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## Parenting Efficacy and Support in Mothers with Dual Disorders in a Substance Abuse Treatment Program

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### Abstract

**Objective**—Approximately 73% of women entering treatment for substance use disorders are mothers of children under the age of 18 (SAMHSA, 2009), and the high rate of mental health disorders among mothers with substance use disorders increases their vulnerability to poor parenting practices. Parenting efficacy and social support for parenting have emerged as significant predictors of positive parenting practices among families at risk for child maltreatment. The purpose of the current study was to examine the impact of parenting support and parenting efficacy on the likelihood of out-of-home placement and custody status among the children of mothers with dual substance use and mental health disorders.

**Methods**—This study examined the impact of parenting efficacy, and assistance with child-care on the likelihood of child out-of-home placement and custody status among 175 mothers diagnosed with a dual substance and mental health disorder and in treatment for substance dependence. Logistic regression was utilized to assess the contributions of parenting efficacy, and the number of individuals in mothers' social networks who assist with child-care, to the likelihood of out-of-home placement and custody loss of children. Parenting efficacy was also examined as a mediator using bootstrapping in PROCESS for SPSS.

**Results**—Greater parenting efficacy was associated with lower likelihood of having at least one child in out-of-home placement ( $B = -.064$ ,  $SE = .029$ ,  $p = .027$ ), and lower likelihood of loss of child custody ( $B = -.094$ ,  $SE = .034$ ,  $p = .006$ ). Greater number of children in the 6–18 age range predicted greater likelihood of having at least one child in the custody of someone else ( $B = .409$ ,  $SE = .171$ ,  $p = .017$ ) and in out-of-home placement ( $B = .651$ ,  $SE = .167$ ,  $p < .001$ ). Additionally, mothers who identified as African-American were less likely to have a child in out-of-home placement ( $B = .927$ ,  $SE = .382$ ,  $p = .015$ ) or to have lost custody of a child ( $B = -1.31$ ,  $SE = .456$ ,  $p = .004$ ). Finally, parenting efficacy mediated the relationship between parenting support and likelihood of out-of-home placement (Effect =  $-.0604$ ,  $SE = .0297$ ,  $z = 2.035$ ,  $p = .042$ ), and

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between parenting support and likelihood of custody loss (Effect =  $-.0332$ ,  $SE = .0144$ ,  $z = -2.298$ ,  $p = .022$ ).

**Conclusion**—Implications for practice include the utilization of personal network interventions, such as increased assistance with child-care, and increased attention to efficacy among mothers with dual disorders.

### Keywords

Mothers; Addiction; Social Networks; Child Custody; Parenting Efficacy

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## Introduction

Approximately 73% of women entering treatment for substance use disorders are mothers of children under the age of 18, and females with substance use disorders are much more likely than men with substance use disorders to live with their children and be without another adult in the home (SAMHSA, 2009). Parenting deficits of mothers with addictions include: difficulty in appropriately interpreting and responding to their children's cues (Hans, Bernstein, & Henson, 1999), feelings of helplessness in the parenting role (Grossman & Schottenfeld, 1992), deficits in knowledge about child development and parenting strategies (Luthar & Walsh, 1995), lower emotional availability (Fraser, Harris-Britt, Thakkallapalli, Kurtz-Costes, & Martin, 2010), and inconsistent or punitive parenting practices (Mayes, 1995). The high rate of mental health disorders among individuals with substance use disorders, 54% by some estimates (Harris & Edlund, 2005), is an additional factor that influences parenting. Mothers with substance use disorders, paranoid symptoms, and depression were more anxious about their parenting competence, and less warm and sensitive toward their infant than mothers without mental health symptoms (Beckwith, Howard, Espinosa, and Tyler, 1999).

