later. In 2003, researchers from the Oregon Youth Study found that fathers who had received poor parental supervision and harsh discipline as children were more likely to use harsh inconsistent discipline with their own children (Capaldi, Pears, Patterson, & Owen, 2003). In addition to harsh parenting, positive parenting has also been shown to continue into subsequent generations. With the use of a large random sample, Chen and Kaplan (2001) found that parents who as children experienced good parenting in early adolescence (positive affection, inductive discipline, communication, etc.) predicted similar patterns of parenting when these youth were in their 30s. A more recent study conducted by Belsky, Jaffee, Sligo, Woodward, and Silva (2005) also support the conclusion that parents with caregivers who did not have authoritarian attitudes and behaviors were more likely to exhibit nurturing behaviors with their children. Campbell and Gilmore (2007) examined intergenerational continuity of parenting styles and found that perceived intergenerational continuities were established for authoritarian and permissive parenting with same gender being stronger than cross-gender continuities, and with similarities being stronger between fathers and sons than mothers and daughters.

An individual's experience of being parented can not only influence his or her own parenting attitudes and practices, but can also affect child developmental outcomes. Parenting styles and practices have been shown to influence children's social-behavioral (e.g. Aunola & Nurmi, 2005), and educational outcomes (Spera, 2005). Children with parents who display an authoritative parenting style, characterized by having high expectations, setting clear rules and boundaries for children, encourages independence, and warmth and responsiveness, have been shown to do better in school, have fewer behavioral problems, and better emotional adjustment than children in non-authoritative homes (Baumrind, 1991; Dornbush, Ritter, Liederman, Roberts & Fralieg, 1987; Gray & Steinberg, 1999; Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

Intergenerational Transmission of Child Maltreatment

Just as positive and supportive parenting can be transmitted to subsequent generations, so can abusive and neglectful parenting behaviors. In fact, one of the major risk factors associated with child abuse and neglect is parental experience of child maltreatment (Belsky, 1993; Kim, 2009; Pears & Capaldi, 2001; Thornberry et al., 2012).

Egeland et al. (1988) examined the factors associated with mothers who went on to break the cycle of abuse and those who perpetuated the abuse. They found that those who broke the cycle tended to be significantly more likely to have emotional support, have been in therapy, and a more "stable, emotionally supportive and satisfying relationship with a mate" (Egeland et al., 1988, p. 1080). Women who went on to abuse had significantly more stressful life events and were more anxious, dependent, immature and depressed.

The study relied on the recollection of participants' own abuse and researcher observations of "child rearing practices" determined to be abusive. Participants were also predetermined to be "at-risk" at the time of recruitment.

Other studies have examined the risk and protective factors associated with the intergenerational cycle of abuse and neglect. For example, Dixon et al.'s (2005) findings indicate a rate of 6.7% of intergenerational abuse within the child's first year of life, with those continuing the cycle of abuse reporting much higher incidences of risk factors such as financial problems, young maternal age, and single parenthood. The comparison group participants were referred for the maltreatment of their children at a rate of .4%. The authors acknowledge several limitations to the study. They relied on participants' self-report of child maltreatment and only looked at the incidence of child maltreatment within the first 13 months of life.

Kim (2009), Li et al. (2011), and Pears and Capaldi (2001) also found support for the hypothesis of intergenerational transmission of child abuse (ITCA). Pears and Capaldi (2001) examined ITCA in a longitudinal study of 109 participants and found that parents reporting childhood abuse were significantly more likely to abuse their own children. Li et al. (2011) found that mothers with a history of child maltreatment were 2.26 times more likely to be reported for maltreatment of their own children than those without a history of child maltreatment. This study also identified education, marriage, and high levels of social support as protective factors against child maltreatment.

Kim (2009) used nationally representative data from the Adolescent Health Longitudinal Study to test the hypothesis of ITCA with specific types of abuse, physical abuse and neglect. Findings indicate support for the ITCA hypothesis in that parents who report being physically abused in their childhood were five times more likely to report physically abusing their own children and 1.4 times more likely to neglect their children. Parents reporting being neglected as children were 2.6 times more likely to report neglectful parenting and were 2 times more likely to be physically abusive as compared with those with no history of abuse. Bert et al. (2009) examined the influence of maternal history of abuse on parenting knowledge and behavior. In addition to supporting previous studies on ITCA, this study's findings indicate that the type of childhood environment (low/high resource) can also impact future parenting behavior.

In a large longitudinal study, Berlin et al. (2011) found that mothers' childhood experience of physical abuse, but not neglect predicted child maltreatment with their offspring. This relationship was mediated by the mothers' social isolation and aggressive behavioral bias. Mothers' aggressive behavioral response was measured by showing them "provocative scenarios with ambiguous social cues from another adult" (p.166), such as being cut off in traffic and asking how they might react. In another study with a group of mothers with a history of child abuse, the presence of community violence and lower authoritarian parenting attitudes were associated with the intergenerational continuity of child maltreatment (Valentino et al., 2011)

Extensive research on the intergenerational transmission of child abuse has yielded varying conclusions related to the hypothesis that parents with a history of child maltreatment themselves are at a higher risk of abusing their own children.

The lack of consistent findings can be explained by methodological flaws with critics suggesting that samples are too small, consist mostly of high-risk participants (such as families in poverty and those who are already involved with the child welfare system), typically focus exclusively on mothers, and do not adequately define child maltreatment outcomes (Kim, 2009; Thornberry et al., 2012). Despite the limitations noted, recently there has been an effort to conduct more robust research, which has generally shown a strong the intergenerational continuity of child maltreatment. However, few, if any studies examining the intergenerational transmission of child maltreatment among children and youth who have been in foster care exist and there is a lack of documentation of child welfare system involvement among children of parents who were in foster care at some time or who have recently aged out of foster care.

Knowledge of Parenting Strategies and Child Development

Knowledge about parenting and child development has also shown to be related to parental attitudes and practices. Having knowledge about developmental norms allows a parent to anticipate developmental changes in children and have appropriate expectations related to a child's age and development. Studies have shown that mothers with greater knowledge of infant and child development have more sophisticated parenting skills (Dukewich et al., 1996; Goodnow, 1988; Huang et al., 2005). In general, greater parental knowledge is associated with more positive child developmental outcomes and greater parental competence. In additional, greater parental knowledge is related to higher socioeconomic status (SES), income and education levels (Conrad, Gross, Fogg, Ruchala, 1992; Hess et al., 2004; Teti, & Hussey-Gardner, 2004; Huang et al., 2005).

An increase in knowledge about child development has been associated with a higher quality home environment and a lower risk of child maltreatment. Parents with an increased knowledge of child development tend to be more physically and verbally engaging and utilize fewer punitive discipline strategies (Dukewich et al., 1996; Huang et al., 2005). Parents' inaccurate beliefs or overestimation of their child's performance can actually undermine the child's performance (Belsky, 1993).

Child Maltreatment and Child-Related Factors

The interaction between caregiver and child and factors related to the child, such as the child's disposition, special needs, and personality can also influence parental attitudes and behaviors. There is indication in the literature suggesting that the child's age, physical health and/or behavior can be predictive of child maltreatment. For example, younger children are more dependent on their caregivers and more physically vulnerable to injury due to developmental reasons, such as the inability to walk and/or speak (Belsky, 1993). Young children also have a harder time expressing themselves verbally and are less able to regulate their emotions, requiring greater capacity for parents to interpret the needs of their children accurately. Children with disabilities, developmental delays, cognitive impairment, or failure to thrive may be at increased risk for maltreatment (Dubowitz et al., 2011; Hibbard & Desch, 2007; Skuse, Gill, Reilly, Wolke, & Lynch, 1995). A child's temperament, mental health and behavioral needs have also been shown to influence parenting orientation (Putnam, Sanson, & Rothbart, 2002).

Contextual and Environmental Factors Related to Child Maltreatment

In addition to parent and child related factors, various contextual and environmental factors such as potential sources of stress, support, socioeconomic status, and neighborhood have been shown to influence parenting attitudes and practices (Kotchick & Forehand, 2002). Children may become at risk of CAN when the child's needs are not being met by a parent or caregiver as a result of a lack of knowledge, resources, or because motivation or environmental and social supports are inadequate. Poverty and a lack of financial resources have been linked to the incidence of child abuse and neglect (Egeland et al., 1988) as well as several socio-economic characteristics of neighborhoods and communities (Coulton, Crampton, Irwin, Spilsbury, & Korbin, 2007; Drake & Pandry, 1996). However, few studies have successfully isolated specific variables related to child maltreatment. Lynch and Cicchetti (2002) examined the relationship between community violence and the family system and determined that children who had experienced violence reported more separation anxiety and less of a connection with their caregiver. The relationship between community level factors and child maltreatment is not surprising given that the risk of maltreatment is highly correlated with individual characteristics such as low socioeconomic status and education. Parents who struggle financially tend to have poorer living conditions and health issues that are not addressed and which tend to interfere with optimal parenting. Parents living in substandard housing or experiencing financial problems may have difficulty meeting their children's basic needs (housing/shelter, food, and clothing) and may experience more housing instability and frequent moves. The emotional stress of lacking financial resources can compound already tense and volatile environment.

Literature Summary

Parenting attitudes, behaviors, and styles – nurturing and harmful alike, are influenced by many factors, including one’s history, one’s current situation, as well as other contextual circumstances. Research has demonstrated that youth aging out of foster care are faced with a number of challenges related to their personal and social well-being. Youth face instability in school, housing, health, and mental health services, and relationships – all critical aspects involved in parenting. Although there is some research that may suggest that these youth may be at risk of maltreating their own children due to a history of child maltreatment, lack of preparation for adulthood and parenthood, instability, and early parenting, there are few studies examining the parental attitudes and practices of youth aging out that indicates how they may fare as parents. Evidence shows that factors such as social support, stability, future aspirations may buffer risks associated with identified risks, but it remains unclear whether these factors are also related to parenting.

Theoretical Framework

This study will examine the parenting attitudes and parental risk of maltreatment among foster youth within a social-ecological framework to capture and incorporate the influence of the individual’s experiences of risk and resilience within their environment. An ecological approach is necessary to fully understand the complex nature of child maltreatment and social interactions, and their influence on future parenting practices. The study also uses a cultural-relational theoretical perspective to understand the importance of relationships on the development of parenting attitudes.

Overview of Ecological Models

Bronfenbrenner's (1979) ecological model typically involves four types of systems that interact and contain distinct but related roles, norms and rules, each nested within the next, that influence development and behavior: the microsystem, mesosystem, exosystem and macrosystem. The ecological perspective suggests that humans are active in the developmental process and are constantly affecting and being affected by their environment (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006). The nature of the parent-child relationship is dependent on the interaction between factors in the child's and the parents' maturing biology, the immediate family and community environment, as well as the societal landscape. Characteristics of one member of the dyad's history or temperament can affect and change the quality of parent-child interactions. Parenting does not occur in isolation and therefore parents develop attitudes and beliefs about their own parenting based on a number of factors as discussed earlier, including but not limited to the child's disposition, the relationship of the parents, parenting self-efficacy and personal values, social support and influence, in addition to their own experiences, education, and abilities. Many parents learn parenting practices through positive and negative experiences with their own caregivers.

Relational-Cultural Theory

Relationships are paramount in human development, however society often places less of a focus on the influence of relationships on behavior due to commonly accepted ideology involving the importance of individuation, competitiveness, self-sufficiency, power, and hierarchical structures which can lead to discrimination and oppression.

Jean Baker Miller developed relational-cultural theory (RCT) in the late 1970s after noting the centrality of relationships in her clients' lives were undervalued and inconsistent with traditional developmental and counseling theoretical models (Comstock, Hammer, Strentzsch, Cannon, Parsons, and Salazar, 2008). She believed that there is a lack of understanding of the relational experiences of women, people of color, and other marginalized groups which can lead to misunderstanding these individuals' experiences. RCT highlights the need to explore how issues of sex roles, socialization, power, dominance, and marginalization can affect how we interact with others and how our development throughout the lifespan is affected by our relationships with others and systems.

As previously described, youth in foster care typically experience instability in various aspects of their lives, including relationships, which are critical in a child's and adolescent's social, psychological, and emotional development. Without appropriate socialization, relational support, and knowledge of engaging in social networks, youth with a history of trauma, maltreatment, and foster care involvement may not know how to safely parent and provide for their own children. Therefore it is critical to consider and examine the relationship between youths' relational supports and their parenting attitudes.

Risk and Protective Factors

Much research has been conducted on the risks and protective factors related to child maltreatment and at-risk children and families. The concept of resilience was developed through an examination of individuals and groups who were able to "overcome the odds" and do well in light of adversity (e.g. Masten, Best, & Garmezy, 1990; Werner & Smith, 1992).

Researchers have worked to identify specific risk factors in an effort to identify factors or circumstances that increased the likelihood of an event occurring, such as child maltreatment. Risk factors are any variables that increase the probability of a problem or condition (Fraser, Kirby, & Smokowski, 2004) and are associated with an individual's experiences at any ecological level. Although it is believed that experiences or processes that occur more frequently, and which are closer to the individual tend to have the greatest impact or effect (Duncan & Raudenbush, 2001). Risk factors are also affected by the setting and environment, timing, length, duration, context, and developmental stage of the individual. It is also believed that as the number of risks increases, the stronger the impact on the individual (Garmezy, 1993).

Protective factors are resources that are internal or external that may buffer or modify the impact of specific risk factors (Rutter, 1987). Garmezy (1985) identified three broad categories of protective factors: individual attributes, family milieu, and extra-familial social environment. Individual attributes include temperament, cognitive abilities, and coping skills. Family can influence an individual's wellbeing by providing safety, support, and warmth. One's social environment contributes social supports and other resources that can enhance wellbeing. The two most influential protective factors that promote resilience throughout childhood are the presence of a strong prosocial relationship with at least one caring adult and having good intellectual capabilities (Werner & Smith, 1982; Rutter, 1990). Protective factors, as with risk factors, may exist within a specific domain and not necessarily apply to an individual's overall well-being.

To capture the multidimensional concepts of parenting and child maltreatment, Bronfenbrenner's (1979) ecological model will be used to examine factors that influence parenting attitudes and parental risk of maltreatment among foster youth at all system levels as well as the interactions among these levels. Within this context, the microsystem is the individual's characteristics and relationships with their immediate surroundings, such as school and the neighborhood. The mesosystem consists of the interactions among the microsystems. It provides a connection between structures in the individual's microsystem. The exosystem includes the link between a social setting in which the individual does not have an active role nor is it within the individual's immediate surroundings (Bronfenbrenner, 1979). Finally, the macrosystem consists of larger cultural and societal influences as the individual is active in interactions with the social network and establishing the norms within this group. The macrosystem describes the collective entity of the micro, meso- and exo-systems that create a culture or ideology in a given system (Bronfenbrenner, 1979). The macrosystem also includes social norms, policies, and the level of embeddedness of the individual and family within the larger social structure. The macro level influences on child maltreatment and parental attitudes include cultural beliefs, the media, racism, other forms of discrimination, as well as educational and economic opportunities. Family circumstances such as socioeconomic status, poverty, lack of social support and neighborhood factors associated with child maltreatment may have a direct or indirect effect on parenting ability and these circumstances can act as risks or protective factors. The consequences of child maltreatment at the macro level refer to the considerable costs it places not only on the individual but on society as a whole.

There are severe social and economic consequences, including the cost of foster care, investigating maltreatment reports, crime, medical and psychological treatment and the burden of intergenerational transmission of child abuse and neglect and poverty.

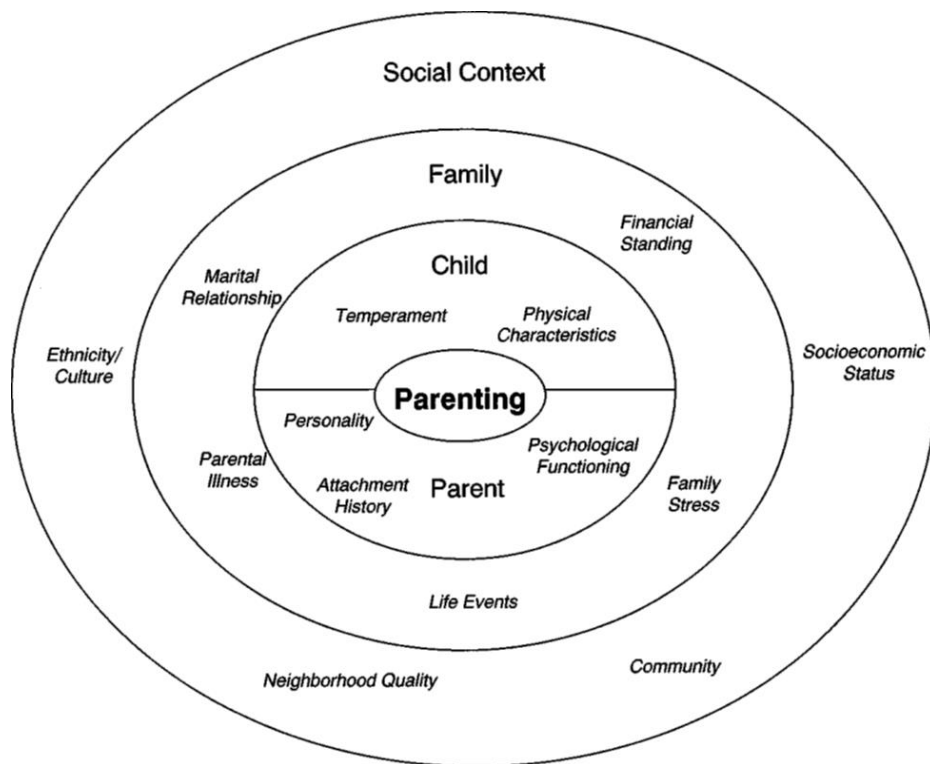
Children who have been maltreated have higher rates of psychological disorders, rates of incarceration and substance abuse (Hussey, Chang & Kotch, 2006). Furthermore, children who have been in foster care have an increased rate of reliance on government assistance, homelessness, and unemployment (Courtney & Dworsky, 2006). Zielinski (2009) conducted a study evaluating the economic impact of child maltreatment and found that adults with a history of maltreatment had lower incomes, lower rates of healthcare coverage and were twice as likely to be unemployed.

Belsky's (1984) Process Model of Parenting uses an ecological perspective in describing the individual and environmental factors that contribute to parenting practices. The model proposes that parenting practices are determined by multiple factors and nested within (a) the parent, (b) the child, and (c) the larger socio-cultural context of the parent and child. The assumptions of the model are based on the ideas that (a) parenting is influenced by multiple factors, (b) the characteristics of the parent, child, and social environment do not equally influence parenting, and (c) the social context is influenced by the parental and child characteristics that in turn affects parenting.

Parental characteristics include the parent's developmental history and personality. A mature and healthy personality and positive experiences of being parented as a child might elicit sensitive parenting characteristics. Child characteristics such as behavior and temperament can influence the quality and quantity of parental responses.

Parents may also experience a certain degree of stress from sources in the social environment, such as work and/or marriage. Belsky (1984) believes that parental characteristics and positive social supports have more influence on parenting than do child characteristics. He noted, for example, that difficult infant temperament does not compromise the quality of parenting if the parent has adequate supports and resources.

Figure 1. Ecology of Parenting



*Adopted from: Kotchick & Forehand, 2002

Understanding Parenting and Intergenerational Continuity of Child Maltreatment among Foster Youth within an Ecological Framework

There are a variety of individual, familial and societal factors that contribute to the level of risk associated with child maltreatment. This study aims at examining social relationships and parenting within an ecological framework that is specific to youth from the foster care system to better understand how foster youth may be as parents currently or in the future. Youth, in general become a part of interrelated systems as they venture through life, helping them to create an identity. Youth from the foster care system may experience these systems in a different way than youth who have not been in the foster care system. For example, a foster youth's microsystem that includes parents, extended family and schools are distinctly different from his/her peers. In general, foster youth do not live with biological parents (or oftentimes, siblings); they may not even have contact with their immediate and extended family and do not generally stay at one school during their educational careers. Foster youth are also involved in a very complex and complicated child welfare system that controls many aspects of the youth's life and developmental trajectories and can have an impact on how youth interact with peers, partners, their own children, and other governmental systems.

The mesosystem experienced by the foster youth mostly involves his/her relationships with others. This also involves the support from key relationships such as family (as the youth describes it), friends, and significant others. It involves where the youth lives and with whom.

This type of relationship and setting can influence the youths' beliefs about parenting, experience with children and knowledge about child development as well as offer the necessary support and modeling from key adults or individuals. Social support is a key element in successful parenting and in cases of child maltreatment, a lack of familial and social support can create varying direct and indirect effects on parental functioning and child developmental outcomes. Conversely, the presence of a supportive adult or peer has been shown to buffer the negative effects of child maltreatment (McGloin & Widom, 2001). This aspect of a child or youth's development can have implications on his/her future family lives, parenting attitudes and practices as well as social and professional relationships. Educational experiences and aspirations can serve as a risk or protective factor based on how it is experienced by the individual. It can be motivating and inspiring or it can be defeating and discouraging. Foster youth are embedded involves systemic influences such as time spent in foster care, the number of placements, and participation in programs offered by state and local agencies to help youth become more self-sufficient.

The research questions posed in this study are rooted within an ecological framework. The first research question aims to explore the parenting attitudes of youth aging out of foster care and what their risk of child maltreatment may be with their own children. Parenting attitudes and practices are defined by a number of factors within an individual's ecology, such as parental expectations, parental empathy towards children's needs, one's beliefs about using corporal punishment, parent-child family roles, and children's power and independence. All of these factors are influenced by the individual and the individual's environment.

For example, beliefs about parent-child family roles and the use of corporal punishment are rooted in the individual's experiences and knowledge, as well as societal expectations and norms of parenting and the treatment of children.

The second research question aims at examining the relational support that might influence participants' parenting attitudes. Specifically, what aspects of perceived social support, youths' living arrangement, and other relationship-based variables are related to foster youths' parenting attitudes? The ecological approach is holistic and attempts to incorporate the multiple levels of influence on behavior and beliefs. It also examines the interactions between the levels of influence as this study aims to do.

Uses and Critiques of Ecological Models

The use of an ecological framework has proved to be helpful in developing a greater understanding of various social phenomena due to its ability to incorporate multiple levels of influences and interactions. The theory itself has been used in various contexts, and has advantages and disadvantages. It is suggested, however that Bronfenbrenner's (Bio) Ecological Theory is extremely broad and very difficult to test, and that it is perhaps instead a meta-theory that can essentially be applied to any concept or issue. Despite this, ecological models are used to provide a more comprehensive and descriptive approach and guide to assessment and intervention (Scannapieco & Connell-Carrick, 2005).