Two constructs, parenting efficacy and social support specific to parenting have emerged as significant predictors of positive parenting practices among families at risk for child maltreatment. Higher efficacy has been associated with lower parental stress among low-income mothers (Raikes & Thompson, 2005) and among mothers living in poverty (Jackson, 2000). Higher parenting support has been linked with maternal nurturing behaviors among mothers living in dangerous neighborhoods (Ceballo & McLoyd, 2002), lower maternal depression, fewer developmental delays in children (Huang, Costeines, Kaufman, & Ayala, 2014), and child pro-social behaviors in the children of adolescent and young adult mothers (Ensor & Hughes, 2010). The purpose of the current study was to examine the impact of parenting support and parenting efficacy on the likelihood of out-of-home placement and loss of legal custody among the children of mothers with dual substance use and mental health disorders.

### Parenting Efficacy

The concept of self-efficacy, derived from Bandura's (1989) Social Learning Theory, refers to an individual's belief in her own capacity to achieve success with a given action. Bandura (1982) highlighted the bidirectional nature of self-efficacy in that individuals with high

efficacy tend to persist more in difficult tasks until success is achieved. This success then increases the sense of perceived efficacy and the likelihood of persistence in future activities. Applied to parenting, self-efficacy refers specifically to the sense of feeling capable in the parenting role; a parent who believes that his/her efforts to soothe or discipline her child will result in successful outcomes. Within the domain of parenting, mothers' self-efficacy depends upon their knowledge of child care strategies that are developmentally appropriate to the child, confidence in their own abilities to execute those strategies, and a belief that their children will respond to this strategy in the manner desired by the mother.

Mothers with low efficacy tend to utilize more punitive and physical methods of disciplining their children as compared to mothers with higher parenting efficacy (Mash & Johnston, 1983; Mash, Johnston & Kovitz, 1983; Teti & Gelfand, 1991). Parenting efficacy has been associated with greater parenting competence (Jones & Prinz, 2005), better child health outcomes (Coleman & Karraker, 2000), child emotional adjustment (Shumow & Lomax, 2002), parental warmth and control (Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000), and to limit-setting and harsh discipline (MacPhee, Fritz, & Miller-Heyl, 1996). It has also been found to mediate the effects of depression on parenting behavior (Teti & Gelfand, 1991).

### **Social Support**

Although maternal substance use, and co-occurring substance use and mental health disorder, increase risk for child protective services involvement, social support may buffer that risk. Previous studies have established a link between positive social support, both perceived and received, and better parenting skills (Anderson & Telleen, 1992; Kotchick, Dorsey, & Heller, 2005). The presence of social support was found to decrease parenting stress among new mothers (Muslow, Caldera, Pursley, Reifman, & Huston, 2002). Hashima and Amato (1994) found that increased social support was associated with decreased use of punitive parenting behaviors, and that this relationship was most pronounced for parents living in poverty. Social support for parenting has also been linked to the increased frequency of positive parent-child interactions (Green, Furrer, & McAllister, 2007).

### **Parenting Support and Efficacy**

Social support may also directly impact parenting efficacy (Muslow, Caldera, Pursley, Reifman, & Huston, 2002). Associations between higher social support for parenting and higher parenting efficacy have been observed among new mothers and fathers (Leerkes & Burney, 2007). Links between parenting support and efficacy have also been observed among adolescent mothers (Umana-Taylor, Guimond, Updegraff, & Jahromi, 2013, Angley, Divney, Magriples, & Kershaw, 2015), mothers of premature babies (Jones, Rowe, & Becker, 2009), mothers with post-partum depression (Cutrona & Troutman, 1986), and among low-income mothers (Ortega, 2002). Parenting efficacy has also been found to mediate the effects of social support on postpartum depression (Haslam, Pakenham, & Smith, 2006).

The construct of parenting support for mothers with dual disorders may be especially salient, as women with dual disorders tend to have lower levels of social support than women with substance use disorders only (Tracy & Biegel, 2006). Additionally, among women with dual

disorders, low social support has been associated with substance abuse severity and greater depression (Dobkin, Civita, Paraherakis, & Gill, 2002; Dodge & Potocky, 2000). The high occurrence of trauma-related symptomatology in women with dual disorders, 55–95% (Najavits, Weiss, & Shaw, 1997), may also relate to many of their social support and social network vulnerabilities (Brown, et. al., 2013), including their ability to identify and utilize social support, difficulty in forming interpersonal attachments (Bollerud, 1990), and lack of relationship reciprocity (Tracy & Johnson, 2007).

Although parenting efficacy and support have been examined among high-risk populations, these constructs have rarely been examined together for mothers with substance use disorders only, and never (to our knowledge) among mothers with dual disorders. Borelli, Goshen, Clark, & Byrne (2009) identified low parenting efficacy and social support among incarcerated women with substance use disorders, and Johnson (2015) found that higher social support and parenting efficacy were linked to better school performance and lower externalizing behaviors in adolescents of mothers with addictions. For mothers with dual disorders, Mowbray and colleagues (2005) examined social support, but not parenting efficacy, and found that family support, specifically living with their extended family members, was related to decreased parenting stress and increased functioning.

## Research Questions

In light of the absence of research on parenting efficacy and support among mothers with dual disorders, the aim of the current study was to examine the impact of parenting efficacy and personal network assistance with child-care, on child out-of-home placement and child custody status for mothers with dual disorders. We asked the following research questions: (1) Is parenting efficacy associated with the likelihood of out-of-home placement or custody loss for mothers with dual disorders?; (2) Are the number of individuals in mothers' personal networks who help with child care associated with the likelihood of child out-of-home placement or child being in the legal custody of someone other than mother for mothers with dual disorders?; and (3) Does parenting efficacy mediate the relationship between parenting support and likelihood of out-of-home placement or loss of custody for mothers with dual disorders? We hypothesized that parenting efficacy and assistance with child-care would be associated with likelihood of out-of-home placement and loss of custody status. Given previous research linking social support to parenting efficacy (Umana-Taylor, Guimond, Updegraff, & Jahromi, 2013, Angleley, et. al., 2015) we further hypothesized that parenting efficacy would mediate the relationship between parenting support and likelihood of out-of-home and loss of custody among these mothers.

## Methods

### Recruitment

Data were collected as part of a National Institute on Drug Abuse funded study on the social networks of women in treatment for substance dependence. Women were recruited from two intensive outpatient and one residential treatment program for women. Participants were eligible if they were at least 18 years old, in substance abuse treatment with one of the participating treatment sites and carried a diagnosis of substance dependence - as determined

by the county intake procedures. Those with a major thought or psychotic disorder were excluded.

The four-quadrant model, developed by the National Association of State Mental Health Program Directors and National Association of State Alcohol/Drug Directors (Burnam & Watkins, 2006) categorizes individuals with dual disorders into four quadrants according to the severity of both their mental health and their substance use disorder (Singer, Kennedy, & Kola, 1998). Quadrants include individuals with more severe mental illness and more severe substance abuse (quadrant IV), individuals with less severe mental health disorder (such as posttraumatic stress disorder, anxiety, depression, dysthymia, and less severe bipolar disorder) and more severe substance use disorder (quadrant III), and individuals with more severe mental illness and less severe substance abuse (quadrant II). Previous research has focused primarily on quadrants II and IV. Therefore, those in quadrant III were selected to be the focus of this study.

All participants were informed of the study's objectives, possible risks, and reminded that participation was strictly voluntary. Each participant signed a consent form and was awarded a \$30 gift card for completion. Case Western Reserve University's Institutional Review Board approved this study prior to sample recruitment.

## Measures

**Mental Health Disorder**—Psychopathology was measured using the Computerized Diagnostic Interview Schedule for the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV); a computerized structured diagnostic program that assesses for the current presence, lifetime occurrence, and age of onset of many of the DSM-IV defined psychiatric disorders (Helzer & Robins, 1988). This was utilized as a screening tool to assess for the current and/or past presence of Major Depression, Dysthymia, Anxiety, Manic episode, and Post Traumatic Stress Disorder.