It is nearly impossible to discuss child maltreatment and parenting within the context of either the individual or the environment. It cannot be fully understood or explained by one or the other, and only when the interactions of multiple levels of biology, individual and familial characteristics, and the environment are examined simultaneously. Although there are many studies that have used an ecological framework for similar topics, the following are some examples that have presented research in child maltreatment and the formation of parenting attitudes and practices with an ecological framework. In addition to the earlier works of Belsky (1993, 1984), Baumrind (1994) used an ecological perspective to unearth the impact of the social context in child maltreatment, specifically highlighting the economic and cultural factors that affect the occurrence of child maltreatment. More recently, Li et al. (2011), Currie and Widom (2010), and Dubowitz et al. (2011) used an ecological framework in examining long term consequences of child abuse and neglect, protective factors among families at risk of child maltreatment, and identifying children who are at high risk of child maltreatment. Kotchick and Forehand (2002) also contend that the use of an ecological perspective allows us to conceptualize “parenting as a process...that will facilitate a more sensitive approach to interventions and public policies” (pp. 256). An ecological perspective allows for a multidimensional approach to understanding parenting and child maltreatment and is the most appropriate in guiding this study’s research questions, methodology, and analysis.

Research Questions

There are two research questions addressed in this research project:

- 1a. What are the parenting attitudes of youth aging out of foster care?
- 1b. What is the parental risk of maltreatment of young adults who are aging out of foster care?
2. Are perceived social support or youths' living situation related to foster youths' parenting attitudes?

Hypotheses

- 1a. Foster youths' parenting attitude mean and construct scores will be less than the normed sample's median scores of 5.5.
- 1b. Foster youths' risk of maltreating as parents will be greater than the normed sample's risk.
- 2a. Higher levels of perceived social support from friends, family, and significant others will be associated with higher levels of overall nurturing parenting attitudes across constructs.
- 2b. Foster youth living with relatives and foster parents will have more nurturing parenting attitudes across constructs than youth living on their own, in group homes and shelters, or in other living situations.

CHAPTER 3

Method

Research Design

This study utilized a cross-sectional questionnaire administered on-site by the researcher to address the research questions. To determine the parenting attitudes among foster youth and the factors related to parenting attitudes, a sample of individuals meeting the predetermined criteria for foster youth were asked a series of questions that represented and measured these constructs.

Sample

Convenience sampling was used to recruit participants, which consisted of obtaining a non-random sample accessible to the researcher. In this particular study, youth in and from the foster care system were challenging to reach, and therefore it was not realistic to attempt to obtain a random sample. Youth in and from the foster care system can be hard to reach due to frequent mobility and disengagement from the system after they ‘age out’ of foster care. As of March 2012, there were 2057 youth between the ages of 16-21 in out of home placement in Arizona, of which 1107 were reportedly receiving Independent Living (IL) Skills services. Approximately 600 youth leave the foster care system each year in Arizona because they reach the age of majority, while another 600 elect to voluntarily continue to receive services (up until the age of 21 should they choose) (Arizona Department of Economic Security, Child Protective Services, 2013). Youth in the foster care system, or who had recently exited, between the ages of 16-23 were recruited to participate (both currently dependent or on voluntary status with CPS).

Participants (male and female) were recruited from various settings including group homes, meetings, fairs, events and gatherings across the state. For youth to be considered, they must have been in out-of-home placement for at least 6 months and not currently in the care of their parents (if under 18). The final sample size consisted of 183 young adults from across the state.

Recruitment

CPS Independent Living Coordinators provided information about Child Protective Services (DES/CPS) contractors to the researcher to engage agencies that serve youth in and recently exited from foster care across the state. The researcher also recruited participants and administered questionnaires at various meetings, functions, group homes, and events. Sixty participants were recruited from group homes, 15 from youth advisory boards, 86 from community events (Jewish Family and Children Services, Magellan, Passages, Department of Children, Youth, and Families Annual Youth Conference), and 22 from contracted agencies serving youth (Arizona's Children Association, Intermountain). The researcher made an effort to recruit young adults across the state and was successful in recruiting from the following counties: Maricopa County, Pima County, Yavapai County, Coconino County, and Pinal County. There are fifteen counties in Arizona with a total state population of 6.5 million, the most populated being Maricopa County (4 million) and Pima County (992,000) (U.S. Census, 2013).

Participant Protections

Several measures were taken to ensure the confidentiality of the participants. The researcher obtained permission from the ASU Institutional Review Board (IRB) prior to data collection (Appendix A).

Participants in this study were considered a protected population with the ASU IRB due to age (under the age of 18) and their status as being legally dependent/in the custody of the State of Arizona and/or affiliated with a young adult program with DES/CPS.

Permission was also granted by the Arizona Department of Economic Security, Division of Children, Youth, and Families (Appendix B). All information collected was anonymous and confidential. The researcher did not know participants' names or other personal identifying information and there was no way to link responses with individual participants. All data were reported in aggregate form and the paper surveys were shredded after being entered into the data file to further ensure confidentiality. All participants in the study were provided with a copy of an information letter outlining their rights as participants, any risks and benefits associated with their participation in the study, and study contact information (Appendix C).

Data Collection

Data were collected through written surveys completed by participants. Prior to administration, the surveys were reviewed by several experts working with youth in foster care to provide feedback and suggestions for language, comprehension, and relevance of questions. Surveys were administered to participants from June 23, 2012 through September 14, 2012. Each participant was provided with a questionnaire, a pencil, and an envelope in which to place the completed survey. Participants were provided with verbal and written instructions to take the survey as well as information about their rights as participants. The time to complete the survey ranged from approximately 15 minutes to 40 minutes.

Envelopes were sealed and only handled by the researcher. When the envelope was returned to the researcher (completed or not), the participant was provided with a \$15 gift card. Participants were instructed to skip questions or stop at any time should they choose without penalty. All participants received a gift card for returning the envelope to the researcher.

Survey Instrument and Measures

The questionnaire being used in this study is a combination of three established, validated and reliable scales, along with a series of questions developed by the researcher for each variable of interest. The following is a description of the variables and constructs examined in this study. There were a total of 117 quantitative and qualitative questions on the survey, however not all variables or scales were used in the final analysis. It was also possible for one to skip certain questions if they did not apply and some were follow up questions for another (see Appendix D). For example, if a participant answered “no” to the question “do you have any children?”, then they would not answer the questions that followed about where the children live and whether there had ever been a report with CPS regarding their children. There were seven domains of questions: (a) parenting attitudes, (b) empathy, (c) social support, (d) foster care experiences, (e) educational experiences and aspirations, (f) relationships, pregnancy, and children, and (g) demographics.

Parenting attitudes. The major focus of this study was the examination of parenting attitudes of current and former foster youth. Parenting attitudes can be defined as an individual’s belief, feeling, or orientation towards an action, or concept related to parenting.

Attitudes and intentions are believed to be the best indicators of behavior in the absence of the behavior itself (Ajzen & Fishbein, 1977; Ajzen, 1991). Oftentimes, an individual has not had the opportunity or been in a situation to act, but still holds a belief or attitude towards this behavior or issue. It is very common for researchers to measure individuals' attitudes towards an issue in an effort to predict the occurrence of a future behavior. In this case, parenting attitudes were measured to determine the probability of future behavior that is consistent with child maltreatment and level of nurturing parenting behavior. Because it was possible that the participant was already a parent, attitudes that reflect current or past practices as a parent could be measured. The variable 'parenting attitudes' is a multidimensional concept that is comprised of a combination of 5 constructs outlined by Bavolek & Keene (1999): (a) parental expectations, (b) parental empathy towards children's needs, (c) beliefs about using corporal punishment, (d) parent-child family roles, and (e) children's power and independence. It has been shown that adolescents have developed fairly well defined attitudes towards parenting and raising children by middle school and/or high school (Bavolek & Keene, 1999). By measuring parenting attitudes, one can use the existing index to determine the potential for risk of practicing behaviors that are attributed to child abuse and neglect.

Parental expectations. Based on knowledge and experience, parents develop expectations for children's behaviors and development (Bavolek, 2000). For example, parents should expect a child's behavior to reflect his or her developmental level, regarding toilet training and/or walking. When parents have inappropriate expectations of the child's abilities and needs, there is the potential for stress and abuse and/or neglect.

Children's self-worth can also be damaged if they perceive themselves as not being able to fulfill parental expectations.

Parental empathy toward children's needs. A lack of empathy, as defined by Bavolek (2000) is the "inability to be empathically aware of their children's needs and to respond to those needs appropriately" (p. 4). For parents to be 'empathically aware', they must be able to understand their children's needs without actually experiencing them. When parents are not 'attuned' to the needs of their children, they essentially ignore cues and signals that their children make to communicate that they are in need. Abusive or neglectful parenting might result when needs that are critical to survival (e.g. food) or to healthy development (e.g. attachment and sense of self) are ignored.

Beliefs about using corporal punishment. Beliefs about punishment and discipline can have a major impact on how people might discipline or punish their own children. If an individual strongly endorses the use of physical punishment as a means of discipline, it might be assumed that the individual believes it to be appropriate to physically punish a child for behavioral infractions and may use this type of punishment regardless of the behavior or age of the child. Parents who physically punish their children believe that this will correct bad conduct or perceived inadequacies (Bavolek, 2000).

Parent-child family roles. The roles in a family are established through guidance and modeling. Parents or caregivers generally assume the role of providing for and meeting the needs of the child. The child is taught to begin to care for her/himself, however, the child is not expected to meet the needs of the parent/caregiver.

Therefore, such a role reversal is perceived as dysfunctional within the family and can be detrimental to the child's development and future functioning (Bavolek, 2000). It is also important to point out that this construct is different from a parent being empathic to the needs of his/her child. In this case, the child becomes necessary to family functioning and instead of receiving direction and monitoring, he or she becomes the source of authority and decision making. By assuming this role, children are often unable to experience common developmental tasks in childhood and adolescence that are necessary to adjust in adulthood.

Children's power and independence. There often exists a double standard or confusion when it comes to a child's appropriate level of control and independence. It is a common goal for parents to want their children to become assertive, self-sufficient and independent but they then may fail to promote these characteristics through their parenting practices. Parents may not want children to challenge their authority, and may expect outright obedience. When a child's power and independence are suppressed, children are not able to formulate their own opinions, ask questions, or make choices. Additionally, these behaviors may be interpreted as 'acting out' or as the child being purposely disobedient (Bavolek, 2000). For children to learn to behave appropriately and have the opportunity to explore their own world independently, parents must set boundaries and rules for them, but must also allow for children to make their own choices, decisions, ask questions and have influence over outcomes that affect them. Parents must provide a rationale for rules and boundaries followed by appropriate consequences.

The *Adult-Adolescent Parenting Inventory – 2* (AAPI-2, Bavolek & Keene, 1999) was used to measure parenting attitudes and child-rearing practices. The AAPI-2 is a standardized measure used to assess parenting attitudes and child rearing practices of adults and adolescents. It also has the capability of identifying high-risk child rearing and parenting practices that could lead to physical or emotional abuse, or neglect of children. The questionnaire is a 40-item inventory consisting of five constructs described above. Responses are given on a 5-point Likert scale, from *strongly agree*, *agree*, *uncertain*, *disagree*, to *strongly disagree*. The instrument can be used with adult parent and pre-parent populations as well as adolescent parents and pre-parents age 13 and older and is written at a 5th grade level.

Internal reliability co-efficients for the AAPI-2's 5 constructs using the Spearman-Brown formula ranged from .83-.93 (Bavolek & Keene, 2005). The Cronbach's alphas ranged from .80 to .92. The items were formed based on statements provided by parents and children. During instrument development, professionals in the helping discipline were asked to assign items to one of the five parenting constructs. Criterion-related validity was tested by comparing results with a group of abusive and non-abusive parents ($N = 1985$) that found abusive parents had statistically significantly lower mean scores on each of the constructs than non-abusive parents. A non-randomly selected sample of abusive/non-abusive, parenting and pre-parenting adolescents and adults serve as norming samples. The norming samples are reportedly nationally representative (Bavolek & Keene, 1999). Regarding differences, overall, males were found to have lower scores than females.

Scoring involves the summing of subscale and total scores and comparing to the normed sample and/or converting raw scores to standard scores that can be plotted on the *AAPI Parenting Profile*, which provides an index for risk of abusive/neglectful behavior.

Lower scores indicate lower levels of nurturing parenting attitudes, while higher scores indicate higher levels of nurturing parenting attitudes. It is also important to note that to obtain raw and sten scores based on the measure, one must enter the scores into a profile on the instrument developers' website. Researchers using this instrument cannot score data they have collected themselves.

Conners, Whiteside-Mansell, Deere, Ledet, and Edwards (2006) conducted exploratory and confirmatory factor analysis on the AAPI-2 with a mostly Caucasian, low-income sample in rural region of southeast United States to determine the unidimensionality of the scale, and to evaluate the consistency of the measure. They concluded from their study that the factor structure was confirmed in this particular sample and that the AAPI-2 has good construct validity due to high correlations with other established instruments measuring parenting behavior and attitudes.

The AAPI-2 can be used as a pre-test and post-test to determine treatment or program effectiveness, assess individuals' attitudes regarding parenting prior to becoming a parent, screen potential staff and volunteers in environments related to children. The AAPI-2 has been used with a number of 'at-risk' populations including incarcerated mothers (Sandifer, 2008), low-income new mothers (LeCroy & Krysik, 2011), pregnant and parenting teen parents (Robbers, 2008; Thomas & Looney, 2004), drug involved inmates (Surratt, 2003), and a combination of at-risk and incarcerated parents (Palusci, Crum, Bliss, & Bavolek, 2008).

Perceived social support. Perceived social support is described as the level of support received from family, friends, and/or significant others in the form of emotional support, tangible support, and social support as perceived by the individual reporting the support.

The *Multidimensional Scale of Perceived Social Support* (MSPSS, Zimet, Dahlem, Zimet, & Farley, 1988) is a self-report measure consisting of 12 questions and 3 subscales: (a) friends, (b) family, and (c) significant other and was used with permission from the primary author. Responses are based on a 7 point Likert scale of *very strongly agree, strongly agree, mildly agree, neutral, mildly agree, strongly agree, and very strongly agree*. Higher scores indicate greater social support, while lower scores indicate less social support.

The MSPSS was initially developed by researchers to capture multiple sources of social support as determined by the individual. This widely used scale has been shown to be psychometrically sound, with good reliability, factorial validity and adequate construct validity (Dahlem, Zimet, & Walker, 1991; Zimet et al., 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The original study by Zimet and colleagues (1988) was conducted with a limited sample of college students. It revealed good internal reliability ($\alpha = .85-.91$), stable test-retest ($\alpha = .72-.85$), and good construct validity by examining correlations with the MSPSS subscales and other established subscales. The study also showed that women had significantly higher scores of support than men from friends, significant others and overall (Zimet et al., 1988).

A follow-up study with pregnant women, adolescents and pediatric residents (male and female) showed good internal reliability across groups ($\alpha = .81-.90$ on family subscale, $\alpha = .90-.94$ on the friends subscale, $\alpha = .83-.98$ on the significant others scale, and $\alpha = .84-.92$ for the scale as a whole) and good factorial validity that confirmed the 3-subscale structure of the previous study (Zimet et al., 1990). The MSPSS has also been validated with youth and adults from diverse backgrounds (Bruwer, Emsley, Kidd, Lochner, & Seedat, 2008; Canty-Mitchell, & Zimet, 2000).

Empathy

The Empathy Assessment Index (EAI, Gerdes, Segal, & Lietz, 2012) is a newly developed 22-item self-report instrument rooted in social cognitive neuroscience that measures an individual's level of empathy based on 5 constructs: (1) emotion regulation, (2) self-other awareness, (3) affective mentalizing, (4) perspective taking, and (5) affective response. Empathy as measured in the AAPI-2 is specific to parental response to a child's needs and does not provide a comprehensive conceptualization of interpersonal empathy in the way that the EAI does with each of the four constructs. The EAI has been found to produce valid and reliable data with samples of college students and community professionals (Lietz et al., 2011). In a confirmatory factor analysis and reliability test of the model of empathy, Lietz et al. (2011) found that an earlier version of the EAI (17 items) had the best fit [CFI = .98; RMSEA = .04 (90% CI (.03; .05); WRMR = .80]. Rigorous evaluation and revision of EAI components and their properties include the use of focus groups and multiple administrations among college students, community professionals, and GED students (Lietz et al., 2011). Additional evaluation of the psychometric properties of the current version of the EAI is underway.

Further validation was also established among ‘known groups’ believed to have low and high empathy in an effort to demonstrate a range of empathy (Gerdes, Geiger, Lietz, Wagaman, & Segal, 2012).

Educational experiences and aspirations. To capture respondents’ educational experiences and aspirations, a series of questions were asked. First, it was important to determine if the participant was currently attending school and if so, at which level (high school and grade, GED program, community college, trade/vocational school, university or other). The construct ‘educational experiences’ involved questions about (1) the highest level of education completed (currently in high school and grade, high school completed, GED, some college, vocational program, or other), (2) the participant’s degree of overall experience in school (ranging from “very positive” to “very negative”), (3) the participant’s self-reported average grades achieved (ranging from “mostly As/A average” to “mostly Fs/F average”, (4) the degree to which the participant believes he or she was prepared to attend postsecondary school (ranging from “strongly agree to strongly disagree”, and (5) identification of the most influential person in the participant’s education (open ended).

Educational aspiration was measured by asking the participant about the highest level of education they *hoped* to complete (high school, GED, vocational training/trade school, military, community college, 4-year college, or graduate school – masters, PhD, Law, Medical) and what level of education they *expected* to complete (same choices). A question was also asked about whether the participant thought they had the resources to attend college should they choose to.

The response for this question was dichotomous – “yes” or “no”. Educational experiences, aspirations, and expectations were explored in this study as potential risk and protective factors.

Demographics. Demographic questions about age, gender, ethnicity, current living situation, relationship status, number of children, income, and employment status were also included in the questionnaire. Age was measured in years at last birthday as reported by the participant. Gender was a categorical variable – male, female, or other. Ethnicity was a categorical variable as defined by the respondent (African American, American Indian, Asian, White/Caucasian, Hispanic/Latino, Multiracial, or other). A variable regarding the participant’s current living situation referred to the housing arrangements of the participant (“in your own apartment/home/dorm”, “with foster parents”, “with relatives”, “in a group home/shelter”, or “other”). Participants were asked about their relationship status, whether they were currently in a romantic relationship or not. Relationships can also influence work, education, and parenting attitudes. Employment status was a dichotomous variable (yes/no) and was followed up with additional information about work if the participant was employed (e.g. part time, full time, other, type of job). The demographic variables were used as independent variables in some cases and control variables in other analyses.

Foster care experiences. Ten questions regarding foster care experiences were included in the survey to determine participants’ history of child maltreatment (physical abuse, emotional abuse, sexual abuse, neglect or other), time in foster care (6 months to a year, 1-2 years, 3-5 years, or more than 5 years), presence of a mentor, and number of placements.

The total number of placements was very relevant to this study in to determine the youth's stability over time. One question was asked about whether the participant was currently participating in an Independent Living Skills Program (ILS) or not. This study included questions to identify the existence of a mentor (ever/currently) and the perceived experience with the mentor (if there was one).

After youth reach the age of majority and leave foster care, many will reconnect with biological parents and family, sometimes moving in with them. A question was included about what (if any) contact the youth may have with biological family.

Mental illness diagnosis is common among children in the foster care system and youth aging out (Courtney & Dworsky, 2006). As previously noted, parents struggling with mental illness may also experience difficulty with parenting (DeBellis et al., 2001). There were 2 questions about mental illness, one to determine if the participant had ever been diagnosed with a mental illness (yes or no) and if yes, what was the diagnosis (open-ended)?

Several questions about participants' experiences with pregnancy and parenting were asked. It was important to determine if the participant was a parent for purposes of evaluating responses on the AAPI-2 and for comparison with other variables. There were questions asking if the participant had ever been pregnant, gotten someone pregnant or was at the time pregnant and the number of times. Participants were also asked if they had any children, the number of children and whether the children lived with them or not. If the participant responded that their child or children did not live with them, then they were asked with whom they lived. They were also asked who helps them with their children if they have any (family, friends, or other).

Participants with children were asked whether they had ever had a report with CPS concerning their children, if their child or children had ever been removed from their care, if so, when and for how long. There were also questions to determine if participants were using birth control and if so, what type of birth control (birth control pills, Depo shot, abstinence, condoms, IUD, or other). Participants were asked about when they plan on starting a family (never, already have a family, within a year, in 2-3 years, in 5 years, in 10 years, in 10+ years). The questionnaire is presented in Appendix D.

Data Handling and Storage

Collected survey data were anonymous and responses were not linked to participants in any way. Names, addresses or other identifying information were not collected. As surveys were collected, the researcher entered the data from each survey into an SPSS 20 file (statistical software package). The data file has been and will be kept on a portable drive that is locked in a cabinet at the School of Social Work when not being used. Once all surveys were collected, the data were reviewed, ‘cleaned up’ and analyses were performed as they related to the research questions.

Variables

Although, additional questions and variables were included in the survey, only the following variables are included in the statistical analysis for purposes of avoiding redundancy and including only those variables that are hypothesized to have a theoretically grounded relationship with the dependent variables. The independent variables used in the analysis were perceived social support and youths’ living arrangement.

Perceived social support was measured using the MSPSS as described above. Control variables included age, gender, length of time in care, number of placements, and whether participants had already had children.

The dependent variable was parenting attitudes, which was comprised of the 5 subscales described above. Each subscale was calculated based on questions asked on the AAPI-2. Each component was measured on a 5 point scale ranging from *strongly agree* to *strongly disagree*. In addition to being recorded in the researcher's database, these variables were entered on a secure website for scoring (developers do not allow others to score their own data) which was then converted into a "sten" score. Sten scores are standardized scores derived from the percentile distribution of raw scores. They are transformed from percentiles into sten scores according to a normal curve of 10 points, with a score of 5.5 being the median of the raw scores. The sten scores therefore are best used to determine where a participant is in relation to a normal distribution of scores.

Power

Power is the probability of rejecting the null hypothesis given the null hypothesis is false. A power analysis was conducted prior to distributing surveys using G*Power 3.1.3 to determine the number of participants needed based on the number of predictors used in the analysis to be able to achieve sufficient power of .80. Power of .80 means that 80% of the time, we will reject the null hypothesis when it is indeed false. Ten predictors were identified in the study's initial regression models. According to a power analysis, a sample size of 118 ($f^2 = .15$) is necessary to achieve a power of .80 with 10 predictors and achieve a medium effect size (Cohen, Cohen, West, & Aiken, 2003).

A small effect size of .02 would require 822 participants, which was not feasible with this study; therefore findings will be discussed with caution. In the final models, no more than 4 predictors were actually tested. Therefore, additional power analyses were conducted after data collection to determine power. With 3 tested predictors and 10 total predictors (including control variables), with a sample size of 183, power of .95 was achieved ($f^2 = .15$). With 4 tested predictors and 11 total predictors in the second model, a power of .95 was achieved ($f^2 = .15$).

Analytic Strategy

Descriptive statistics, including percent, means and standard deviations, when appropriate, were calculated from the data. Bivariate correlations among the variables were also calculated using Pearson's r coefficients. The reliability coefficients were calculated, when possible, for the scales used in the regression model using Cronbach's Alpha.

Missing Data

There were very little missing data from the surveys. Responses to specific questions yielded data that were unusable because they were unmeasurable or it was not possible to categorize them based on the participant's response. For example, the question related to the number of placements experienced by the youth. Many were able to recall the exact number of placements, however many simply wrote, "too many", or "a lot" which made it impossible to assign a number or category. Only those responses that were specific to a number were used, therefore decreasing the number of data points used for this variable. No imputation was done as it would have been difficult to estimate the number of placements given the information collected.

Research Question 1: Sten Scores and Child Maltreatment Risk

For the first research question, means and standard deviations were calculated for each of the parenting attitude constructs. Risk of maltreatment categories are based on the sten scores and were calculated by using the guidelines of the instrument developers. Maltreatment risk by construct was calculated as well as overall risk of maltreatment. Sten scores indicate the level of nurturing parenting attitudes, therefore, scores of 1-3 indicate high risk of maltreatment (lower nurturing parenting attitudes), scores of 4-7 indicate 'medium risk' of maltreatment, and scores of 8 through 10 indicate a 'low risk' of maltreatment. Overall risk of maltreatment was calculated by summing the risk associated with the 5 parenting constructs and dividing by five.

Research Question 2: Multiple Regression Analyses

The second research question examined the relationship between the independent variables (perceived social support, current living arrangements) and parenting attitudes of foster youth, the dependent variable controlling for age, gender, time spent in care, number of placements, and whether the youth was a parent. To evaluate these relationships, multiple regression analyses were conducted with the independent variables as predictors, and each of the parenting construct sten scores as dependent variables. Multiple regression analysis allows for a number of variables to be included in a prediction model while controlling for certain variables. There are several assumptions to be met when analyzing and interpreting the relationship between variables in a linear regression model.

Linear regression requires that variables are normally distributed, the relationships between variables are linear, there is an independence of errors, and the relationship between metric and dichotomous variables is homoscedastic (Cohen et al., 2003). To evaluate the assumption of linearity, scatterplots were examined to determine a linear relationship between the independent and dependent variables. Scatterplots can also identify outliers in the data to be addressed. Correlations were also obtained to evaluate the relationships among the variables. There is also an assumption of correct specification of independent variables in the model (Cohen et al., 2003). Theory dictates which variables to be used in the regression model; that is, there must be a theoretical basis for including specific variables in a model because there is a proposed or established relationship with the dependent variable. The reliability of the independent variables was also assessed for measurement error. The assumption of the independence of errors was tested by conducting a Durbin-Watson test. This ensures that residuals are not correlated. All variables were tested for multicollinearity while dichotomous variables were assessed for homogeneity of variance. To avoid multicollinearity, the independent variables were tested in separate models with the dependent variables.

Limitations

There are limitations in the research design and statistical analysis. First, the study uses a convenience sample, which may not be representative of the population of youth aging out in Arizona of the United States. The sample is generally small when compared to the number of youth aging out in Arizona and the United States and data were only collected in one state, Arizona, and is therefore limited in its generalizability. There is no comparison sample, therefore the parenting attitude scores presented are only descriptive.

The questionnaire relied on youths' self-report, which may include a social desirability bias or inaccurate responses due to failure to recall specific answers or misunderstanding of the question. The questions reflect participants' attitudes which may not necessarily reflect current or future behaviors or actions. In addition, many variables were included in the study and analysis, however there may be other variables that are related to parenting attitudes that were not included in the study and analysis. It is important to note that the intent of the study was to explore the parenting attitudes of a sample of youth aging out in Arizona and was not intended to show causation between variables of interest and the parenting attitudes of youth aging out.

Summary

Youth age 16 through 23 were recruited to participate in an anonymous survey about parenting attitudes, perceived social support, educational experiences and aspirations, and foster care experiences. One hundred and eighty three participants completed the survey. Descriptive statistics were calculated to determine the mean scores on each of the AAPI-2 constructs: parental expectations, parental empathic awareness of children's needs, beliefs about corporal punishment, parent-child roles, and children's power and independence. Regression analyses were used to determine whether the variables listed above as well as control variables were related to each of the AAPI-2 constructs.

CHAPTER 4

Results

This study examined the parenting attitudes, parental risk of child maltreatment, and the relationship between youths' perceived social support and living arrangements and their parenting attitudes. This chapter will present findings related to the two overarching research questions. First, descriptive statistics are presented regarding the sample demographics, educational experiences and aspirations, foster care experiences, pregnancy and parenting experiences, perceived social support, parenting attitudes, child maltreatment risk, and overall risk. Bivariate correlations using Pearson's r were conducted to present the relationships between each of the parenting attitude constructs, youths' living arrangements, perceived social support scores, and control variables. Linear regression analyses are presented for each of the parenting attitudes as dependent variables and for youths' living arrangement and youths' perceived social support as independent variables.

Descriptive Statistics

Approximately half of the 183 participants were female (52.5%, $n = 96$) and 31.7% identified their race/ethnicity as Caucasian/White ($n = 58$). Twelve percent were African American ($n = 22$), 6% American Indian ($n = 11$), 24% Latino/a or Hispanic ($n = 44$), 23% identified as being biracial or multiracial ($n = 42$), and 2.7% identified as other ($n = 5$). These figures are very similar to the ethnic makeup for children of all ages in the foster care system in Arizona, with those identifying as Hispanic/Latino(a) being slightly underrepresented in the sample (Arizona Department of Economic Security, 2013). The sample demographics are included in Table 1.

The mean age of the participants was 17.33 and the median age was 17, indicating many of the youth in the study were still in the legal and physical custody of Child Protective Services. In March 2012, there were 687 youth age 16, 785 were age 17, and 585 were age 18 in out of home care in Arizona.

Table 1
Description of Study Participants (n= 183)

Variable	Frequency	Percent
Gender		
Female	96	52.5
Male	81	44.3
Missing	6	3.3
Race/Ethnicity		
African American	22	12.1
American Indian	11	6.0
White/Caucasian	58	31.7
Latino/a or Hispanic	44	24.0
Multiracial	42	23.0
Other	5	2.7
Missing	1	0.5
Age		
Age 16	50	27.3
Age 17	64	35.0
Age 18	33	18.0
Age 19	14	7.7
Age 20	11	6.0
Age 21	2	1.1
Age 23	1	0.5
Missing	8	4.4

Educational Experiences and Aspirations

Eight-six percent of the participants reported they were currently enrolled in school ($n = 153$). Of those enrolled in school, the majority were in high school (72.5%, $n = 121$); 6% were enrolled in a GED program ($n = 10$), 3% were at community college ($n = 5$), 15% were enrolled at a trade or vocational school ($n = 25$), and 2.8% were enrolled at a university ($n = 3$). Participants reported mostly achieving B and C grades in their most recent semester or evaluation.

Participants reported mostly positive experiences in school. On a scale of 1-5 (5 being very positive), participants reported a mean score of 3.69. Regarding aspiration, most had hopes to complete a 4-year college degree (32.2%, $n = 59$) and graduate school (29.5%, $n = 54$). When asked what level of education they expected to complete, those numbers, although still high were lower than what they had hoped for, 4-year college (30.1%, $n = 55$) and graduate school (23%, $n = 42$). Participants reported feeling moderately prepared for college with a score of 3.55 out of 5 possible points, 5 indicating they strongly agreed. Seventy-seven percent reported having the resources for college should they choose to attend. This however is the youth's perception of resources and not necessarily actual resources available to them.

Foster Care Experiences

Participants were asked the reason they entered foster care. Four categories of abuse and neglect were listed in addition to an 'other category' and participants were permitted to select more than one category. The majority of respondents reported experiencing more than one type of abuse. Almost half of participants reported experiencing neglect (49.4%, $n = 87$). Forty-three percent reported experiencing physical abuse ($n = 75$), 33% emotional abuse ($n = 58$), and 25% reported sexual abuse ($n = 44$). Thirty-six percent ($n = 64$) reported another reason for entering the foster care system, such as pregnancy, bad behavior or getting in trouble, abandonment, immigration issues, drug use by youth or parent, and homelessness. National data suggests that more than three quarters of children reported for maltreatment are victims of neglect, 18% are reports of physical abuse, 9% sexual abuse and 11% are other.

In Arizona, 71% are reports for neglect, 25% for physical abuse, 3% for sexual abuse, and less than one percent are due to emotional abuse (Arizona Department of Economic Security, 2013).

The majority of participants were living in a group home setting (53.9%, $n = 97$), while 15.6% were living on their own in a home, apartment, or a dorm ($n = 28$). Eighteen percent lived with foster parents ($n = 33$), 7.2% with relatives ($n = 13$), and 5% ($n = 9$) reported another living arrangement such as a hotel, with friends or a significant other, and a youth facility. In Arizona, a quarter of youth over the age of 16 lives in a group home setting, 16% in residential treatment facilities, 20% in foster homes, 14% with relatives, 14% on their own, and 11% have runaway (Arizona Department of Economic Security, 2013).

The total length of time reported by participants was fairly evenly divided among the four categories. Approximately 29% had been in the foster care system for 6 months to a year ($n = 51$), 20% for 1-2 years ($n = 35$), 25.1% for 3-5 years ($n = 44$), and almost 26% had been in care for more than 5 years ($n = 45$). The Arizona Department of Economic Security (2013) reported that by the time youth reach the age of 18 and 'age out' of the system, 31% had had more than 5 placements and almost half (49.6%) had been in care for more than 6 years. In the current study, the average number of placements was difficult to determine. Many participants could not remember the exact number and others estimated the number. For those that were able to offer a number ($n = 167$), the mean number of placements was 5.08, ranging from 1 to 35. Seventeen percent reported being adopted at some point perhaps suggesting that the adoption had failed and they had returned to the custody of CPS.

The majority of youth who participated in the study were currently participating in an independent living program (75.7%; $n = 34$) and 82.9% ($n = 50$) reported having contact with their biological family, although to varying degrees and with different members. The majority of participants reported being in contact with siblings and parents fairly frequently (several times a month) but sporadically. Others reported seeing extended family members for visits and special occasions.

Sixty-four percent of participants reported ever having a mentor ($n = 113$), with 45% currently having a mentor ($n = 81$). Participants who had had a mentor reported mostly positive experiences with their mentor with a mean score of 4.46 out of 5 (range 2-5), 5 representing a very positive experience.

Pregnancy and Parenting Experiences

Twenty-six or 14% of the participants reported ever being pregnant or gotten someone else pregnant and 6% ($n = 11$) reported being currently pregnant. Of those who reported ever being pregnant or getting someone else pregnant, 56% had been pregnant or gotten someone pregnant one time ($n = 9$), 35% ($n = 12$) two times, 6% ($n = 2$) 3 times and 3% ($n = 1$) reported 5 times. Twenty-two participants (12%) reporting having children, of which 7 reported having had a report made to Child Protective Services at some point. Thirty-five percent reported using some type of birth control ($n = 64$), including birth control pills (11.5%, $n = 21$), the Depo shot (6%, $n = 11$), 3.8% abstinence ($n = 7$), 13.7% condoms ($n = 25$), and one person reported using an IUD as birth control ($n = 1$).

Perceived Social Support

The means and standard deviations for the subscale scores of participants for the Multidimensional Scale of Perceived Social Support (MSPSS) are presented in Table 2. Participants reported the lowest mean scores for social support from friends ($\mu = 4.45$) and the highest from significant others ($\mu = 5.05$). The total social support mean score was 5.02 out of a possible 7. Reliability analyses were conducted for each of the subscales using Cronbach's alpha. The significant other subscale yielded an alpha of 0.85; the friends subscale, an alpha of 0.88; and the family subscale yielded an alpha of 0.92, indicating good and excellent internal reliability within the subscales.

Table 2

Means and Standard deviations for Multidimensional Scale of Perceived Social Support (n= 181)

Subscales	Mean	SD
Family	4.44	1.85
Friends	5.01	1.60
Significant Others	5.33	1.49

Parenting Attitudes

The means, medians, and standard deviations for the AAPI-2 sten scores are presented in Table 3. These scores represent the scores based on the normed sample provided by the scale developers. The median sten score of the normed sample for each of the constructs is 5.5 out of 10. The median scores in this study were a half a point lower than the median scores from the normed sample in three out of five of the constructs. The lowest sten scores are in the areas of parental empathic awareness of children's needs and parent-child roles, with parent-child roles having the lowest median score, 1.5 points below the median score of the normed sample. The highest mean sten score was participants' beliefs in corporal punishment.

This score was 1.5 points higher than the median score of the normed sample and 2 points higher than the median scores of the other constructs. In this case again, lower sten scores represent less nurturing or positive parenting attitudes.

Table 3

<i>Means, Medians, and Standard Deviations for AAPI-2 Sten Scores (n= 183)</i>			
Construct	Mean	Median	SD
Appropriate Parental Expectations	5.20	5	2.40
Parental Empathic Awareness of Children's Needs	4.88	5	2.27
Belief in Corporal Punishment	6.57	7	2.20
Parent-Child roles	4.67	4	2.50
Children's Power and independence	5.32	5	1.77

Note: Median scores on normed sample distribution are 5.5. Lower scores indicate less nurturing attitudes towards parenting.

Child Maltreatment Risk

Table 4 shows the level of risk distribution by AAPI-2 construct based on the sten scores calculated from the normed sample distribution. The highest levels of risk are in the areas of parental empathic awareness of children's needs and parent-child roles. Thirty percent of participants fall in the category of 'high risk' parenting attitudes as it relates to being empathic towards children's needs and 39% are considered 'high risk' as it relates to their perception of the parent's and child's roles. The majority of participants fall within the 'medium risk' category with 60% of participants at medium risk in the parental expectations and empathic awareness of needs constructs; 52% at 'medium risk' in the beliefs in corporal punishment construct; 44% are at 'medium risk' in the parent-child role construct (just slightly higher than the proportion in the 'high risk' category); and 76% of the participants falling into the 'medium risk' category in the child's power and independence construct.

Table 4

<i>Level of Risk Distribution by AAPI-2 Construct (n= 183)</i>			
Construct	Level of Risk		
	n (%)		
	Low	Medium	High
Appropriate Parental Expectations	31 (16.9)	108 (59.0)	44 (24.0)
Parental Empathic Awareness of Children's Needs	16 (8.7)	112 (61.2)	55 (30.1)
Belief in Corporal Punishment	65 (35.5)	96 (52.5)	22 (12.0)
Parent-Child Roles	30 (16.4)	81 (44.3)	72 (39.3)
Children's Power and Independence	18 (9.8)	140 (76.5)	25 (13.7)

Note: Low risk is 8-10 sten score, medium risk is 4-7, High risk is 1-3 sten score.

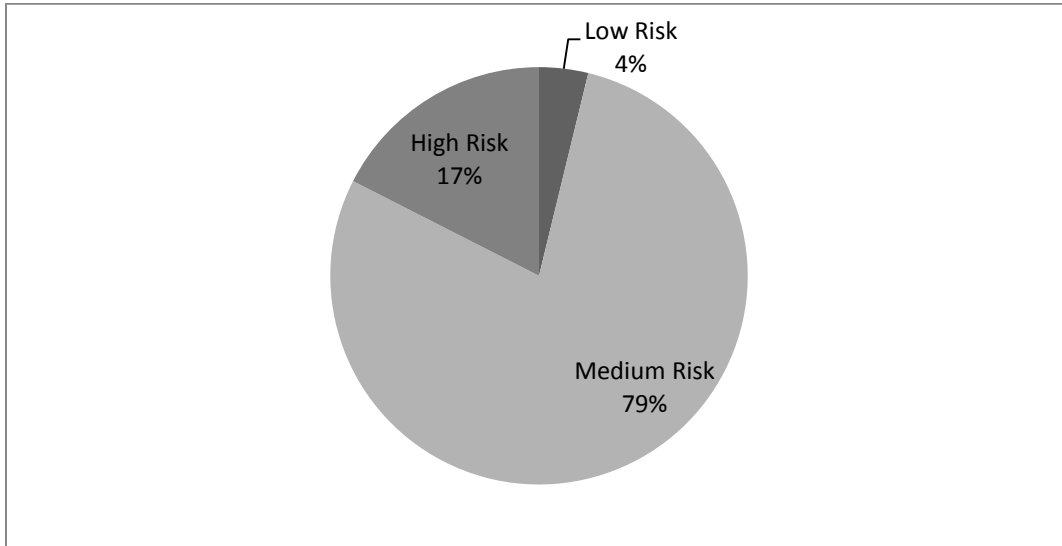
Overall Risk

Overall, 3.8% of participants' scores were low risk ($n = 7$), 78.7% ($n = 144$) were medium risk, and 17.5% ($n = 32$) of participants' scores were high risk. Percentages of overall risk are presented in figure 1. Further examination of the high risk group, 34% had lived in 1-2 placements ($n = 11$), and 28% in 3-5 placements ($n = 9$). Twenty-eight percent of the high risk group had been in care 6 months to a year ($n = 9$), 16% for 1-2 years ($n = 5$), and 25% for 3-5 years ($n = 8$). Of those youth who reported having children ($n = 22$), 32% were considered to have scores that were considered high risk ($n = 7$), while 64% were considered medium risk of perpetrating maltreatment ($n = 14$).

Further analysis of the group of youth who were parents was conducted. Youth who were parents had an average age of 18.3 and were more likely to be female (60%, $n = 13$) than male. In this sample, youth who were parents were 4.29 times more likely to be Hispanic/Latino than Caucasian ($n = 9$) and were less likely to live with foster parents ($n = 1$) than on their own ($n = 7$). A regression analysis indicate that youth who were parents had significantly lower scores than those who were not on the beliefs in the use of corporal punishment construct ($\beta = -.17$, $t = -2.30$, $p < .05$).

There were no significant differences between the parent group and non-parent group regarding levels of social support from friends, family, or significant others.

Figure 1. Overall Risk of Child Maltreatment



Bivariate Analyses

Bivariate correlations using Pearson's r were used to examine the relationship between each of the parenting attitude constructs and the study variables. Correlations of perceived social support, parenting attitudes, and control variables are presented in Table 5. Perceived social support from friends was positively correlated with perceived social support from family ($r = .37, p < .001$), perceived social support from significant other ($r = .55, p < .001$), beliefs about corporal punishment ($r = .16, p < .05$), and children's power and independence ($r = .20, p < .01$). Perceived social support from family was correlated with perceived social support from friends ($r = .37, p < .001$), and perceived social support from significant others ($r = .41, p < .001$).

Perceived social support from significant other was positively correlated with perceived social support from family ($r = .55, p < .001$), perceived social support from friends ($r = .41, p < .001$), and appropriate parental expectations ($r = -.19, p < .01$).

Correlations of youths' living arrangements are presented table 6. Living with relatives was only negatively correlated with living in a group home or shelter ($r = -.30, p < .001$). Living in a group home or shelter was negatively correlated with age ($r = -.47, p < .001$), being in care 3-5 years ($r = -.16, p < .05$), other living arrangement ($r = -.47, p < .001$), living with foster parents ($r = -.51, p < .001$), living with relatives ($r = -.30, p < .001$), and positively correlated with favorable beliefs regarding the use of corporal punishment ($r = .15, p < .05$). Living with foster parents was correlated with sex (female) ($r = .19, p < .05$), being in care 3-5 years ($r = .20, p < .01$), and negatively correlated with living in a group home or shelter ($r = -.51, p < .001$), being in care 5 or more years ($r = -.15, p < .05$).

The parental expectations construct was only weakly correlated with perceived social support from significant others ($r = -.19, p < .01$). The parental empathic awareness of children's needs construct was correlated with the parental expectations construct ($r = .53, p < .001$). The construct regarding beliefs of using corporal punishment was negatively correlated with age ($r = -.18, p < .05$), having a child ($r = -.17, p < .05$). It was positively correlated with perceived social support from friends ($r = .16, p < .05$), living in a group home or shelter ($r = .15, p < .05$), the parental expectations construct ($r = .41, p < .001$), and the parental empathic awareness construct ($r = .32, p < .001$).

Parent-child roles was correlated with sex (female) ($r = -.15, p < .05$), living with foster parents ($r = .16, p < .05$), the parental expectations construct ($r = .54, p < .001$), the parental empathic awareness construct ($r = .58, p < .001$), and favorable beliefs regarding the use of corporal punishment ($r = .32, p < .001$). And finally, the children's power and independence construct was positively correlated with favorable beliefs in the use of corporal punishment ($r = .18, p < .01$) and perceived social support from friends ($r = .20, p < .01$).

Table 5

Correlations of Perceived Social Support, Parenting Attitudes, and Control Variables (n= 181)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Support – Friends		.37**	.55**	.05	.13	-.05	.01	-.01	-.05	.10	-.02	.02	.16*	-.03	.20**
2. Support – Family			.41**	.14	.01	.03	-.10	.03	-.05	.03	-.09	-.08	-.004	-.11	.03
3. Support – SO				.14	.01	.03	-.10	.03	-.05	.03	-.19**	-.11	.04	-.05	.04
4. Female					-.03	.06	.02	-.05	.14	-.04	.03	-.02	-.01	.15*	-.06
5. Age						.29**	.23**	-.09	.07	.23**	-.09	-.12	-.18*	-.05	.08
6. Children							.004	.03	-.09	.03	-.10	-.04	-.17*	-.05	.05
7. Placements								-.24**	.13	.55**	.003	.03	.10	.06	.06
8. 1-2 years									-.30**	-.29**	.05	.09	-.09	.04	-.03
9. 3-5 years										-.34**	-.14	-.05	-.09	-.10	.04
10. 5 or more years											.04	.02	.06	.04	-.03
11. Parental Expectations												.53**	.41**	.54**	.05
12. Empathic Awareness													.32**	.58**	.11
13. Belief in Corporal Punishment														.32**	.18**
14. Parent-Child Roles															.09
15. Oppressing Children's Power															

Note: ** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Table 6

Correlations of Living Arrangements, Parenting Attitudes, and Control Variables (n= 180)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Living with FP		-.13	-.51**	-.11	.19*	-.04	-.14	-.12	-.03	.20**	-.15*	.02	.01	.10	.16*	.08
2. Living with relatives			-.30**	0.06	-.09	.01	.10	-.10	.06	-.03	-.09	.07	.12	-.08	-.03	-.08
3. Living in GH/shelter				-.25**	-.13	-.47**	-.10	.04	.06	-.16*	.05	.03	.06	.15*	-.03	.001
4. Other living					-.10	.14	.07	-.01	-.05	-.08	.16*	.01	-.04	-.06	-.03	-.07
5. Female						-.03	.06	.02	-.05	.16	-.04	.03	-.02	-.01	.15	-.06
6. Age							.29**	.23**	-.09	.07	.23**	-.09	-.12	-.18*	-.05	.08
7. Children								.004	.03	-.09	.03	-.10	-.04	-.17*	-.05	.05
8. Placements									-.24**	.13	.55**	.003	.03	.10	.06	.06
9. 1-2 years										-.29**	-.29**	.05	.09	-.09	.04	-.03
10. 3-5 years											-.34**	-.14	-.05	-.09	-.10	.04
11. More than 5 years												.04	.02	.06	.04	-.03
12. Parental Expectations													.53**	.41**	.54**	.05
13. Empathic Awareness														.32**	.58**	.11
14. Belief in Corporal Punishment															.32**	.18*
15. Parent-Child Roles																.09
16. Oppressing Children's Power																

Note: ** Correlation is significant at the .01 level (2-tailed)

*Correlation is significant at the .05 level (2-tailed)

Analysis of Parenting Attitude Constructs and Demographic Variables

Differences among sex, age (17 years and under vs. 18 years and older), race/ethnicity were also calculated among each of the parenting constructs. Females had higher scores than males on the parent-child roles construct, $\beta = .15, t = 2.012, p < .05$. Participants over the age of 18 had lower scores than those age 16 or 17 on the empathic awareness construct and the beliefs regarding the use of corporal punishment construct ($\beta = -.16, t = -2.18, p < .05, \beta = -.16, t = -2.15, p < .05$). Compared with Caucasian youth, Hispanic/Latino youth and youth who identified as being multiracial had lower scores on the belief in the use of corporal punishment construct ($\beta = -.26, t = -3.08, p < .01, \beta = -.26, t = -3.14, p < .01$).

Multivariate Analyses

Ordinary Least Squares (OLS) linear regression analyses were run with each of the parenting attitude sten construct scores as the dependent variable. Independent variables include perceived social support from friends, perceived social support from family, perceived social support from significant other, ever had a mentor, living situations (living in own place, living in group home/shelter, living with foster parents, living with relatives, and other living arrangement). Control variables include sex, age, number of placements, time in care, and parent status.

Variables

The dependent variables are the sten scores of each of the parenting attitude constructs. Two regression models were estimated separately for each dependent variable in order to avoid multicollinearity.

The first model included social support from friends, social support from family, and social support from significant other as independent variables while controlling for number of placements, time spent in foster care (with 6 months to year as the reference category), gender, and age. The second model included living situation (with relatives, with foster parents, living in a group home or shelter, other living situation) as independent variables and number of placements, and time spent in foster care, gender, and age as control variables. The reference category for living arrangement was living on own.

The multiple regression predicting parental expectation construct scores are displayed in tables 5 and 6. Regression results for empathic awareness of children's needs are presented in tables 7 and 8; results for beliefs in use of corporal punishment in tables 9 and 10; parent-child role reversal in tables 11 and 12; and regressions predicting children's power and independence in tables 13 and 14.

Parental expectations.

Perceived social support did not account for a significant proportion of the variance in the dependent variable, appropriate parental expectations, $R^2 = .08$, $F(10, 136) = 1.21$, $p = .29$. Perceived social support from significant others had a negative relationship with the parental expectation construct scores, $\beta = -.23$, $t(136) = -2.22$, $p < .05$. Participants' living arrangement was not significantly associated with the parental expectations construct and did not account for a significant proportion of the variance in the dependent variable, $R^2 = .06$, $F(11, 135) = 0.75$, $p = .69$.

Table 7

*Perceived Social Support Predicting Appropriate Parental Expectations
(n=147)*

Variable	β (SE)	95% CI
Support from Friends	.14 (.15)	(-.08-.50)
Support from Family	-.06 (.12)	(-.31-.17)
Support from Significant Others	-.23 (.16) *	(-.69-.05)
Female	.04 (.40)	(-.60-.99)
Age	-.002 (.17)	(-.33-.38)
Children	-.01 (.63)	(-1.35-1.16)
Number of placements	-.03 (.06)	(-.13-.10)
One to two years in care ^a	.002 (.52)	(-1.02-1.04)
Three to five years in care ^a	-.19 (.57) [†]	(-2.15-.11)
More than 5 years in care ^a	.14 (.15)	(-1.25-1.52)
Constant	-.06 (.12)	

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group for time in care is 6 months to a year

Table 8

*Living Arrangement Predicting Appropriate Parental Expectations
(n = 148)*

Variable	β (SE)	95% CI
Living with foster parents ^a	.13 (.78)	(-.73-2.35)
Living with relatives ^a	.15 (1.05)	(-.58-3.58)
Living in a group home/shelter ^a	.22 (.75)	(-.45-2.53)
Other living arrangement ^a	.06 (1.14)	(-1.50-3.02)
Female	.02 (.42)	(-.71-.94)
Age	.12 (.23)	(-.23-.67)
Children	-.07 (.64)	(-1.77-.74)
Number of placements	.03 (.06)	(-.10-.13)
One to two years in care ^b	-.01 (.54)	(-1.12-1.00)
Three to five years in care ^b	-.21 (.58) [†]	(-2.27-.03)
More than 5 years in care ^b	-.03 (.72)	(-1.58-1.26)
Constant	.81	

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group is living on own

^b Reference group is 6 months to one year in care

Parental empathic awareness of children's needs.

Perceived social support did not account for a significant proportion of the variance in the dependent variable, parental empathic awareness of children's needs,

$R^2 = .06$, $F(10, 136) = 0.89$, $p = .55$.

Participants' living arrangement did not account for a significant proportion of the variance in the dependent variable, $R^2 = .09$, $F(11, 135) = 1.15$, $p = .33$. However, participants living with foster parents or relatives had significantly more nurturing parenting attitudes related to parental empathic awareness of children's needs when compared with participants who reported living on their own, $\beta = 0.26$, $t(135) = 2.04$, $p < .05$; $\beta = 0.32$, $t(135) = 3.01$, $p < .01$.

Table 9

Perceived Social Support Predicting Parental Empathic Awareness of Children's Needs (n = 147)

Variable	β (SE)	95% CI
Support from Friends	.16 (.14)	(-.05-.51)
Support from Family	-.13 (.12)	(-.38-.08)
Support from Significant Others	-.17 (.16) [†]	(-.58-.04)
Female	-.05 (.39)	(-1.01-.53)
Age	-.02 (.16)	(-.35-.29)
Children	.06 (.62)	(-.89-1.64)
Number of placements	.01 (.05)	(-.10-.11)
One to two years in care ^a	.09 (.51)	(-.52-1.49)
Three to five years in care ^a	-.02 (.56)	(-1.22-1.46)
More than 5 years in care ^a	.02 (.68)	(-1.24-1.46)
Constant	6.50	

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group for time in care is 6 months to a year

Table 10

Living Arrangement Predicting Parental Empathic Awareness of Children's Needs (n = 148)

Variable	β (SE)	95% CI
Living with foster parents ^a	.26 (.74) [*]	(.05-2.97)
Living with relatives ^a	.32 (1.00) ^{**}	(1.03-.4.97)
Living in a group home/shelter ^a	.26 (.72)	(-.24-2.59)
Other living arrangement ^a	.08 (1.09)	(-1.24-3.05)
Female	-.05 (.40)	(-1.03-.54)
Age	.15 (.22)	(-.16-.70)
Children	-.002 (.60)	(-1.21-1.18)
Number of placements	.08 (.06)	(-.07-.15)
One to two years in care ^b	.08 (.51)	(-.60-1.41)
Three to five years in care ^b	-.06 (.55)	(-1.42-.77)
More than 5 years in care ^b	-.01 (.68)	(-1.41-1.29)
Constant	-.82	

Note: † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group is living on own

^b Reference group is 6 months to one year in care

Belief in the Use of Corporal Punishment.

Perceived social support did not account for a significant proportion of the variance in the dependent variable, belief in the use of corporal punishment, $R^2 = .10$, $F(10, 136) = 1.50$, $p = 0.15$. Perceived social support from friends was significantly associated with favorable attitudes regarding the use of corporal punishment, $\beta = 0.20$, $t(136) = 2.04$, $p < .05$. Youth who had spent 3 to 5 years in foster care had significantly less nurturing attitudes regarding the use of corporal punishment as compared to youth who had spent 6 months to a year in care, $\beta = -0.20$, $t(136) = -1.94$, $p < .05$.

Participants' living arrangement also did not account for a significant proportion of the variance in the dependent variable, $R^2 = 0.12$, $F(11, 135) = 1.68$, $p = .09$.

Participants living with foster parents had significantly more nurturing parenting attitudes related to beliefs about corporal punishment as compared with participants who reported living on their own, $\beta = 0.25$, $t(135) = 2.03$, $p < .05$.

The number of placements was significantly associated with youths' beliefs in the use of corporal punishment, $\beta = 0.22$, $t(135) = 2.08$, $p < .05$, meaning youth with more placements had more nurturing parenting attitudes as it relates to their beliefs about the use of corporal punishment. Youth who spent 3 to 5 years in foster care had significantly less nurturing parenting attitudes related to their beliefs about using corporal punishment as compared with youth who had spent 6 months to a 1 year in foster care, $\beta = -0.22$, $t(135) = -2.14$, $p < .05$.

Table 11

Perceived Social Support Predicting Belief in Use of Corporal Punishment (n = 147)

Variable	β (SE)	95% CI
Support from Friends	.20 (.14) [*]	(-.01-.55)
Support from Family	-.06 (.11)	(-.30-.15)
Support from Significant Others	-.03 (.15)	(-.35-.25)
Female	-.06 (.16)	(-1.01-.49)
Age	-.16 (.16) [†]	(-.60-.02)
Children	-.06 (.60)	(-1.70-.73)
Number of placements	.18 (.05)	(-.02-.19)
One to two years in care ^a	-.14 (.49)	(-1.70-.26)
Three to five years in care ^a	-.20 (.54) [*]	(-2.12-.02)
More than 5 years in care ^a	-.12 (.66)	(-2.00-.62)
Constant	11.08	

Note: [†] $p < .10$, ^{*} $p < .05$, ^{**} $p < .01$, ^{***} $p < .001$

^aReference group for time in care is 6 months to a year

Table 12

Living Arrangement Predicting Belief in Use of Corporal Punishment
(*n* = 148)

Variable	β (SE)	95% CI
Living with foster parents ^a	.25 (.72) [*]	(.04-2.87)
Living with relatives ^a	.16 (.97)	(-.46-3.36)
Living in a group home/shelter ^a	.28 (.69) [†]	(-.10-2.65)
Other living arrangement ^a	.03 (1.05)	(-1.79-2.37)
Female	-.05 (.38)	(-1.00-.52)
Age	.002 (.21)	(-.41-.42)
Children	-.10 (.59)	(-1.86-.46)
Number of placements	.22 (.05) [*]	(.01-.22)
One to two years in care ^b	-.15 (.49)	(-1.76-.19)
Three to five years in care ^b	-.22 (.54) [*]	(-2.20-.08)
More than 5 years in care ^b	-.15 (.66)	(-2.15-.46)
Constant	5.75	

Note: [†] $p < .10$, ^{*} $p < .05$, ^{**} $p < .01$, ^{***} $p < .001$

^a Reference group is living on own

^b Reference group is 6 months to one year in care

Parent-Child Roles.

Perceived social support did not account for a significant proportion of the variance in the dependent variable, parent-child roles, $R^2 = .06$, $F(10, 136) = 0.87$, $p = 0.57$. Participants' living arrangement also did not account for a significant proportion of the variance in the dependent variable, $R^2 = 0.09$, $F(11, 135) = 1.28$, $p = .24$. Participants living with foster parents had significantly more nurturing parenting attitudes related to parent and child family roles as compared with participants who reported living on their own, $\beta = 0.29$, $t(135) = 2.35$, $p < .05$. Youth who spent 3 to 5 years in foster care had significantly less nurturing parenting attitudes related to parent and child family roles as compared with youth who had spent 6 months to a 1 year in foster care, $\beta = -0.21$, $t(135) = -2.02$, $p < .05$.

Table 13

<i>Perceived Social Support Predicting Parent-Child Roles (n = 147)</i>		
Variable	β (SE)	95% CI
Support from Friends	.03 (.16)	(-.26-.36)
Support from Family	-.13 (.13)	(-.42-.08)
Support from Significant Others	-.01 (.17)	(-.36-.33)
Female	.16 (.43) [†]	(-.05-1.65)
Age	-.02 (.18)	(-.31-.40)
Children	-.06 (.68)	(-1.82-.86)
Number of placements	.06 (.06)	(-.09-.15)
One to two years in care ^a	-.01 (.56)	(-1.82-.86)
Three to five years in care ^a	-.19 (.61) [†]	(-2.27-.15)
More than 5 years in care ^a	-.07 (.75)	(-1.90-1.08)
Constant	4.38	

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group for time in care is 6 months to a year

Table 14

<i>Living Arrangement Predicting Parent-Child Roles (n = 148)</i>		
Variable	β (SE)	95% CI
Living with foster parents ^a	.29 (.80) [*]	(.30-3.47)
Living with relatives ^a	.13 (1.08)	(-.81-3.47)
Living in a group home/shelter ^a	.14 (.78)	(-.87-2.20)
Other living arrangement ^a	.07 (1.18)	(-1.46-3.19)
Female	.15 (.43) [†]	(-.11-1.59)
Age	.09 (.24)	(-.28-.65)
Children	-.06 (.66)	(-1.74-.85)
Number of placements	.13 (.06)	(-.05-.19)
One to two years in care ^b	-.02 (.55)	(1-.22-.96)
Three to five years in care ^b	-.21 (.60) [*]	(-2.40-.03)
More than 5 years in care ^b	-.09 (.74)	(-2.03-.89)
Constant	.58	

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group is living on own

^b Reference group is 6 months to one year in care

Children's power and independence.

Perceived social support did not account for a significant proportion of the variance in the dependent variable, parent-child roles, $R^2 = .06$, $F(10, 136) = 0.93$, $p = 0.51$. Perceived social support from friends was significantly associated with the parenting construct of promoting children's power and independence, $\beta = 0.26$, $t(136) = 2.61$, $p < .01$. Participants' living arrangement did not account for a significant proportion of the variance in the dependent variable, $R^2 = 0.04$, $F(11, 135) = 0.49$, $p = .91$.

Table 15

Perceived Social Support Predicting Children's Power and Independence (n = 147)

Variable	β (SE)	95% CI
Support from Friends	.26 (.11)**	(.07-.48)
Support from Family	-.01 (.09)	(-.18-.16)
Support from Significant Others	-.13 (.12)	(-.38-.09)
Female	-.05 (.29)	(-.76-.40)
Age	.02 (.12)	(-.21-.27)
Children	.07 (.46)	(-.53-1.29)
Number of placements	.06 (.04)	(-.06-.10)
One to two years in care ^a	-.05 (.38)	(-.96-.54)
Three to five years in care ^a	-.05 (.42)	(-1.00-.65)
More than 5 years in care ^a	-.10 (.51)	(-1.41-.61)
Constant	4.37	

Note: † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group for time in care is 6 months to a year

Table 16

Living Arrangement Predicting Children's Power and Independence
(*n* = 148)

Variable	β (SE)	95% CI
Living with foster parents ^a	.09 (.56)	(-.73-1.49)
Living with relatives ^a	-.07 (.76)	(-1.96-1.05)
Living in a group home/shelter ^a	-.07 (.54)	(-1.30-.85)
Other living arrangement ^a	-.07 (.83)	(-2.23-1.04)
Female	-.09 (.30)	(-.89-.30)
Age	.03 (.17)	(-.28-.37)
Children	.07 (.46)	(-.53-1.29)
Number of placements	.08 (.04)	(-.05-.11)
One to two years in care ^b	-.06 (.39)	(-.99-.54)
Three to five years in care ^b	-.08 (.42)	(-1.14-.52)
More than 5 years in care ^b	-.10 (.52)	(-1.44-.61)
Constant	4.87	

Note: † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^a Reference group is living on own

^b Reference group is 6 months to one year in care

Summary of Findings

This study explored the parenting attitudes and risk of child maltreatment as parents of a sample of 183 youth who are aging out of the foster care system or who have recently aged out. It also examined the relationship between youths' perceived social support from friends, family, and significant others and youths' parenting attitudes as well as youths' current living arrangements and their parenting attitudes. The sample was approximately half female with an average age of 17.33. They were one third Caucasian/White, one quarter Latino/a, and almost a quarter multiracial. Eighty-six were still enrolled in high school and the majority had high educational aspirations. Over half lived in group homes/shelters (54%, $n = 97$). Thirty percent had been in care for 6 months to a year ($n = 51$), a quarter for 3-5 years ($n = 44$), and 26% for 5 or more years ($n = 45$). On average, participants had been in 4.71 placements.

Participants' perceived social support scores were highest from significant others, while lowest scores of perceived support were from family. Youths' mean scores on the parenting attitudes were highest regarding their beliefs about the use of corporal punishment, while the lowest mean scores were related to the parental empathic awareness of children's needs and parent-child roles. When an overall risk composite score was calculated, 17.5% were considered at high risk ($n = 32$). There are five dependent variables used that make up the construct 'parenting attitudes'.

Regression models for each of the 5 parenting attitude constructs were estimated for perceived social support and youths' living arrangement. Perceived social support from significant others was negatively associated with the parenting construct of parental expectations and youths' parental empathic awareness of children's needs. Youth living with foster parents or relatives had higher scores related to parental empathic awareness of children's needs than youth who were living on their own. Perceived social support from friends was positively associated with an increase in youths' scores related to their belief in the use of corporal punishment, while youth who had been in care for 3-5 years had significantly lower scores related to beliefs about corporal punishment than youth who had been in care for 6 months to a year. Youth living with foster parents had significantly higher scores related to beliefs about corporal punishment than youth living on their own and the number of placements youth experienced was associated with an increase in scores related to their beliefs about corporal punishment. Youth who had been in care for 3-5 years had lower scores than youth who had been in care 6 months to 1 year. Youth living with foster parents had significantly higher scores related to parent-child roles than youth living on their own.

Youth who had been in care for 3-5 years had significantly lower scores than youth who had been in care for 6 months to a year. Perceived social support from friends was associated with an increase in the parenting construct related to children's power and independence.

In summary, living with foster parents and relatives had more favorable parenting attitudes when compared with youth living on their own. Youth who had been in care for 3-5 years had significantly less favorable parenting attitudes in 2 out of the 5 constructs compared to youth who had been in care for 6 months to a year. Perceived social support from friends was significantly associated with an increase in 2 of the 5 parenting construct scores.

CHAPTER 5

Discussion

Child maltreatment continues to be a serious public health issue in the United States and around the world. Research demonstrates that youth aging out of the foster care system nationwide experience significant challenges associated with the transition to adulthood. This transition includes issues related to pregnancy and parenting, education, relationships, economic and financial stability, employment, and housing stability. Many youth who are aging out are parents at the time of their discharge from the foster care system, and many more will become parents or will have contact with children in work, volunteer, or family circumstances. Therefore, it is critical to understand how youth from the foster care system might interact with their own children as parents, and/or as caretakers of others' children. Many factors may influence these interactions. Possibly most influential will be previous relationships with others (Byrne et al., 2012; Green et al., 2007; Kotchick & Forehand, 2002; Lyons et al., 2005; Rodrigo et al., 2007). Individuals learn to care for children through their own experiences and interactions, what they learn from others, and from knowledge gained formally and informally (Belsky, 1993).

Youth aging out of foster care may have very different experiences within their ecological environment regarding interactions with their biological families, their living environment, social relationships, and overall development and stability.

From an attachment perspective, children in the foster care system who experience instability in placement and relationships may not have had an opportunity to bond with an adult figure and therefore may have difficulties in social situations, developing relationships with peers and romantic partners, and parenting (Ahrens, Garrison, Spencer, Richardson, & Lozano, 2011; Goodkind et al., 2011; Jones, 2013; Scott et al., 2012).

Previous studies have explored parenting stress among foster youth (Budd et al., 2006), the needs and experiences of pregnant and parenting foster youth in Chicago (Dworsky & DeCoursey, 2009), and experiences and motivations of foster youth as mothers (Pryce & Samuels, 2010; Rolfe, 2008), but there are no studies currently available examining foster youths' parenting attitudes or parental risk of maltreatment.

The purpose of this study was to ascertain parenting attitudes and corresponding levels of potential risk for child maltreatment among a sample of youth aging out of foster care. It also examined youths' perceived social support and current living arrangements as factors associated with parenting attitudes. Despite a presumed elevated risk of intergenerational transmission of child maltreatment among youth aging out of foster care, there is little research documenting youths' parenting attitudes and the risks posed to their own children.

The following is a discussion of the study findings as they relate to 1) youths' parenting attitude scores and corresponding level of child maltreatment risk; 2) the relationship between youths' perceived social support from friends, family, and significant others and parenting attitude scores; and 3) the relationship between youths' living arrangement and their parenting attitudes.

The overall findings indicate that youth had varying parenting attitude scores. The most striking findings indicate that youth in the study sample had lower scores and possibly less nurturing parenting attitudes regarding parental empathic awareness of children's needs and parent-child roles. Youth had higher scores than the median normed sample scores on the construct related to their beliefs in the use of corporal punishment. When an overall averaged level of child maltreatment risk was calculated across parenting attitude constructs, 17% were considered at high risk of child maltreatment and 79% were at medium risk.

Youth living with foster parents had more favorable parenting attitudes across 3 out of the 5 constructs than youth who were living on their own: parental empathic awareness of children's needs, beliefs in the use of corporal punishment, and parent-child roles. Youth living with relatives had more favorable parenting attitudes than youth living on their own as it relates to parental empathic awareness.

As youths' perceived support from friends increased, their scores related to corporal punishment and children's power and independence significantly increased. As youths' perceived support from significant others increased, their parental expectations scores significantly decreased.

Parenting Attitudes

Youth in the sample responded to 40 questions on the Adult-Adolescent Parenting Inventory (APPI-2), which were then translated into sten scores and risk level on 5 parenting constructs: appropriate parental expectations, parental empathic awareness of children's needs, beliefs in the use of corporal punishment, parent-child roles, and children's power and independence.

The hypothesis regarding youths' scores was partially supported in that youths' mean scores were slightly lower than the median scores offered for the normed sample (5.5) on 2 of the constructs: parental expectations and children's power and independence, but higher and slightly lower than the median on the 3 other constructs. Their scores were above the median score for the belief in use of corporal punishment construct, and below the median score on 2 out of the 5 constructs: parental empathic awareness of children's needs and parent-child roles.

Parent-child role reversal.

The findings suggest that these foster youth may have similar parenting attitudes as others regarding some aspects of parenting, but may have difficulties with others. Given most foster youths' experiences of instability, a lack of supportive parent/caregiver, and perhaps non-traditional and often temporary, multiple home and living environments (e.g. group homes, foster homes, or shelters), it would be expected that these youth might have difficulty identifying appropriate parent and child-roles and understanding how to meet the needs of children. Children who have been maltreated, particularly those who are neglected, are often 'parentified' and/or expected to care for themselves (and possibly other younger children). It is likely that they have not experienced an appropriate parent-child relationship and roles where the parent is the caregiver and the child is cared for. Additionally, when family roles are confused, parents may treat children as peers instead of children and may use children to meet the needs of the parent instead of the parent meeting the needs of the child. Children with these experiences may exhibit low self-esteem, poor self-awareness, and poor social skills if not resolved (Bavolek, 2000).

Youth as adults may have unrealistic expectations of others and can experience dysfunctional relationships with others. In addition, under these conditions, children may avoid being cared for because being cared for means danger, abandonment, rejection, confusion and hurt. It is possible that children in these circumstances learn to prefer to be in control rather than be controlled, which may cause problems when children in foster care are placed in homes with appropriate family roles. Children in foster care may often struggle when attempting to adjust to new structures in foster homes or group homes, and may not understand the roles of authority figures and their rules. Children with such experiences may not learn to trust and possibly develop fearful, helpless, sad, violent, self-endangering behaviors (Howe & Fearnley, 2003). If children in foster care are placed in non-traditional settings following removal from their families, they may never develop common, more traditional family, parent, and child roles.

Parental empathic awareness of children's needs.

Empathy is developed through interactions with others, primarily with our caregivers as children. It is a complex bio-psychosocial emotion, action, feeling, and cognitive process that occurs when interacting with other living beings. Empathy, or the ability to understand what other people are feeling and thinking, is an essential skill in facilitating social agreement and successfully navigating personal relationships (de Waal, 2009) and parent-child relationships. Empathy is necessary for healthy parent-child interactions in that a parent needs to be able to understand the basic needs of the child, especially in the case of very young children who are not able to express themselves verbally or clearly.

An ability to understand the needs and desires of children allows the parent to tend to those needs as necessary and to establish a balance in the interaction between parent and child. There are times when parents need to place the needs of their child above their own. When a child's needs are not met or a parent/caregiver is unable to understand what a child is trying to communicate regarding his or her needs, it is possible a child will be neglected or abused. Therefore, it is concerning that this sample of youth had lower than the median normed sample scores for parental empathic awareness of children's needs. However, given the experiences of youth from the foster care system of perhaps not having their own needs met as children, it would not be surprising for these youth to struggle with being able to understand the needs or wants of others as a consequence of not having their own needs met as children (Tempel, 2007; Weihe, 1997). These youth may also struggle to have a sense of self, a separation of self from others, emotion regulation, and accurate affective and cognitive processing of others' emotions and behaviors. It is believed that individuals with low levels of empathy towards their children may be unable to handle parenting stressors (Bavolek, 2000) and can lead to child maltreatment (Bavolek, 2000; Wiehe, 1997).

Beliefs in the use of corporal punishment.

The foster youth in this study had higher median scores than that of the normed sample for their beliefs regarding the use of corporal punishment; that is they had very negative views about the use of corporal punishment. It is possible that there was a social desirability bias in that these youth might have learned that it is not socially acceptable to use spanking and hitting as forms of punishment during their time in foster care and their experiences precipitating the child welfare investigation process.

There may also be strict rules about corporal punishment where the youth are living which is reinforced and/or discussed regularly. It may also be possible that youth who have been abused, physically or otherwise have very strong beliefs about the use of corporal punishment and made sure that this was apparent in their responses. Upon reviewing the questions on the instrument, it may be that the questions related to physical punishment – hitting and spanking - were more obvious and blatant than questions related to other constructs, therefore reinforcing the social desirability bias.

Previous Research Related to Parenting Attitudes

The AAPI-2 has been used with a number of ‘at-risk’ populations including incarcerated mothers (Sandifer, 2008), low-income new mothers (LeCroy & Krysik, 2011), pregnant and parenting teen parents (Robbers, 2008; Thomas & Looney, 2004), drug involved inmates (Surratt, 2003), and a combination of at-risk and incarcerated parents (Palusci et al., 2008). Baseline and post-intervention scores of previous studies vary depending on the population and how the AAPI-2 was used (e.g. total score, sten score, number of constructs assessed). In the current study, participants had the following raw scores and mean score for each construct: parental expectations: 18.69 (2.67), empathic awareness of children’s needs: 33.87 (3.39), belief in the use of corporal punishment: 38.43 (3.49), parent-child roles: 19.84 (2.83), and children’s power and independence: 17.89 (3.58). When comparing the baseline scores of participants in other studies to the current study, participants in the current study had similar baseline scores as participants in studies with at-risk groups. For example, Thompson and Harm’s (2007) study with incarcerated mothers had slightly higher sten scores in all categories except belief in the use of corporal punishment.

Another study conducted by Sandifer (2008) with incarcerated mothers yielded lower mean sten scores than the current study's sample. Both of the incarcerated samples were older (mean age of 29 and 32) and both were comprised of mostly Caucasian and African American women who had children already. Surratt (2003) studied the parenting attitudes of drug-involved female inmates. Participants were categorized based on parent training. In comparing participants with no parent training with the current study's sample, Surratt's (2003) sample had lower mean sten scores across constructs. These participants were also older (mean age of 32), had a history of substance abuse, and all had children. Thomas and Looney (2004) conducted a study to examine the effectiveness of a study with a small sample of pregnant and parenting adolescents in two different settings, a residential facility and a rural alternative school. They reported median sten scores. LeCroy and Krysik (2011) conducted a study with mostly young, Hispanic, at-risk families enrolled in *Healthy Families Arizona*. They reported mean raw scores were lower in 4 out of the 5 parenting constructs when compared with youth from the current study's sample – only reporting higher scores in the parental expectations construct. Cicchetti, Rogosch, and Toth (2006) reported mean raw scores of maltreated and non-maltreated parents in their study examining attachment among infants in maltreating families. Maltreated parents reported slightly higher, although significantly different scores than non-maltreated parents.

The comparison of scores is simply descriptive as samples vary in terms of demographics and history. Also, researchers have calculated and reported scores differently and therefore render a mixed interpretation of what the scores truly mean.

The current study is cross-sectional and therefore does not compare scores among the same sample at multiple time points, nor does it offer an intervention to participants. Therefore, it seems as though the best assessment of where youth in the current study fall regarding their parenting attitudes is to compare their scores with the median normed sample scores which represents several thousand individuals' scores from around the United States.

Parental Risk of Child Maltreatment

Parental risk of child maltreatment was calculated based on participants' sten scores for each construct. The AAPI-2 measures parenting attitude and potential for child maltreatment (low, medium, and high risk) in five domains already discussed. It was hypothesized that youth in the sample would have above average (compared with the normed sample) levels of risk across domains. The findings revealed that 24% percent of youth in the study had a high risk for maltreating related to their level of expectations as a parent. Thirty percent were considered at high risk as a result of a lack of empathic awareness of children's needs, while 12% were at risk due to their beliefs in the use of corporal punishment. Almost 40% of youth in the sample were determined to be at high risk due to attitudes regarding parent-child role reversal. These levels of risk directly correspond with the youths' sten scores for each construct and therefore may be explained similarly in terms of youths' experiences, development, and relationships. Level of risk is difficult to interpret and caution must be exercised when attempting to determine future outcomes and/or making predictions regarding these levels of risk. The level of risk, based on the scores allows us to conceptualize the youths' potential risk for engaging in child maltreatment as parents.

Although it is important to look at risk by construct to better understand where to intervene, an overall composite risk assessment and characteristics of the high risk group can also offer important implications. Overall, 17.5% or 32 out of 183 participants were considered high risk. Almost 79% averaged scores that were considered medium risk. Although a level of medium risk may not seem significant, these are youth who may be very close to being at a high risk once a specific stressor is introduced or encountered if they were to become unstable or lose existing supports. Youths' attitudes may also change should they become parents (if not already).

The majority of the sample did not have children (88%), but 22 (12%) did have children and 14% ($n = 26$) had been pregnant or gotten someone pregnant at least once. Of the 22 youth with children of their own, 7 stated they previously had a report with CPS as a parent. Although this was a small number from the sample, it is concerning that almost a third of them already had some level of involvement with CPS as a parent. These findings are consistent with Dworsky and DeCoursey's (2009) sample of parenting youth where 22% were investigated for abuse or neglect of their child. Further analysis was conducted to examine this small group of youth because of their increased vulnerability as parents. Compared with youth who were not parents, parenting youth had significantly less nurturing parenting attitudes regarding beliefs in the use of corporal punishment, but none of the other parenting attitude constructs. This suggests that perhaps after having children, one's beliefs about the use of corporal punishment might change.

Risk of child maltreatment can be influenced by and exacerbated by several factors. Prior research has identified a number of individual, relational, and community variables related to an increased or decreased risk of child maltreatment such as stress, support and socioeconomic status (Kotchik & Forehand, 2002), poverty (Egeland et al., 1988), early childbearing and parenting (Brown et al., 1998; Dubowitz et al., 2011; Dukewich et al., 1996; Fundudis et al., 2003; Mersky et al., 2009; Sidebotham et al., 2001), socioeconomic status of community (Coulton et al., 2007; Drake & Pandry, 1996), and history of child maltreatment (Belsky, 1993; Berlin et al., 2011; Bert et al., 2009; Cort et al., 2011; Dixon et al., 2009; Egeland et al., 1988; Kim, 2009; Li et al., 2011; Pears & Capaldi, 2001; Thornberry et al., 2012; Valentino et al., 2011). Youth aging out of foster care or who have a history of child maltreatment and child welfare system involvement may be at a greater risk because they are more likely to experience multiple risk factors listed above.

Youth aging out may already have undeveloped or immature beliefs about parenting, particularly if they do not have children yet. Youth aging out also face a number of challenges associated with their experiences of being maltreated and being in foster care while they negotiate the developmental task of transitioning into adulthood and independence. Youth aging out of foster care have unique experiences and may present at a higher risk for child maltreatment in certain areas. Past studies have shown that youth aging out are having children at a younger age and at a higher rate than their peers who have not been in foster care (Dworsky & Courtney, 2010).

Many are not enrolling in postsecondary education (Courtney et al., 2009) or developing supportive social networks (Goodkind et al., 2011) potentially placing them at increased risk of child maltreatment in addition to other poor outcomes as they enter into adulthood.

The parenting attitudes of youth aging out have never been assessed or analyzed. There are only a handful of studies that have examined parental risk for maltreatment among this group of youth, many of whom are already parenting. Studies that have explored youths' parenting experiences and practices suggest an elevated risk of committing child maltreatment and struggles associated with parenting (Budd et al., 2006; Dworsky & DeCoursey, 2009). Budd and colleagues (2006) suggest that parenting stress may be related to unrealistic expectations of their children, which could lead to maltreatment, supporting the necessity of parenting education for young parents or young adults likely to be parents who have been maltreated and/or been in the foster care system.

Perceived Social Support and Parenting Attitudes

This study examined the relationship between youths' perceived social support from friends, family, and significant others and their parenting attitudes. Social support may be a protective factor in that it may buffer the incidence of child maltreatment and can assist young adults in successful transition to adulthood and independent living. Overcoming obstacles and reaching goals in general require the support of others.

Formal and informal support can be invaluable to young and new parents (Kotch et al., 1999), and youth aging out of foster care (Courtney & Dworsky, 2006; Greenon & Bowen, 2008; Osterling & Hines, 2006) and has been shown to be one of the strongest protective factors against child maltreatment (Stith et al., 2009).

The current study's findings show that youth aging out perceive a great amount of support from friends – more so than from significant others and family. Given this population and their separation and possible maltreatment from their family of origin, it is not surprising that youth from foster care do not perceive as much support from their families. Developmentally, it is also common that adolescents place a high value on friendships and relationships with others (Erikson, 1968). During adolescence, a significant and extremely important developmental stage, children are becoming more independent and begin to look forward to careers, family, housing, and relationships. Adolescents are developing and discovering their own identity, likes and dislikes, and dealing with many changes related to their physical body, emotions, thoughts, and social interactions.

Adolescents must also learn roles they will have as an adult and how they will fit in with society. If adolescents do not complete or master the tasks associated with this stage of development, they may have a fragmented sense of self, an unhealthy concept of their role in society or in their community, and may have trouble as they move into other stages of development (Erikson, 1959). Fortunately, there is hope that such issues can be resolved at a later time, but that does create greater risk.

The hypotheses regarding perceived social support were partially supported. Greater perceived support from friends was associated with more nurturing attitudes among some components of youths' parenting attitudes (beliefs about use of corporal punishment and children's power and independence), but not with other constructs. Again, it would be expected that youth would value the support of their friends or peers, but it also may present an issue if youth are relying on their friends when seeing information about parenting, as those youth may also be inexperienced or immature. Perceived social support from significant others was negatively associated with youths' parental expectations. Depending on how youth define significant other (could be a romantic partner or close acquaintance), youth may be focusing on building a romantic relationship with a partner, may be distracted, and/or not be aware or in tune with what is expected of a child developmentally – emotionally, physically, cognitively, or otherwise. For youth at this age and stage of development, and those who are not yet parents, this is not striking. It does however allow us to understand what information we should be providing young people regarding children so that they are prepared to appropriately interact with young children, whether they are parenting them or not. This highlights the need for a universal parenting education program which includes opportunities for positive interactions with children.

Previous research indicates that a third of youth aging out reported receiving much of the information about parenting from their biological mothers, almost 12% reported receiving information from foster parents, 13% from a grandparent, and 9% from a friend (Courtney et al., 2009).

In the same study, when youth were asked who taught them to be a ‘good parent’, a quarter of youth identified their biological mother, 13% their foster mother, 28% a grandparent or other relative, and almost 4% reported a friend. Studies highlighting young adults aging out of foster care and their motivation to become parents are important in shedding light on their perceptions and experiences related to parenting and who they seek for support and guidance. For example, youth in Haight et al.’s (2009) study reported drawing on spiritual beliefs and practices for support and their children serving as a motivator for success, stability, and maturity. Pryce and Samuels (2010) describe similar findings where parenting youth who were aging out viewed motherhood as a source of healing, but continued to struggle with dealing with their past and trying to move forward.

Hypotheses related to perceived support from family were not supported. In fact, perceived support, although not significant in predicting any of the parenting attitude constructs, was actually negatively associated with the outcome variables, indicating that the more perceived social support from family was associated with a decrease in favorable parenting attitudes among this sample of youth. It is unclear whether youth referred to their biological families or their current ‘families’ when asked about their perceptions of social support. It is noteworthy that either way, youth may be more in tune with and dependent on friends for emotional support in situations when life becomes challenging, and feel that friends are those who most care about their well-being.

Youths' Living Arrangements and Parenting Attitudes

The findings demonstrate that youth living with foster parents/foster family have more favorable parenting attitudes than youth living on their own when the number of placements, time in care, age, and sex were all controlled for. Social support not only stems from our perceptions of relationships, but also from stability, reliance, loyalty, comfort, and a sense of belonging. Where we live and with whom can also impact how we develop our beliefs about parenting and how we will interact with children. With the exception of appropriate parental expectations and children's power and independence, youth who live with foster parents had significantly more nurturing parenting attitudes, which partially supported the hypotheses offered regarding the relationship between youths' living situation and their parenting attitudes. Perhaps the reason that youth living with foster parents did not have significantly higher scores in the area of parental expectations is because foster families typically care for a particular age group and when fostering youth, they do not typically have younger children in the home. Youth may not have been able to observe appropriate child developmental milestones with younger children.

Youth living with foster families are more likely to observe and experience how a typical family interacts with each other and with those outside of the family. They learn structure, rules, and regulations associated with living in a home environment. Youth may learn skills, be exposed to other foster children, biological and adopted children as well as extended family. Youth may also be able to experience family trips, activities, traditions which can influence their attitudes and knowledge about parenting.

They may have more support overall and feel more comfortable and stable, allowing them to focus on age appropriate activities, exploring their own identity, culture, and establishing beliefs, aspirations, and hopes for their own future.

Youth living with relatives were more likely than youth living alone to have more favorable parenting attitudes in the domain of parental empathy. This suggests that perhaps family or relatives have a way of demonstrating empathy for children who they are related to in a way that is different than living with a non-kin family, in a group home, or on one's own. Empathy involves physical and cognitive processes where one is able to understand how others are feeling, thinking, and experiencing (Gerdes, Segal, & Lietz, 2010). Empathy is essential in establishing and navigating interpersonal personal relationships (de Waal, 2009; Toussaint & Webb, 2005). One's ability to read the feelings, needs, and thoughts of others is also critical in successful parenting (De Paul & Guibert, 2008; De Paul et al., 2008; Hoffman, 2000; Moor & Silvern, 2006; Wiehe, 1997). The findings, therefore, suggest that foster youth living with relatives may experience the empathy of others and may learn how to demonstrate empathy with peers, family, their children, and others they interact with.

Living in a group home or shelter was associated with more favorable attitudes regarding corporal punishment which could suggest that youth, particularly those who have experienced abuse have learned that corporal punishment is not acceptable and is something that is commonly known and socially acceptable. However, although foster youth may think that this is socially acceptable, it may not necessarily be a value they hold and may not predict how they might behave in the future in their parenting interactions, limiting the ability to interpret this finding or apply it to future behaviors.

Time in Care, Number of Placements, and Parenting Attitudes

There were several control variables included in both models run for each of the constructs of interests: time in care, number of placements, whether youth were parents or not, age, and sex. Although not the focus of the study, it is important to point out some of the significant relationships between these variables and foster youths' parenting attitudes. The number of placements youth had was associated with an increase in favorable beliefs regarding corporal punishment, again, perhaps due to a social desirability factor with this population. When time in care was assessed, and controlling for perceived social support, age, sex, and number of placements, youth who were in foster care from 3-5 years tended to have less favorable parenting attitudes when compared to youth who had been in care 6 months to 1 year regarding their beliefs about the use of corporal punishment. When controlling for living arrangement, age, sex, and number of placements, youth who had been in foster care for 3 to 5 years had less nurturing parenting attitudes regarding the use of corporal punishment and parent-child roles when compared with youth who had been in care for 6 months to a year. Perhaps this is indicative of youth becoming more educated, knowledgeable, or knowing what's expected of them from society. On the other hand, youth may be focused on other things related to their current circumstances, such as peer relationships, school, visitation with family, and/or mental health treatment. These findings may be contradictory to what one might expect in that the longer youth are in care, the less favorable their outcomes related to parenting attitudes and risk of maltreatment might be. We might expect youth in foster care who spend more time than others to have poorer outcomes as they most likely have experienced more instability in placement, school, and relationships.

However, perhaps after spending at least 3 years in care, foster youth have been able to connect more with caring and supportive adults (teachers, mentors, staff, case workers) who have been able to provide meaningful learning opportunities or guidance as it relates to building character and skills that may also be helpful in developing nurturing parenting attitudes. Foster youth may also have been able to access more services or have received services long enough to benefit than youth who have not been in care as long.

Youth Aging out in Arizona

It is important to consider the context in which youth are aging out of foster care in Arizona. Recently, there have been many major changes in leadership as well as ongoing concerns about inadequate investigations, lack of follow up, lack of services for children and families, and a large increase in the number of children who are coming into foster care. A disproportionate number of youth in Arizona's foster care system are placed in group homes and spend the majority of their time in group home settings for the duration of their time in foster care, typically until they reach the age of majority. The findings from this study, although not generalizable, are still applicable to policies and programs across the country, especially here in Arizona. Due to high numbers of youth living in group homes as opposed to relative and foster placements, youth may have an increased instability in placement, relationships, school, and as mentioned, connections and interactions occurring within a family setting. Arizona does allow the option for youth to elect to continue to receive services until they reach the age of 21, however there are many restrictions placed on them during this time in order for them to receive financial support and services that often dissuade youth from staying in the system.

Arizona has had, in recent history, excellent leadership for the independent living program (youth age 16 and older) with workers and supervisors who are extremely dedicated to the youth they serve and work hard to obtain the necessary services for them to succeed, although budgetary issues often create barriers to accessing adequate services for the youth. There are several promising programs and initiatives occurring in Arizona. In 2013, SB 1208 was passed in Arizona, which allows state higher educational institutions to provide a waiver of tuition for former foster youth. Despite a lack of details regarding implementation, funding, and infrastructure of the law, this provides an excellent start to supporting youth in their pursuit of higher education and improving their economic and social well-being. The Annie E Casey Foundation has selected Arizona to launch a Jim Casey Youth Opportunities Initiatives to help youth in foster care make successful transitions to adulthood. The goal of the initiative is to connect youth to education, employment, health care, housing, and supportive personal and community relationships and link them to supportive, permanent connections with caring adults.

Study Limitations

There are limitations to this study to note. First, despite a very diverse sample, data were collected in only one state in the United States. A convenience sample was used, which limits generalizability of the findings. There is also no comparison sample. One of the instruments, the AAPI-2, relies on self-report and is susceptible to a social desirability bias. Despite being written at a 5th grade level, youth had difficulty understanding the meaning of some of the statements on the questionnaire. The questionnaire itself was lengthy for a teen's attention span.

The responses on the AAPI-2 represent youth's attitudes at the time they completed the survey and may not actually reflect actual behavior or future behavior regarding parenting practices. Several variables believed to have an influence on parenting attitudes were controlled for, however there were many variables known to be associated with parenting attitudes or practices that were not assessed in the study. Although the developers of the AAPI-2 claim that scores can assess for attitudes and risk of child maltreatment, there are many factors that predict the occurrence of child abuse and neglect and it is impossible for one instrument to measure what might happen in the future. We can however use this information to gauge a certain level of risk and offer services and use preventive measures to prevent abuse from occurring. The study was cross-sectional, which poses limitations regarding behavior over time. The findings are only relative to the specific time that youth completed the survey. Only information regarding youths' current beliefs, thoughts, and recollections were obtained. Information about which types of placements youth have had or the duration of these placements are unknown, and may have had an impact on the findings.

Implications

Despite the study limitations, this exploratory study offers important implications to consider regarding policies, programs, and practice with youth aging out of foster care prior to and after they become parents. Findings suggest that youth aging out of foster care have significant differences in some aspects of parenting attitudes and are similar or slightly more nurturing in other areas. This finding offers important implications when designing and developing interventions targeting youth aging out who may be pregnant and/or parenting.

Although all areas of parenting should be addressed in parent training, the findings allow program planners to identify the areas that may require more guidance and support and others that can be strengthened, in this case, parental empathic awareness of children's needs (or increasing empathy in general), and clearly identifying the parent-child and overall family roles. It is critical for practitioners working with youth aging out to acknowledge their experiences related to maltreatment, foster care involvement, trauma, and the types of support they may or may not have received. Although all youth are different in their own experiences, these findings allow us to understand better how common experiences, such as foster care involvement can influence parenting attitudes.

Parenting Education

A universal parenting education program, as a component to existing independent living skills development programs or a program on its own, should be available to all youth in foster care over the age of 16 (possibly even younger). Such a program should focus on reducing known factors associated with child maltreatment, increasing knowledge about aspects of child development, increasing interpersonal empathy, strengthening social networks and support systems, offering opportunities for positive interactions with younger children, promoting resilience, strengths, and education, as well as offer tangible resources. In addition to skill building, additional supports need to be available and accessible to youth to provide stable housing, job training, educational support, health and mental health services, substance abuse prevention and treatment as needed, and education about financial planning and security. Youth should be assessed for trauma symptomology and provided with trauma informed treatment as a result of a history of child maltreatment and child welfare system involvement.

Furthermore, to reduce child maltreatment among parenting youth who are aging out, there should also be a focus on promoting healthy sexual practices and early/unintended pregnancy prevention. Health education – formal or informal must be consistently available to youth before, during, and after pregnancy. Given the high number of youth aging out who become pregnant, it is important to re-examine the need for a targeted pregnancy prevention program for these youth. They have unique needs and experiences and should have access to a program that fits their needs and where they can share ideas and thoughts with other youth and facilitators who have a greater understanding of their circumstances (Geiger & Schelbe, 2014).

More recently, many youth aged 16-25 (commonly referred to as emerging adults) are not experiencing this transition as youth typically did a century ago. Young adults are not marrying, moving out of the family home, and having children as young and many are relying more on their parents and family for support during this time (Arnett, 2007). This trend is less likely to be available to youth aging out of foster care, as they are already in short supply of ongoing parental and family support. Given what we know about young adults and their reliance on support, family, and others well into their 20s, we would expect youth from the foster care system to have an even greater reliance and need for support. The additional challenges associated with aging out and transitioning into adulthood among foster youth is well documented, therefore requiring ongoing and consistent support for youth aging out into adulthood.

There are, however, services offered to youth who choose to stay enrolled in the child welfare system until they are age 21 on a voluntary basis (where this program is offered), but many youth become disillusioned with the system, and like many others their age, seek independence, and a chance to have more control over their lives and decisions. In spite of their optimism and excitement, many young adults are not prepared to live on their own, especially without supports. Youth aging out may be a difficult group to identify and target for services post-emancipation unless they become somehow involved in the child welfare system, the justice system, or the mental health system and they are asked about possible foster care involvement as a child. Also, youth may not opt to take advantage of services offered because of their distrust of professionals and human service workers. Therefore, although it is extremely important to offer services to youth as they age out and into adulthood, it is imperative to engage youth prior to emancipation in a way that is conducive to their learning, involvement level, and one that involves choices. As always, ongoing and increased financial, social, and educational resources for foster youth are needed to support their growth as individuals.

Recognition of Parental History of Maltreatment

Parents and families may be identified as being high risk of child maltreatment for a number of reasons. The parents may be young, inexperienced, have a lack of resources, or they may be noticed by a professional. For example, a healthcare professional may note substance abuse during prenatal care or a hospital social worker or nurse may notice postpartum depression, immaturity, or a lack of preparedness for the baby following birth. A school teacher may notice that a child is not dressed appropriately for the weather or seems disheveled at school.

Oftentimes, a parent is not identified as being at risk because of his or her history of child abuse or neglect. When youth are still in the foster care system or they have recently exited from the system and become pregnant or new parents, professionals should recognize the need for additional supports required for new parents and for youth from the foster care system. Perhaps assessments made in the hospital or facilities offering prenatal services should also screen for parental history of child maltreatment and offer specialized parental support services for new parents (e.g. healthy families, fussy baby network, parents anonymous, zero to three).

Recruitment of Foster Families to Serve as Role Models for Adolescents

There are several implications to consider regarding the placement of youth in foster care. First, efforts should be made to recruit more foster families willing to care for adolescents in general, and pregnant and parenting adolescents and young adults. In order to be successful at parenting, we need a number of things – a good model of family roles, support, and access to resources and education are a good foundation. Foster families/parents should be recruited to be mentors and/or parenting partners to pregnant and parenting young adults who are aging out to be available for education, support, and guidance in parenting. They can offer practical advice, respite, be available for questions, allow for youth to observe healthy parent-child interactions with children, and offer socialization opportunities for the youth as young people and parents as well as for their children in a safe and fulfilling environment.

Several studies have identified the motivation for some foster youth to have children and a family as a means of creating something of their own or having a child or person in their life who will love them unconditionally, perhaps because they have never had this before (Pryce & Samuels, 2010; Rolfe, 2008). If foster families or relatives are caring for youth in foster care and providing them with the support and unconditional love they need as children and humans, it is possible some foster youth will not feel the need to create a family for themselves to experience loving relationships and the feeling of being needed and wanted.

Programs such as the “Staying Connected” program can be adapted to use with youth aging out and foster parents (Storer et al., 2012). Families in the community can also serve in similar roles as volunteers to young parents. Ideally, youth would be connected with a foster family prior to leaving care, but having a family to offer such support, housing, and a place to go for special events and/or in times of need is a necessity. Oftentimes, foster families are not available to care for youth and they are subsequently placed in congregate care. In order for youth in foster care to have exposure to family settings, it is possible to recruit part-time foster families who can take youth for meals, weekends, and special events and occasions. Perhaps rules governing CASA (Court Appointed Special Advocate) volunteers could be changed so that volunteers could spend additional time with youth and their siblings so that they have experiences that typically occur with families within a family setting. A peer network of young parents could also be established in communities to provide support, information, and guidance that is coordinated by former foster youth, successful young parents, and social workers.

Support for Relative Care

Findings also suggest that policymakers and child welfare workers should continue to seek out and support relative placements for youth. It is evident that placements involving a family setting are optimal for all children in foster care and relatives offer an opportunity to maintain a connection with family, but too often relatives are not in a situation to care for children needing immediate placement. However, with support – financially, programmatically, and socially, relatives may be more able to care for their family members in need.

Technology as a Resource

Technology should also be used to engage young people, young mothers and fathers in increasing knowledge about pregnancy prevention, protection from sexually transmitted infections, as well as what to expect during pregnancy and parenthood. In addition to knowledge building, a social media or social connection component could be incorporated for youth to obtain information, ask questions, and receive advice from others.

Building Relationships

Policymakers should emphasize the importance of relationships, permanency, and social support of youth aging out. Recent research has highlighted the importance of relationships among youth and has called for more programs and policies supporting initiatives where youth are encouraged to create, maintain, and foster meaningful relationships with individuals whom they identify as important in their lives (Goodkind et al., 2011). These relationships can be formal or informal, but should be directed by the youth.

Relational-cultural theory supports an approach to intervention that emphasizes relationship building in an effort to help individuals heal and move forward in their lives (Comstock et al., 2008).

Future Directions

There are several research questions and projects that will build upon the findings of the current study. First, an in-depth qualitative study should be conducted with youth aging out or who have recently aged out to explore their pregnancy and parenting experiences as they navigate the transition to adulthood and independence. Further assessment of the needs of pregnant and parenting youth currently in the foster care system is also necessary. Current independent living services program (ILS) do not adequately address pregnancy prevention and parenting with youth in foster care. Further research should be conducted to inform the development and testing of interventions to improve knowledge about child development, parenting skills, and support and resource cultivation with young parents with a history of child maltreatment and child welfare involvement among this group. The transition from care needs to be slower, employing a gradual and flexible process based on the youth's level of maturity and skill development, rather than just age.

A latent class analysis of the profile of youth and risk of maltreatment should be conducted to determine characteristics among youth aging out and the level of risk related to child maltreatment. Other risk and protective factors related to parenting, such as trauma, stress, intimate partner relationships, access to resources and services, education, interpersonal empathy, and parent-child interactions should be examined with this population.

Future research should include the father's perspective and experiences. Interventions involving youth aging out as parents should also include fathers so that they may have the opportunity to learn to improve their parenting abilities and increase their access and knowledge of resources when caring for children.

Conclusion

The study findings provide important implications for changes to current policies and programs for youth aging out of foster care. The challenges youth face as they age out are well documented and researchers and practitioners are beginning to better understand how youth are parenting and interacting with children. It is important to note that although the findings indicate that this particular sample of youth may be considered at a higher risk of child maltreatment as parents, we should evaluate these findings with caution. The findings indicate that youth may lack knowledge and/or experience as youth and are going through a difficult developmental transition where they have a number of possible stressors that affect their current state of mind and well-being. We are in no way suggesting that all youth who have been maltreated themselves and/or who have aged out of foster care will go on to maltreat a child. Due to their experiences, they may be at a greater risk of child maltreatment, knowledge we can use to improve their outcomes as it relates to parenting. It is very important to identify which areas are needed for improvement, to bring awareness and attention to youth aging out who may already be parenting, who are pregnant, or who will be interacting with children so that we may offer more support, programming, or services tailored to the unique needs of youth aging out and their children.

Policymakers and practitioners should emphasize the importance of relationships, permanence, stability, and social support of youth who are aging out. Youth in the foster care system are already experiencing a great deal of instability and fragmentation in their families of origin and with their peers and friends. Programs and policies supporting relationships with peers, friends, adults, and professionals should be encouraged and supported. Programs designed to offer information and hands-on experience with children and families will be helpful in providing youth with knowledge about child development and health family, parent, and child roles.

Researchers, practitioners, and policymakers are beginning to acknowledge and respond to the need for youth to carefully reconnect with family and establish and maintain positive relationships with peers and caring adults. Professionals need to continue to make efforts to ensure adolescents, particularly pregnant and parenting adolescents are placed with families and/or relatives and only use congregate care settings as a last resort. Foster families and relative placements should be trained and encouraged to assist youth with the transition into establishing their own independence, but be available and supportive to them throughout this process and well into adulthood to ensure a smooth transition. Findings from the current study will be presented and provided to community stakeholders, policymakers, non-profits serving foster children, youth and families, child and family safety advocates, as well as the child protection system in Arizona in maximize the impact of the findings and implications.

REFERENCES

- Abidin, R. R. (1992). The determinants of parenting. *Journal of Clinical Child Psychology, 21*(4), 407-412.
- Ahrens, K.R., DuBois, D.L., Garrison, M., Spencer, R., Richardson, L.P., & Lozano, P. (2011). Qualitative exploration of relationships with important non-parental adults in the lives of youth in foster care. *Children and Youth Services Review, 33*, 1012-1023.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*(5), 888-918.
- Allen, B., & Vacca, J.S. (2010). Frequent moving has a negative affect on the school achievement of foster children makes the case for reform. *Children and Youth Services Review, 32*, 829-832.
- Andresen, P.A., & Telleen, S.L. (1992). The relationship between social support and maternal behaviors and attitudes: A meta-analytic review. *American Journal of Community Psychology, 20*(6), 756-774.
- Antle, B.F., Johnson, L., Barbee, A., & Sullivan, D. (2009). Fostering interdependent versus independent living in youth aging out of care through healthy relationships. *Families in Society: The Journal of Contemporary Social Services, 90*(3), 309-314.
- Arizona Department of Economic Security (2013). Child Welfare Reporting Requirements: Semi-Annual Report for the Period of April 1, 2012 to September 30, 2012. Retrieved 3/1/2013 from https://www.azdes.gov/InternetFiles/Reports/pdf/Child_Welfare_Semi_Annual_Report.pdf
- Aunola, K., & Nurmi, J. (2005). The role of parenting styles in children's problem behavior. *Child Development, 76*(6), 1144-1159.
- Ayala-Quillen, B. A. (1998). The Adoption and Safe Families Act of 1997 kinship care report: An analysis of key areas. *Protecting Children, 14*(3), 12-14.
- Barber, J. G., & Delfabbro, P. H. (2003). Placement stability and the psychosocial well-being of children in foster care. *Research on Social Work Practice, 13*(4), 415-431.

- Barker, R. L. (2008). *The Social Work Dictionary* (5th eds.). Washington, D.C.: NASW Press.
- Barth, R.P. (2009). Preventing child abuse and neglect with parenting training: Evidence and opportunities. *Future of Children, 19*(2), 95-118.
- Barth, R. P. (2002). Institutions vs. foster homes: The empirical base for the second century of debate. *Chapel Hill, NC: Annie E. Casey Foundation, University of North Carolina, School of Social Work, Jordan Institute of Families.*
- Barth, R. P., Greeson, J. K., Guo, S., Green, R. L., Hurley, S., & Sisson, J. (2007). Changes in family functioning and child behavior following intensive in-home therapy. *Children and Youth Services Review, 29*(8), 988-1009.
- Batsche, C., Hart, S., Ort, R., Armstrong, M., Strozier, A., & Hummer, V. (2012). Post-secondary transitions of youth emancipated from foster care. *Child & Family Social Work, 19*(2), 174-184.
- Batson, C. D., Håkansson Eklund, J., Chermok, V. L., Hoyt, J. L., & Ortiz, B. G. (2007). An additional antecedent of empathic concern: Valuing the welfare of the person in need. *Journal of Personality and Social Psychology, 93*, 65-74.
- Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes, and action: Can feeling for a member of a stigmatized group motivate one to help the group? *Personality and Social Psychology Bulletin, 28*, 1655- 1666.
- Baumrind, D. (1994). The social context of child maltreatment. *Family Relations, 43*, 360-368.
- Baumrind, D. (1991). Parenting styles and adolescent development. In Lerner, A.C. Petersen, & J. Brooks-Gunn (Eds.), *The Encyclopedia on Adolescence* (pp. 758-772). New York: Garland.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*(1), 43-88.
- Bavolek, S. J., & Keene, R. G. (2005). AAPI online development handbook: The Adult-Adolescent Parenting Inventory (AAPI-2): Assessing high-risk parenting attitudes and behaviors. Park City, UT: Family Development Resources.
- Bavolek, S.J. & Keene, R.G. (1999). *Adult-Adolescent Parenting Inventory (AAPI-2) administration and development handbook*. Park City, UT: Family Development Resources, Inc.
- Bavolek, S.J. (November, 2000). *The Nurturing Parenting Programs*. Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

- Belanger, S. A. (2002). The advisability of kinship foster placements: A comparison of adaptive behaviors and psychopathology of children in traditional and kinship foster care. *ETD Collection for Fordham University*. Paper AAI3037209. Retrieved 9/13/2013 from <http://fordham.bepress.com.ezproxy1.lib.asu.edu/dissertations/AAI303729>
- Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. *Psychological Bulletin*, *114*(3), 413-434.
- Belsky, J. (1984). The determinants of parenting: A Process Model. *Child Development*, *55*, 83-96.
- Belsky, J., Conger, R., & Capaldi, D.M. (2009). The intergenerational transmission of parenting: Introduction to the special section. *Developmental Psychology*, *45*(5), 1201-1204.
- Belsky, J., Jaffee, S., Sligo, J., Woodward, L., & Silva, P. (2005). Intergenerational transmission of warm-sensitive-stimulating parenting: A prospective study of mothers and fathers of 3-years-olds. *Child Development*, *76*, 384-396.
- Berlin, L.J., Appleyard, K., & Dodge, K.A. (2011). Intergenerational continuity in child maltreatment: Mediating mechanisms and implications for prevention intergenerational continuity. *Child Development*, *82*(1), 162-176.
- Berrick, J. D., Barth, R. P., & Needell, B. (1994). A comparison of kinship foster homes and foster family homes: Implications for kinship foster care as family preservation. *Children and Youth Services Review*, *16*, 33-63.
- Bert, S.C., Guner, B.M., & Lanzi, R.G. (2009). The influence of maternal history of abuse on parenting knowledge and behavior. *Family Relations*, *58*, 176-187.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, *22*(6), 723-742.
- Bronfenbrenner, U., & Morris. (2006). The bioecological model of human development. In W. Damon, & R.M. Lerner (Eds.), *Handbook of child psychology* (pp. 793-828). Hoboken, N.J.: Wiley.
- Brown, J., Cohen, P., Johnson, J. G., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: Findings of a 17-year prospective study of officially recorded and self-reported child abuse and neglect. *Child Abuse & Neglect*, *22*(11), 1065-1078.

- Bruwer, B., Emsley, R., Kidd, M., Lochner, C., & Seedat, S. (2008). Psychometric properties of the Multidimensional Scale of Perceived Social Support in youth. *Comprehensive Psychiatry, 49*(2), 195-201.
- Budd, K.S., Heilman, N.E., Kane, D. (2000). Psychosocial correlates of child abuse potential in multiply disadvantaged adolescent mothers. *Child Abuse & Neglect, 24*(5), 611–625.
- Budd, K.S., Holdsworth, M.J., & HoganBruen, K.D. (2006). Antecedents and concomitants of parenting stress in adolescent mothers in foster care. *Child Abuse & Neglect, 30*, 557–574.
- Bureau of Labor Statistics. (July, 2007). Labor Force Statistics from the Current Population Survey.
- Byrne, S., Rodrigo, M.J., & Martin, J.C. (2012). Influence of form and timing of social support on parental outcomes of a child-maltreatment prevention program. *Children and Youth Services Review, 34*, 2495-2503.
- Campbell, J., & Gilmore, L. (2007). Intergenerational continuities and discontinuities in parenting styles. *Australian Journal of Psychology, 59*(3), 140-150.
- Canty-Mitchell J., Zimet, G.D. (2000) Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. *American Journal of Community Psychology, 28*, 391-400.
- Capaldi, D. M., Pears, K. C., Patterson, G. R., & Owen, L. D. (2003). Continuity of parenting practices across generations in an at-risk sample: A prospective comparison of direct and mediated associations. *Journal of Abnormal Child Psychology, 31*(2), 127-142.
- Carpenter, S.C., Clyman, R.B., Davidson, A.J., & Steiner, J.F. (2001). The association of foster care or kinship care with adolescent sexual behavior and first pregnancy. *Pediatrics, 108*(3), 1-6.
- Caspi A, Elder Jr, G.H. Emergent family patterns: The intergenerational construction of problem behavior and relationships. In: Hinde RA, Stevenson-Hinde J, (eds.) *Relationships within Families: Mutual Influences*. Oxford: Oxford University Press; 1988:218e24.
- Chen, Z. Y., & Kaplan, H. B. (2001). Intergenerational transmission of constructive parenting. *Journal of Marriage and Family, 63*(1), 17-31.
- Cicchetti, D., & Toth, S. (1995). Developmental psychopathology perspective on child abuse and neglect. *Journal of American Academy of Child and Adolescent Psychiatry, 34*(5), 541-565.

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)*. Erlbaum: Mahwah, NJ.
- Collins, M.E. (2004). Enhancing services to youths leaving foster care: Analysis of recent legislation and its potential impact. *Children and Youth Services Review*, *26*, 1051-1065.
- Collins, M. E. (2001). Transition to adulthood for vulnerable youth: A review of research and implications for policy. *Social Service Review*, *75*(2), 271–291.
- Collins, M.E., Clay, C. (2009). Influencing policy for youth transitioning from care: Defining problems, crafting solutions and assessing politics. *Children and Youth Services Review*, *31*, 743-751.
- Collins, M.E., Spencer, R., & Ward, R. (2010). Supporting youth in the transition from foster care: Formal and informal connections. *Child Welfare*, *89*, 1, 125-143.
- Comstock, D.L., Hammer, T.R., Strentzsch, J., Cannon, K., Parsons, J., & Salazar II, G. (2008). Relational-Cultural Theory: A framework for bridging relational, multicultural, and social justice competencies. *Journal of Counseling and Development*, *86*, 279-287.
- Conrad, B., Gross, D., Fogg, L., & Ruchala, P. (1992). Maternal confidence, knowledge, and quality of mother-toddler interactions: a preliminary study. *Infant Mental Health Journal*, *13*(4), 353-362.
- Conrade, G., & Ho, R. (2001). Differential parenting styles for fathers and mothers. *Australian Journal of Psychology*, *53*(1), 29-35.
- Connors, N.A., Whiteside-Mansell, L., Deere, D., Ledet, T., Edwards, M.C. (2006). Measuring the potential for child maltreatment: The reliability and validity of the Adult Adolescent Parenting Inventory - 2. *Child Abuse & Neglect*, *30*(1), 39-53.
- Cort, N.A., Toth, S.L., Cerulli, C., & Rogosch, F. (2011). Maternal Intergenerational Transmission of Childhood Multitype Maltreatment. *Journal of Aggression, Maltreatment, and Trauma*, *20*, 19-38.
- Coulton C.J., Crampton D.S., Irwin M., Spilsbury J.C. & Korbin J.E. (2007). How neighbourhoods influence child maltreatment: a review of the literature and alternative pathways. *Child Abuse & Neglect*, *31*, 1117–1142.
- Courtney, M.E., Dworsky, A., Lee, J., & Raap, M. (2009). *Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 23 and 24*. Chicago: Chapin Hall at the University of Chicago.

- Courtney, M.E. & Dworsky, A. (2006). Early outcomes for young adults transitioning from out-of-home care in the USA. *Child and Family Social Work, 11*, 209-219.
- Covell, C. N., Huss, M. T., & Langhinrichsen-Rohling, J. (2007). Empathic deficits among male batterers: A multidimensional approach. *Journal of Family Violence, 22*, 165-174.
- Craig, L. (2006). Parental education, time in paid work, and time with children: an Australian time-diary analysis. *The British Journal of Sociology, 57*(4), 553-575.
- Currie, J., & Widom, C.S. (2010). Long-term consequences of child abuse and neglect on adult economic well-being. *Child Maltreatment, 15*(2), 111-120.
- Dahlem, N.W., Zimet, G.D., Walker, R.R.(1991). The Multidimensional Scale of Perceived Social Support: A confirmation study. *Journal of Clinical Psychology, 47*, 756-61.
- Daro, D. (2011). Prevention of Child Abuse and Neglect. In J.E. Myers (Ed), *The APSAC Handbook on Child Maltreatment* (3rd Eds.) (pp. 17-37). Los Angeles: Sage.
- Daro, D. (1988). *Confronting child abuse: Research for effective program design*. New York: Free Press.
- De Bellis, M.D., Broussard, E.R., Herring, D.J., Wexler, S., Moritz, G., & Benitez, J.G. (2001). Psychiatric co-morbidity in caregivers and children involved in maltreatment: a pilot research study with policy implications. *Child Abuse & Neglect, 25*(7), 923-944.
- De Paul, J., & Guibert, M. (2008). Empathy and child neglect: A theoretical model. *Child Abuse & Neglect, 32*, 1063-1071.
- De Paul, J., Perez-Albeniz, A., Guibert, M., Asla, N., Ormaechea, A. (2008). Dispositional empathy in neglectful mothers and mothers at high risk of physical abuse. *Journal of Interpersonal Violence, 23*, 5, 670-684.
- DeSena, A. D., Murphy, R. A., Douglas-Palumberi, H., Blau, G., Kelly, B., Horwitz, S. M., & Kaufman, J. (2005). SAFE Homes: Is it worth the cost?: An evaluation of a group home permanency planning program for children who first enter out-of-home care. *Child Abuse & Neglect, 29*(6), 627-643.
- de Waal, F. B. M. (2009). Putting altruism back into altruism: The evolution of empathy. *Annual Review of Psychology, 59*, 279–300.
- Dixon, L., Browne, K., & Hamilton-Giachritsis, C. (2009). Patterns of risk and protective factors in intergenerational cycle of maltreatment. *Journal of Family Violence, 24*, 111-122.

- Dore, M. M., & Eisner, E. (1993). Child-related dimensions of placement stability in treatment foster care. *Child and Adolescent Social Work Journal, 10*(4), 301-317.
- Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58*, 1244-1257.
- Drake, B., & Pandey, S. (1996). Understanding the relationship between neighborhood poverty and specific types of child maltreatment. *Child Abuse & Neglect, 20*(11), 1003-1018.
- Dubowitz, H. (1994). Kinship care: Suggestions for future research. *Child Welfare: Journal of Policy, Practice, and Program.*
- Dubowitz, H., Kim, J., Black, M.M., Weisbart, C., Semiatin, J., & Magder, L.S. (2011). Identifying children at high risk for a child maltreatment report. *Child Abuse & Neglect, 35*, 96-104.
- Dukewich, T.L., Borkowski, J.G., & Whitman, T.L. (1996). Adolescent mothers and child abuse potential: An evaluation of risk factors. *Child Abuse & Neglect, 20*(11), 1031-1047.
- Duncan, G. J., & Raudenbush, S. W. (2001). Neighborhoods and adolescent development: How can we determine the links. *Does it Take a Village*, 105-136.
- Dworsky, A., & Courtney, M.E. (2010). The risk of teenage pregnancy among transitioning foster youth: Implications for extending state care beyond age 18. *Children and Youth Services Review, 32*, 1351-1356.
- Dworsky, A., & DeCoursey, J. (2009). *Pregnant and parenting foster youth: Their needs, their experiences*. Chicago: Chapin Hall at the University of Chicago.
- Dworsky, A., & Perez, A. (2010). Helping former foster youth graduate from college through campus support programs. *Children and Youth Services Review, 32*, 255-263.
- Egeland, B. (1997). Mediators of the effects of child maltreatment on developmental adaptation in adolescence. In D. Cicchetti & S. L. Toth (Eds.), *Developmental perspectives on trauma: Theory, research, and intervention. Rochester symposium on developmental psychology* (pp. 403-434). Rochester, NY: University of Rochester Press.
- Egeland, B., Jacobitz, D., & Sroufe, L.A. (1988). Breaking the cycle of abuse. *Child Development, 59*, 1080-1088.

- Eisenberg, N., & Eggum, N. D. (2009). Empathic responding: Sympathy and personal distress. *The Social Neuroscience of Empathy*, 71-83.
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48(1), 43.
- Elsegood, K. J., & Duff, S. C. (2010). Theory of mind in men who have sexually offended against children: A UK comparison study between child sex offenders and nonoffender controls. *Sexual Abuse: A Journal of Research and Treatment*, 22(1), 112-131.
- English, E. J. (2003). Foster youth transition to independence study: Second annual report. Seattle, WA Retrieved on 12/05/13 from <http://www1.dshs.wa.gov/pdf/ca/FYTRpt2.pdf>
- Erikson, E. H. (1968). *Identity: Youth and crisis* (No. 7). WW Norton & Company.
- Fang, Z., Brown, D.S., Florence, C.S. & Mercy, J.A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse & Neglect*, 36(2), 156-165.
- Farmer, E. (2009). How do placements in kinship care compare with those in non-kin foster care: placement patterns, progress and outcomes?. *Child & Family Social Work*, 14(3), 331-342.
- Francis, K. J. & Wolfe, D. A. (2008). Cognitive and emotional differences between abusive and non-abusive fathers. *Child Abuse & Neglect*, 32, 1127-1137.
- Fraser, M. W., Kirby, L. D., Smokowski, P. R. (In Press). Risk and resilience in childhood. In: M. W. Fraser (Ed.) *Risk and Resilience in Childhood: An Ecological Perspective (2nd Edn)*. Washington D.C.: National Association of Social Workers.
- Fundudis, T., Kaplan, C., & Dickinson, H. (2003). A comparison study of characteristics of parents of abused and non-abused children. *Educational & Child Psychology*, 20 (1), 90–108.
- Garnezy, N. (1985). Stress-resistant children: The search for protective factors. In J. E. Stevenson, *Recent research in developmental psychopathology* (pp. 213 –233). Tarrytown, NY: Pergamon Press.
- Garnezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry*, 56, 127 – 136.

- Geiger, J.M. & Schelbe, L.A. (2014). Stopping the cycle of child abuse and neglect: A call to action to focus on pregnant and parenting youth in and aging out of the foster care system. *Journal of Public Child Welfare*, 8(1), 1-26.
- Gelles, R. J. & Perlman, S. (2012). *Estimated annual cost of child abuse and neglect*. Chicago: Prevent Child Abuse America.
- Gerdes, K.E., Geiger, J.M., Lietz, C.A., Wagaman, M.A., & Segal, E.A. (2012). Examination of known-groups validity for the Empathy Assessment Index (EAI): Differences in EAI scores between social service providers and service recipients. *Journal of the Society for Social Work and Research*, 3(2), 94-112.
- Gerdes, K.E., Segal, E.A., Jackson, K.F., & Mullins, J.L. (2011). Teaching empathy: A model rooted in social cognitive neuroscience and social justice. *Journal of Social Work Education*, 47(1), 1-24.
- Gerdes, K.E., Segal, E.A. & Lietz, C.A. (2010). Conceptualizing and measuring empathy. *British Journal of Social Work*, 40, 2326-2343.
- Gerdes, K.E., Segal, E.A., & Lietz, C.A. (2012). *The Empathy Assessment Index*. Arizona State University.
- Gibbons, S. B. (2011). Understanding empathy as a complex construct: A review of the literature. *Clinical Social Work Journal*, 39(3), 243-252.
- Gini, G., Albiero, P., Benelli, B., & Altoe, G. (2008). Determinants of adolescents' active defending and passive bystanding behavior in bullying. *Journal of Adolescence*, 31, 93-105.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.
- Goodkind, S., Schelbe, L.A., & Shook, J. J. (2011). Why youth leave care: Understandings of adulthood and transition successes and challenges among youth aging out of child welfare. *Children and Youth Services Review*, 33, 1039-1048.
- Goodnow, J. J. (2002). Parents' knowledge and expectations: Using what we know. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 3. Being and becoming a parent* (2nd ed., pp. 439-460). Mahwah, N.J.: Erlbaum.
- Gotbaum, B. (2005). Children raising children: City fails to adequately assist pregnant and parenting youth in foster care. New York: Public Advocate for the City of New York.

- Gray, M. R., & Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family*, *61*, 574-587.
- Green, B.L., Furrer, C., & McAllister, C. (2007). How do relationships support parenting? Effects of attachment style and social support on parenting behavior in an at-risk population. *American Journal of Community Psychology*, *40*, 96-108.
- Greeson, J.K., & Bowen, N.K. (2008). “She holds my hand”. The experiences of foster youth with their natural mentors. *Children and Youth Services Review*, *30*, 1178-1188.
- Grogan-Kaylor, A. (2000). Who goes into kinship care? The relationship of child and family characteristics to placement into kinship foster care. *Social Work Research*, *24*(3), 132-141.
- Hass, M., & Graydon, K. (2009). Sources of resiliency among successful foster youth. *Children and Youth Services Review*, *31*, 457-463.
- Hernandez, L., & Naccarato, T. (2010). Scholarships and supports available to foster care alumni: A study of 12 programs across the U.S. *Children and Youth Services Review*, *32*, 758-766.
- Herrenkohl, E. C., Herrenkohl, R. C., & Egolf, B. P. (2003). The psychosocial consequences of living environment instability on maltreated children. *American Journal of Orthopsychiatry*, *73*(4), 367-380.
- Hess, C. R., Teti, D. M., & Hussey-Gardner, B. (2004). Self-efficacy and parenting of high-risk infants: The moderating role of parent knowledge of infant development. *Journal of Applied Developmental Psychology*, *25*(4), 423-437.
- Hibbard, R. A., & Desch, L. W. (2007). American Academy of Pediatrics Committee on Child Abuse and Neglect, American Academy of Pediatrics Council on Children With Disabilities: Maltreatment of children with disabilities. *Pediatrics*, *119*(5), 1018-1025.
- Hoffman, M.L. (2000). *Empathy and Moral Development: Implications for Caring and Justice*. New York: Cambridge University Press.
- Hoghughi, M. (2004). Parenting – An introduction. In M. Hoghughi, & N. Long, (Eds.) *Handbook of Parenting: Theory and research for practice* (pp. 1-18). London: Sage.
- Holton, A., Ronning, J., Handegard, B., & Sourander, A. (2005). A comparison of mental health problems in kinship and nonkinship foster care. *European Child and Adolescent Psychiatry*, *14*, 2000-2007.

- Hook, J.L., & Courtney, M.E. (2011). Employment outcomes of former foster youth as young adults: The importance of human, personal, and social capital. *Children and Youth Services Review, 33*, 1855-1865.
- Howe, D., & Fearnley, S. (2003). Disorders of attachment in adopted and fostered children: Recognition and treatment. *Clinical Child Psychology and Psychiatry, 8*(3), 369-387.
- Huang, K., Caughy, M.O., Genevo, J.L., & Miller, T.L. (2005). Maternal knowledge of child development and quality of parenting among white, African American, and Hispanic mothers. *Applied Developmental Psychology, 26*, 149-170.
- Hussey, J.M., Chang, J. J., & Kotch, J.B. (2006). Child maltreatment in the United States: Prevalence, risk factors and adolescent health consequences. *Pediatrics, 118*(3), 933-942.
- Hyde, J., & Kammerer, N. (2009). Adolescents' perspectives on placement moves and congregate settings: Complex and cumulative instabilities in out-of-home care. *Children and Youth Services Review, 31*(2), 265-273.
- Jackson, S., & Cameron, C. (2012). Leaving care: Looking ahead and aiming higher. *Children and Youth Services Review, 34*(6), 1107-1114.
- James, S. (2004). Why do foster care placements disrupt? An investigation of reasons for placement change in foster care. *Social Service Review, 78*(4), 601-627.
- Jolliffe, D., & Farrington, D. P. (2007). Examining the relationship between low empathy and self-reported offending. *Legal and Criminological Psychology, 12*(2), 265-286.
- Jones, L. (2013): The Family and Social Networks of Recently Discharged Foster Youth. *Journal of Family Social Work, 16*(3), 225-242.
- Kelleher, K., Chaffin, M., Hollenberg, J., & Fischer, E. (1994). Alcohol and drug disorders among physically abusive and neglectful parents in a community-based sample. *American Journal of Public Health, 84*, 1586-1590.
- Childstats.gov Forum on Child and Family Statistics. Child Population Chart. Retrieved 2/25/2014 from <http://childstats.gov/americaschildren/tables.asp>
- Killen, M., & Smetana, J. (2008). Moral judgment and moral neuroscience: Intersections, definitions, and issues. *Child Development Perspectives, 2*(1), 1-6.
- Kilpatrick, K.L. (2005). The Parental Empathy Measure: a new approach to assessing child maltreatment risk. *American Journal of Orthopsychiatry, 75*, 4, 608-620.

- Kim, J. (2009). Type-specific intergenerational transmission of neglectful and physically abusive parenting behaviors among young parents. *Children and Youth Services Review, 31*, 761-767.
- King, B., Putnam-Hornstein, E., Cederbaum, J. A., & Needell, B. (2014). A cross-sectional examination of birth rates among adolescent girls in foster care. *Children and Youth Services Review, 36*, 179-186.
- Kirk, R., & Day, A. (2011). Increasing college access for youth aging out of foster care: Evaluation of a summer camp program for foster youth transitioning from high school to college. *Children and Youth Services Review, 33*(7), 1173-1180.
- Koh, E., & Testa, M. F. (2008). Propensity Score Matching of Children in Kinship and Nonkinship Foster Care: Do Permanency Outcomes Differ? *Social Work Research, 32*(2), 105-116.
- Kotch, J.B., Browne, D.C., Dufort, V., & Winsor, J. (1999). Predicting child maltreatment in the first 4 years of life from characteristics assessed in the neonatal period. *Child Abuse & Neglect, 23*(4), 305-319.
- Kotchick, B.A., & Forehand, R. (2002). Putting parenting in perspective: A discussion of the contextual factors that shape parenting practices. *Journal of Child and Family Studies, 11*(3), 255-269.
- Laible, D. J., Carlo, G., & Roesch, S. C. (2004). Pathways to self-esteem in late adolescence: The role of parent and peer attachment, empathy, and social behaviours. *Journal of Adolescence, 27*(6), 703-716.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*(5), 1049-1065.
- LeCroy, C.W., & Krysik, J. (2011). Randomized trial of the Healthy Families Arizona home visiting program. *Children and Youth Services Review, 33*, 1761-1766.
- Lee, R. E., & Whiting, J. B. (2007). Foster children's expressions of ambiguous loss. *The American Journal of Family Therapy, 35*(5), 417-428.
- Lee, B. R., Bright, C. L., Svoboda, D. V., Fakunmoju, S., & Barth, R. P. (2011). Outcomes of group care for youth: A review of comparative studies. *Research on Social Work Practice, 21*(2), 177-189.
- Leos-Urbel, J., Bess, R., & Geen, R. (2002). The evolution of federal and state policies for assessing and supporting kinship caregivers. *Children and Youth Services Review, 24*(1), 37-52.

- Li, F., Godinet, M.T., & Arnsberger, P. (2011). Protective factors among families with children at risk of maltreatment: Follow up to early school years. *Children and Youth Services Review, 33*, 139-148.
- Lietz, C.A., Gerdes, K.E., Sun, F., Geiger J.M., & Wagaman, M.A, & Segal, E.A. (2011). The Empathy Assessment Inventory (EAI): A confirmatory factor analysis of a five component model of empathy. *Journal of the Society for Social Work and Research, 2, 2*, 104-124.
- Lindsey, E., & Ahmed, F. (1999). The North Carolina independent living program: a comparison of outcomes for participants and nonparticipants. *Children and Youth Services Review, 21*, 389-412.
- Loper, A. B., Hoffschmidt, S. J., & Ash, E. (2001). Personality features and characteristics of violent events committed by juvenile offenders. *Behavioral Sciences & the Law, 19*(1), 81-96.
- Love, L., McIntosh, J., Rosst, M., & Tertzakian, K. (2005). *Fostering hope: Preventing teen pregnancy among youth in foster care*. Washington, DC: National Campaign to Prevent Teen Pregnancy.
- Lynch & Cicchetti (2002). Links between community violence and the family system: Evidence from children's feelings of relatedness and perception of parents' behavior. *Family Process, 41*(3), 519-532.
- Lyons, S.J., Henly, J.R., & Schuerman, J.R. (2005). Informal support in maltreating families: Its effect on parenting practices. *Children and Youth Services Review, 27*, 21-38.
- Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology, 28*(6), 1006.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of child psychology: formerly Carmichael's Manual of child psychology/Paul H. Mussen, editor*.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*(04), 425-444.
- McGloin, J. M., & Widom, C. S. (2001). Resilience among abused and neglected children grown up. *Development and Psychopathology, 13*(4), 1021-1038.
- McMahon, S. D., Wernsman, J., & Parnes, A. L. (2006). Understanding prosocial behavior: the impact of empathy and gender among African American adolescents. *Journal of Adolescent Health, 39*(1), 135-137.

- Mech, E. V., & Fung, C. C. M. (1999). Placement restrictiveness and educational achievement among emancipated foster youth. *Research on Social Work Practice, 9*(2), 213-228.
- Mersky, J.P., Berger, L.M., Reynolds, A.J., & Gromoske, A.N. (2009). Risk factors for child and adolescent maltreatment: A longitudinal investigation of a cohort of inner city youth. *Child Maltreatment, 14*(1), 73-88.
- Mersky, J.P., & Topitzes, J. (2010). Comparing early adult outcomes of maltreated and nonmaltreated children: A prospective longitudinal investigation. *Children and Youth Services Review, 32*, 1086-1096.
- Moor, A., & Silvern, L. (2006). Identifying pathways linking child abuse to psychological outcome: The mediating role of perceived parental failure of empathy. *Journal of Emotional Abuse, 6*, 4, 91-114.
- Munson, M.R. & McMillen, J.C. (2009). Natural mentoring and psychosocial outcomes among older youth transitioning from foster care. *Children and Youth Services Review, 31*, 104-111.
- Nath, P.S., Borkowski, J. G., Whitman, T.L., & Schellenbach, C.J. (1991). Understanding adolescent parenting: The dimensions and functions of social support. *Family Relations, 40*(4), 411-420.
- National Association of Social Workers. (2006). *Code of ethics of the National Association of Social Workers*. Washington, D.C.: Author.
- Neumann, M., Bensing, J., Mercer, S., Ernstmann, N., Ommen, O., & Pfaff, H. (2009). Analyzing the “nature” and “specific effectiveness” of clinical empathy: a theoretical overview and contribution towards a theory-based research agenda. *Patient Education and Counseling, 74*(3), 339-346.
- Newton, R. R., Litrownik, A. J., & Landsverk, J. A. (2000). Children and youth in foster care: Disentangling the relationship between problem behaviors and number of placements. *Child Abuse & Neglect, 24*(10), 1363-1374.
- Matta Oshima, K. M., Narendorf, S. C., & McMillen, J. C. (2013). Pregnancy risk among older youth transitioning out of foster care. *Children and Youth Services Review, 35*(10), 1760-1765.
- Osterling, K.L. & Hines, A.M. (2006). Mentoring adolescent foster youth: Promoting resilience during developmental transitions. *Child and Family Social Work, 11*, 242-253.

- Packard, T., Delgado, M., Fellmeth, R. & McCready, K. (2008). A cost-benefit analysis of transitional services for emancipating foster youth. *Children and Youth Services Review, 30*, 1267-1278.
- Palusci, V.J., Crum, P., Bliss, R., Bavolek, S.J. (2008). Changes in parenting attitudes and knowledge among inmates and other at-risk populations after a family nurturing program. *Children and Youth Services Review, 30*(1), 79-89.
- Pears, K.C., & Capaldi, D. M. (2001). Intergenerational transmission of abuse: a two generational prospective study of an at-risk sample. *Child Abuse & Neglect, 25*, 1439-1461.
- Pecora, P. J. (2012). Maximizing educational achievement of youth in foster care and alumni: Factors associated with success. *Children and Youth Services Review, 34*(6), 1121-1129.
- Pecora, P.J., & Harrison-Jackson, M. (2011). Child welfare policies and programs. In J.M. Jensen & M.W. Fraser (Eds.). *Social policy for children and families* (pp. 57-112). Los Angeles, CA: Sage.
- Pecora, P. J., Williams, J., Kessler, R.C., Hiripi, E., O'Brien, K., Emerson, J., Herrick, M.A & Torres, D. (2006). Assessing the educational achievements of adults who were formerly placed in family foster care. *Child and Family Social Work, 11*, 220-231.
- Pecora, P., Williams, J., Kessler, R., Downs, A., O'Brien, K., Hiripi, E., et al. (2003). *Assessing the effects of foster care: Early results from the Casey National Alumni Study*. Seattle, WA: Casey Family Programs.
- Pepin, E.N., Banyard, V. L. (2006). Social support: A mediator between child maltreatment and developmental outcomes. *Journal of Youth and Adolescence, 25*(4), 617-630.
- Pryce, J.M., & Samuels, G.M. (2010). Renewal and risk: the dual experience of young motherhood and aging out of the child welfare system. *Journal of Adolescent Research, 25*(2), 205-230.
- Putnam, S.P., Sanson, A.V., & Rothbart, M.K. (2002). Child temperament and parenting. In M. H. Bornstein, (Ed.) *Handbook of Parenting Volume 1* (pp. 255-278). Mahwah, NJ: Erlbaum.
- Radhakrishna, A., Bou-Saada, I. E., Hunter, W. M., Catellier, D. J., & Kotch, J. B. (2001). Are father surrogates a risk factor for child maltreatment?. *Child Maltreatment, 6*(4), 281-289.

- Robbers, M.L.P. (2008). The Caring Equation: An Intervention Program for Teenage Mothers and Their Male Partners. *Children and Schools*, 30(1), 37-47.
- Roberts, D. E. (2000). Kinship care and the price of state support for children. *Chi.-Kent L. Rev.*, 76, 1619.
- Rodrigo, M. J., Martín, J. C., Máiquez, M. L., & Rodríguez, G. (2007). Informal and formal supports and maternal child-rearing practices in at-risk and non at-risk psychosocial contexts. *Children and Youth Services Review*, 29(3), 329-347.
- Rolfe, A. (2008). "You've got to grow up when you've got a kid": Marginalized young women's accounts of motherhood. *Journal of Community and Applied Social Psychology*, 18, 299-314.
- Ronan, K.R., Canoy, D.F., & Burke, K.J. (2009). Child maltreatment: Prevention, risk, solutions and obstacles. *Australian Psychologist*, 44(3), 195-213.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181-214). New York: Cambridge University Press.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316.
- Ryan, J. P., Marshall, J. M., Herz, D., & Hernandez, P. M. (2008). Juvenile delinquency in child welfare: Investigating group home effects. *Children and Youth Services Review*, 30(9), 1088-1099.
- Sams, D. P., & Truscott, S. D. (2004, February). Empathy, exposure to community violence, and use of violence among urban, at-risk adolescents. In *Child and Youth Care Forum* (Vol. 33, No. 1, pp. 33-50). Kluwer Academic Publishers-Plenum Publishers.
- Samuels, G.M., & Pryce, J.M. (2008) "What doesn't kill you makes you stronger": Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review*, 30, 1198-1210.
- Sanders, M. R. (2008). Triple P-Positive Parenting Program as a public health approach to strengthening parenting. *Journal of Family Psychology*, 22(4), 506.
- Sanders, M.R. (1999). Triple P-Positive Parenting Program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behavior and emotional problems in children. *Clinical Child and Family Psychological Review*, 2(2), 71-90.

- Sandifer, J.L. (2008). Evaluating the efficacy of a parenting program for incarcerated mothers. *Prison Journal*, 88, 423-445.
- Scannapieco, M., & Connell-Carrick, K. (2005). *Understanding child maltreatment: An ecological and developmental perspective*. New York: Oxford University Press.
- Scott, M. E., Moore, K. A., Hawkins, A. J., Malm, K., & Beltz, M. (2012). Putting Youth Relationship Education on the Child Welfare Agenda: Findings from a Research and Evaluation Review. *Child Trends*.
- Shin, S.H. (2003). Building evidence to promote educational competence of youth in foster care. *Child Welfare*, 82 (5), 615-632.
- Shaw, R., & Kilburn, M. (2009). *Child Abuse and neglect prevention: Reports from the Field and Ideas for the Future*. Unpublished document prepared for the Doris Duke Foundation. Retrieved August 5, 2011, from http://www.rand.org/pubs/working_papers/2009/RAND_WR632.pdf
- Sidebotham, P., Golding, J., & The ALSPAC Study Team. (2001). Child maltreatment in the “Children of the Nineties” A longitudinal study of parental risk factors. *Child Abuse and Neglect*, 25, 1177-1200.
- Simons, L. G., & Conger, R. D. (2007). Linking mother–father differences in parenting to a typology of family parenting styles and adolescent outcomes. *Journal of Family Issues*, 28(2), 212-241.
- Skuse, D. H., Gill, D., Reilly, S., Wolke, D., & Lynch, M. A. (1995). Failure to thrive and the risk of child abuse: A prospective population survey. *Journal of Medical Screening*, 2(3), 145–149.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, 17(2), 125-146.
- Stiffman, M. N., Schnitzer, P. G., Adam, P., Kruse, R. L., & Ewigman, B. G. (2002). Household composition and risk of fatal child maltreatment. *Pediatrics*, 109(4), 615-621.
- Stith, S.M., Ting Lui, L., Davies, C., Boykin, E.L., Alder, M.C., Harris, J. M., Som, A., McPherson, M., & Dees, J.E.M.E.G. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behavior*, 13, 13-29.
- Stone, S. (2007). Child maltreatment, out-of-home placement and academic vulnerability: A fifteen-year review of evidence and future directions. *Children and Youth Services Review*, 29, 139-161.

- Stott, T. (2012). Placement instability and risky behaviors of youth aging out of foster care. *Child and Adolescent Social Work Journal*, 29(1), 61-83.
- Stott, T. (2009). *The Wellbeing and risk behaviors of young adults from foster care*. Unpublished dissertation: Arizona State University, Phoenix, AZ.
- Stott, T. & Gustavsson, N. (2010). Balancing permanency and stability for youth in foster care. *Children and Youth Services Review*, 32, 619-625.
- Sullivan, M.J., Jones, L., Mathiesen, S. (2010). School change, academic progress, and behavior problems in a sample of foster youth. *Children and Youth Services Review*, 32, 164-170.
- Surratt, H.L. (2003). Parenting Attitudes of Drug-Involved Women Inmates. *The Prison Journal*, 83(2), 206-220.
- Thomas, D.V., & Looney, S.W. (2004). Effectiveness of a comprehensive psychoeducational intervention with pregnancy and parenting adolescents: A pilot study. *Journal of Child and Adolescent Psychiatric Nursing*, 17(2), 66-77.
- Thornberry, T. P., Knight, K. E., & Lovegrove, P. J. (2012). Does maltreatment beget maltreatment? A systematic review of the intergenerational literature. *Trauma, Violence, & Abuse*, 13(3), 135-152.
- Tempel, L. R. (2007). Pathways to the clinician's experience of empathy in engaging single mothers at risk for physical abuse of their children. *Clinical Social Work Journal*, 35, 257-265.
- Toussaint, L., & Webb, J. R. (2005). Gender differences in the relationship between empathy and forgiveness. *The Journal of Social Psychology*, 145(6), 673-685.
- Unrau, Y. A., Seita, J. R., & Putney, K. S. (2008). Former foster youth remember multiple placement moves: A journey of loss and hope. *Children and Youth Services Review*, 30(11), 1256-1266.
- Utah Department of Human Services. (2004). *Assessing outcomes of youth transitioning from foster care*. Salt Lake City, UT.
- U.S. Department of Health and Human Services, (2013). Administration for Children and Families. Child Maltreatment 2010. Retrieved 3/13/13 from <http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2010>
- U.S. Department of Health and Human Services. Administration for Children and Families. Retrieved 7/30/11 from http://www.acf.hhs.gov/programs/cb/laws_policies/implementation_foster.htm.

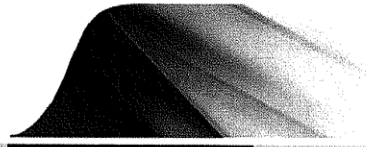
- Vacca, J.S. (2008). Foster children need more help after they reach the age of eighteen. *Children and Youth Services Review, 30*, 485-492.
- Valentino, K., Nuttall, A. K., Comas, M., Borkowski, J. G., & Akai, C. E. (2012). Intergenerational continuity of child abuse among adolescent mothers authoritarian parenting, community violence, and race. *Child Maltreatment, 17*(2), 172-181.
- Way, C-T., & Holton, J. (2007). *Total estimated cost of child abuse in the United States* (Economic Impact Study, September, 2007). Retrieved from Prevent Child Abuse America website:
http://member.preventchildabuse.org/site/DocServer/cost_analysis.pdf?docID=144
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Wiehe, V.R. (1997). Approaching child abuse treatment from the perspective of empathy. *Child Abuse & Neglect, 21*, 12, 1191-1204.
- Williams, J. R., Pope, S. M., Sirles, E. A., & Lally, E. M. (2005). Alaska foster care alumni study. *Anchorage: University of Alaska Anchorage*.
- Winokur, M. A., Crawford, G. A., Longobardi, R. C., & Valentine, D. P. (2008). Matched comparison of children in kinship care and foster care on child welfare outcomes. *Families in Society: The Journal of Contemporary Social Services, 89*(3), 338-346.
- Wulczyn, F., Kogan, J., & Harden, B. J. (2003). Placement stability and movement trajectories. *Social Service Review, 77*(2), 212-236.
- Young, N.K., Boles, S.M., & Otero, C. (2007). Parental substance use disorders and child maltreatment: Overlap, gaps and opportunities. *Child Maltreatment, 12*(2), 137-149.
- Zetlin, A.G., Weinberg, L.A. (2004). Understanding the plight of foster youth and improving their educational opportunities. *Child Abuse & Neglect, 28*, 917-923.
- Zielinski, D.S. (2009). Child maltreatment and adult socioeconomic well-being. *Child Abuse & Neglect, 33*, 666-678.
- Zielinski, D.S., & Bradshaw, C.P. (2006). Ecological influences on the sequelae of child maltreatment: A review of the literature. *Child Maltreatment, 11*(1), 49-62.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 31-41.

Zimet, G.D., Powell, S.S., Farley, G.K., Werkman, S., & Berkoff, K.A. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 55, 610-17.


APPENDIX A

ASU INSTITUTIONAL REVIEW BOARD STUDY APPROVAL LETTER



Office of Research Integrity and Assurance

To: Elizabeth Segal
UCENT

From: Mark Roosa, Chair 
Soc Beh Full Board

Date: 05/25/2012

Committee Action: Approval

IRB Action Date: 05/25/2012

Approval Date: 05/25/2012

IRB Protocol #: 1112007213

Study Title: Exploring Parenting Attitudes Among Youth from the Foster Care System in Arizona

Expiration Date: 05/24/2013

The above-referenced protocol has been APPROVED following Full Board Review by the Institutional Review Board.

This approval does not replace any departmental or other approvals that may be required. It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date noted above. Please allow sufficient time for continued approval. Research activity of any sort may not continue beyond the expiration date without committee approval. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol on the expiration date. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study termination.

Adverse Reactions: If any untoward incidents or severe reactions should develop as a result of this study, you are required to notify the Soc Beh Full Board immediately. If necessary a member of the Committee will be assigned to look into the matter. If the problem is serious, approval may be withdrawn pending IRB review.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, or the investigators, please communicate your requested changes to the Soc Beh Full Board. The new procedure is not to be initiated until the IRB approval has been given.

APPENDIX B

ARIZONA DEPARTMENT OF ECONOMIC SECURITY DIVISION OF CHILDREN,
YOUTH, AND FAMILIES RESEARCH COMMITTEE APPROVAL LETTER



DEPARTMENT OF ECONOMIC SECURITY

Your Partner For A Stronger Arizona

Janice K. Brewer
Governor

Clarence H. Carter
Director

May 18, 2012

Ms. Jennifer Mullins-Geiger
Arizona State University
School of Social Work
411 N. Central Ave., Suite 800
Phoenix, AZ 85004

Dear Ms. Mullins-Geiger:

The Division of Children, Youth and Families (DCYF), Research Committee (RC) has reviewed your research proposal to perform a study on *Exploring Parenting Attitudes among Youth from the Foster Care System*. The Committee has approved of the proposal with the following understandings:

1. The research is limited to the design presented in the proposal. The DCYF RC must approve of any substantive changes in the research design before the changes are implemented.
2. If needed, court orders authorizing you to review cases should be obtained through collaboration with your agency and the Attorney General's Office.
3. The Department must review all information derived from this project, including summaries, scholarly papers or other printed material before the information is released to the public.
4. The research findings must be presented to the DCYF management upon request.
5. A copy of the finished research paper must be submitted to the RC upon completion.

Your point of contact will be April Maggio and Beverlee Kroll. If you have any questions please feel free to contact April at (602) 542-2280 or Beverlee at (602) 542-2295. The Division of Children, Youth and Families looks forward to working with you on this project and to reviewing the findings once the project is completed.

Sincerely,

Karla Kreikamp
DES Deputy Assistant Director
Division of Children, Youth and Families

KK:am

cc: Beverlee Kroll

APPENDIX C
STUDY INFORMATION LETTER

INFORMATION LETTER
Foster Youth Study
ARIZONA STATE UNIVERSITY

My name is Jennifer Mullins Geiger and I am a doctoral student from the School of Social Work at Arizona State University. I am conducting a research study to learn more about parenting beliefs and I am asking you to take part in this research study. This study consists of a survey and it will take you about 20-30 minutes to complete.

If you agree to be in this study, you will be asked to complete a survey. The survey will ask you questions about your thoughts and feelings about parenting, human interactions, and your experiences in foster care. You do not have to answer any question you don't want to or you can stop participating at any time. Also, no one will be able to know how you responded to the questions and your name will never be known.

I have also asked Child Protective Services (CPS) for permission to ask you to participate in this study. Even though they have given me permission to ask you to participate, it is solely your decision whether you want to participate. You may also change your mind before or during the survey. No one will be upset with you if you don't want to participate or if you change your mind later and want to stop. You do not have to finish the survey. You may stop any time and you do not have to answer any questions you don't want to. Nothing you say will jeopardize your standing with DES, CPS, or the State of Arizona.

You may ask me any questions about this study. You can call me at 602-312-9014 if you have any questions. You can also contact my supervisor, Dr. Elizabeth Segal at 602-496-0053. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

By completing the survey, you are agreeing to participate with the understanding that Child Protective Services (CPS) has given permission for you to take part in this project. You are participating in this study because you want to. You will be given a copy of this form for you to keep. Completing the survey indicates your agreement to participate. You will be provided a \$15 gift card for your time.

Thank you for your time and consideration,

Jennifer Mullins Geiger, MSW
Doctoral Candidate
School of Social Work, Arizona State University

APPENDIX D
STUDY QUESTIONNAIRE

Foster Youth Study

Thank you for agreeing to take this survey. Below there are a series of questions divided into sections. For each section, please follow the instructions given before the questions. The survey should take you about 30 minutes. You do not have to finish the survey. You may stop at any time and you do not have to answer any questions you don't want to.

Instructions: Below, there are 40 statements. They are statements about parenting and raising children. You decide the degree to which you agree or disagree with each statement by circling one of the responses.

STRONGLY AGREE – Circle **SA** if you strongly support the statement, or feel the statement is true most of the time.

AGREE- Circle **A** if you support the statement, or feel the statement is true some of the time.

STRONGLY DISAGREE – Circle **SD** if you feel strongly against the statement, or feel the statement is not true.

DISAGREE – Circle **D** if you feel you cannot support the statement or that the statement is not true some of the time.

UNCERTAIN – Circle **U** only when it is impossible to decide on one of the other choices.

In answering the following statements, please keep these four points in mind:

1. Respond to the statements truthfully. There is no advantage in giving an untrue response because you think it is the right thing to say. There really is no right or wrong answer – only your opinion.
2. Respond to the statements as quickly as you can. Give the first natural response that comes to mind.
3. Circle only one response for each statement.
4. Although some statements may seem much like others, no two statements are exactly alike.

Strongly Agree	Agree	Disagree	Strongly Disagree	Uncertain	
Children need to be allowed freedom to explore their world in safety.	SA	A	D	SD	U
Time-out is an effective way to discipline children.	SA	A	D	SD	U
Children who are one-year-old should be able to stay away from things that could harm them.	SA	A	D	SD	U
Strong-willed children must be taught to mind their parents.	SA	A	D	SD	U
The sooner children learn to feed and dress themselves and use the toilet, the better off they will be as adults.	SA	A	D	SD	U
Spanking teaches children right from wrong.	SA	A	D	SD	U
Babies need to learn how to be considerate of the needs of their mother.	SA	A	D	SD	U
Strict discipline is the best way to raise children.	SA	A	D	SD	U
Parents who nurture themselves make better parents.	SA	A	D	SD	U
Children can learn good discipline without being spanked.	SA	A	D	SD	U
Children have a responsibility to please their parents.	SA	A	D	SD	U
Good children always obey their parents.	SA	A	D	SD	U
In father's absence, the son needs to become the man of the house.	SA	A	D	SD	U
A good spanking never hurt anyone.	SA	A	D	SD	U
Parents need to push their children to do better.	SA	A	D	SD	U

Strongly Agree	Agree	Disagree	Strongly Disagree	Uncertain	
Children should keep their feelings to themselves	SA	A	D	SD	U
Children should be aware of ways to comfort their parents after a hard day's work.	SA	A	D	SD	U
Children learn respect through strict discipline.	SA	A	D	SD	U
Hitting a child out of love is different than hitting a child out of anger.	SA	A	D	SD	U
A good child sleeps through the night.	SA	A	D	SD	U
Children should be potty trained when they are ready and not before.	SA	A	D	SD	U
A certain amount of fear is necessary for children To respect their parents.	SA	A	D	SD	U
Spanking teaches children it's alright to hit others.	SA	A	D	SD	U
Children who feel secure often grow up expecting too much.	SA	A	D	SD	U
There is nothing worse than a strong-willed two-year-old.	SA	A	D	SD	U
Sometimes spanking is the only thing that will work.	SA	A	D	SD	U
Children who receive praise will think too much of Themselves.	SA	A	D	SD	U
Children should do what they're told to do, when they're told to do it. It's that simple.	SA	A	D	SD	U
Children should be taught to obey their parents at all times.	SA	A	D	SD	U

Strongly Agree Agree Disagree Strongly Disagree Uncertain

Children should know what their parents need without being told.	SA	A	D	SD	U
Children should be responsible for the well-being of their parents.	SA	A	D	SD	U
It's OK to spank as a last resort.	SA	A	D	SD	U
Parents should be able to confide in their children.	SA	A	D	SD	U
Parents who encourage their children to talk to them only end up listening to complaints.	SA	A	D	SD	U
Children need discipline, not spanking.	SA	A	D	SD	U
Letting a child sleep in their parents' bed every now and then is a bad idea.	SA	A	D	SD	U
A good spanking lets children know parents mean business.	SA	A	D	SD	U
A good child will comfort both parents after they have argued.	SA	A	D	SD	U
"Because I said so" is the only reason parents need to give.	SA	A	D	SD	U
Children should be their parents' best friend.	SA	A	D	SD	U

Please respond to the following questions by selecting the choice that most closely reflects your feelings or beliefs:

Never	Rarely	Sometimes	Frequently	Almost always	Always			
1	2	3	4	5	6			
When I see someone receive a gift that makes them happy, I feel happy myself.			1	2	3	4	5	6
Emotional stability describes me well.			1	2	3	4	5	6
I am good at understanding other people's emotions.			1	2	3	4	5	6
I can consider my point of view and another person's point of view at the same time.			1	2	3	4	5	6
When I get angry, I need a lot of time to get over it.			1	2	3	4	5	6
I can imagine what the character is feeling in a good movie.			1	2	3	4	5	6
When I see someone being publicly embarrassed, I cringe a little.			1	2	3	4	5	6
I can tell the difference between someone else's feelings and my own.			1	2	3	4	5	6
When I see a person experiencing a strong emotion I can accurately assess what that person is feeling.			1	2	3	4	5	6
Friends view me as a moody person.			1	2	3	4	5	6
When I see someone accidentally hit his or her thumb with a hammer, I feel a flash of pain myself.			1	2	3	4	5	6
When I see a person experiencing a strong emotion, I can describe what the person is feeling to someone else.			1	2	3	4	5	6
I can imagine what it's like to be in someone else's shoes.			1	2	3	4	5	6
I can tell the difference between my friend's feelings and my own.			1	2	3	4	5	6

Never	Rarely	Sometimes	Frequently	Almost always	Always
1	2	3	4	5	6

I consider other people's points of view in discussions. 1 2 3 4 5 6

When I am with someone who gets sad news, I feel sad for a moment, too. 1 2 3 4 5 6

When I am upset or unhappy, I get over it quickly. 1 2 3 4 5 6

I can explain to others how I am feeling. 1 2 3 4 5 6

I can agree to disagree with other people. 1 2 3 4 5 6

I can watch other people's emotions without being overwhelmed by them. 1 2 3 4 5 6

I am aware of what other people think of me. 1 2 3 4 5 6

Hearing laughter makes me smile. 1 2 3 4 5 6

I am aware of other people's emotions. 1 2 3 4 5 6

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6	7

There is a special person who is around when I am in need 1 2 3 4 5 6 7

There is a special person with whom I can share my joys and sorrows. 1 2 3 4 5 6 7

My family really tries to help me. 1 2 3 4 5 6 7

I get the emotional help and support I need from my family. 1 2 3 4 5 6 7

I have a special person who is a real source of comfort to me. 1 2 3 4 5 6 7

Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6	7

- My friends really try to help me. 1 2 3 4 5 6 7
- I can count on my friends when things go wrong. 1 2 3 4 5 6 7
- I can talk about my problems with my family. 1 2 3 4 5 6 7
- I have friends with whom I can share my joys and sorrows. 1 2 3 4 5 6 7
- There is a special person in my life who cares about my feelings. 1 2 3 4 5 6 7
- My family is willing to help me make decisions. 1 2 3 4 5 6 7
- I can talk about my problems with my friends. 1 2 3 4 5 6 7

Please answer the following questions about your experiences. Some of the questions have choices to pick from; others will have space for you to fill in. There is also room for you to explain further if you want to.

How long have you been/were you in foster care? (Circle one)

6 months- 1 year 1-2 years 3-5 years more than 5
years

How many placements have you lived in since you've been in foster care?

Are you currently participating in an Independent Living Skills Program?

Yes No

Where are you living right now? (Circle one)

In your own apartment/home/dorm

With foster parents

With relatives

In a group home/shelter

Other (please explain) _____

Do you have any contact with your biological family? NO YES

Please explain (with who, how much, where, when? Do not use real names):

What was the reason you came into foster care?

Physical abuse

Emotional abuse

Sexual abuse

Neglect

Other (please explain) _____

Have you ever been adopted?

YES

NO

Have you ever had a mentor?

YES

NO

Do you currently have a mentor? YES NO

If yes, what has been your experience with your mentor?

Very positive Mostly positive Neutral Mostly negative
Very negative

Are you currently in school? (Circle one) YES NO

If you are currently a student, at what level? (Circle one)

High School GED Program
Community College Trade/Vocational
University

OTHER (please specify) _____

What is the highest level of education you completed? (Circle one)

Currently in high school - Grade _____ High School Completed
GED Some College Vocational Program
Other _____

What kind of grades did you average last semester, or the last semester you were in school? (Circle one)

Mostly A's/A Average
Mostly B's/B Average
Mostly C's/C Average
Mostly D's/D Average
Mostly F's/F Average

What were your experiences like in school?

Very positive

Mostly positive

Neutral

Mostly negative

Very negative

COMMENTS:

What level of education do you *hope* to complete? (Circle One)

High School

GED

Vocational

Training/Trade School

Military

Community College

4-year College

Graduate school (Masters, PhD, Law, Medical)

What level of education do you *expect* to complete? (Circle One)

High School

GED

Vocational

Training/Trade School

Military

Community College

4-year College

Graduate school (Masters, PhD, Law, Medical)

Do you feel you are/were prepared for college?

Strongly Agree

Agree

Disagree

Strongly Disagree

Uncertain

Please explain:

If you wanted to attend college, do you think you have the resources to attend?

No Yes

Who would you say was the biggest influence on your education? Why?

Are you working right now?

YES NO

If yes, are you working Full-time Part-time Other

What is your job(s)?

Are you able to pay your expenses such as rent, electric bill, food (if you have any)?

YES NO

What is your gender? Male Female Other

What is your age in years? _____

How would you describe your ethnicity/race? (Circle one)

African American

American Indian

Asian

White/Caucasian

Hispanic/Latino

Multiracial

OTHER (please specify) _____

Have you ever been told you have a mental health diagnosis? NO YES

If yes, what was your diagnosis?

Are you currently in a romantic relationship? NO YES

Do you have any children? NO YES **How many?** _____

Does your child(ren) live with you? NO YES

If no, who does your child(ren) live with?

Who helps you with your child(ren)?

Family Friends Other

Have you ever had a report with CPS with your child/children? NO

YES

Has your child/children ever been removed from your care? NO

YES

If YES, When? _____ **For how long?**

COMMENTS:

Have you ever been pregnant OR gotten someone pregnant? NO YES
Currently Pregnant

If yes, how many times? _____

Are you currently using birth control (males and females)? NO YES

If yes, what type?

Birth control pills Depo shot Abstinence
Condom IUD OTHER _____

When do you plan on starting a family? (Circle one)

Never Already have a family Within a year In 2-3 years
In 5 years In 10 years In 10 years +

Is there anything else you would like to add that might be relevant to this study?