**Parenting Efficacy**—Parenting efficacy was measured using the Parenting Efficacy subscale of the Parenting Sense of Competence Scale (PSOC) (Johnston and Mash, 1989). The PSOC is a 17-item publicly available scale with a two factor structure: Satisfaction, which assesses the degree of liking a person has for their role as parent, and Efficacy, which assesses an individual's perceived competence in their role as parent (Ohan, Leung, & Johnston, 2000). The Efficacy subscale contains 8 items such as, "My mother was better prepared to be a good mother than I am", and are measured on a 6-point Likert scale with response options ranging from "strongly disagree" to "strongly agree". Cronbach's alpha was reported to be .80 for mothers on the Efficacy scale (Ohan, Leung, & Johnston, 2000).

**Personal Networks**—Personal network characteristics were measured using EgoNet, an open source computerized program used for assessing personal social network data (McCarty, 2002). Respondents were asked to identify 25 individuals with whom they had contact with over the past 6 months. Once listed, questions regarding types and degree of support were asked of the respondent regarding each individual, including which individuals within their network aided with child-care. The number of network members who assisted with child-care was the only network variable used in the final regression model.

**Child Out-of-Home Placement and Custody Status**—The dependent variables related to child out-of-home placement and child custody status were operationalized as the likelihood that at least one of the mother’s biological children was in out-of-home placement or in the legal custody of someone other than mother. Out-of-home placement was defined as having at least one child in the custodial care of someone else, such as a relative, friend, or child’s father, regardless of who has legal custody of the child. Having at least one child in the legal custody of someone other than mother involves legal termination of mother’s custody rights to that child. Two dichotomous Yes/No variables were created. Out-of-home placement and custody status were assessed as separate variables because multiple contextual and system level factors influence legal custody that may not influence out-of-home placement. Additionally, out-of-home placement may or may not include the involvement of child protective services.

### Covariates

Due to a lack of variability, race and education level were re-coded into dichotomous variables. These additional variables were included as covariates to represent the degree of parenting and child difficulty: (1) Number of children that a mother was responsible for raising within each of two age categories: 0–5 and 6–17. These two age categories account for whether or not children are of school age, as children who are attending school are more likely to come to the attention of Child Protective Services due to involvement of teachers and other school personnel; and (2) Number of children’s behavioral, mental health, physical/medical, or learning problems as reported by the mothers. This was assessed by asking the following questions: “Have you ever been told by a professional that your child has a medical problem?; a learning disability?; a behavioral problem?; a mental health problem?; an emotional problem?” All “yes” responses were added together to create the “number of problems” variable.

### Data Analysis

Independent samples t-tests and Chi Squared tests were utilized to identify covariates for inclusion in each regression model, based on a  $p = .05$  significance level. Demographic variables included age, race, and education level. Binary logistic regression with hierarchical entry was used to examine the specific variance accounted for by the covariates, assistance with child-care, and parenting efficacy. Demographic covariates and number of children were entered into the regression model in the first block, number of social network members who assist with child care in the second block, and parenting efficacy was added in the third block. Two regression models were run to examine the influence of the independent variables on the likelihood of child out-of-home placement and child custody status for mothers with dual disorders. Two post-hoc analyses, using bootstrapping in PROCESS (an SPSS application developed by Preacher and Hayes, 2004), examined the potential for parenting efficacy to mediate the relationship between assistance with child-care and likelihood of child out-of-home placement, and between assistance with child care and likelihood of loss of custody.

## Results

### Sample

This sample consisted of 175 mothers (mean age = 36, range = 19 to 58) diagnosed with substance dependence and a mental health disorder (Table 1). More than half of the women (61.7%) identified as Black/African American and 39% had less than a high school diploma. Of the 175 mothers, three identified as Native American, one as West Indian, two as Puerto Rican, two as non-black/Latino/other, 56 as White/Caucasian, and four as bi/multi-racial. Race was then divided into two categories, African American and non-African American mothers. The number of substances which women were dependent ranged from one to six, and the number of psychological disorders with which women were diagnosed ranged from one to five. Income was not included as a covariate in the final regression models due to lack of variability; the majority of women in this sample (90%) were poor and survived on some form of public assistance.

In this sample, all variables (see Table 2) were normally distributed. Mothers had fewer children in the 0–5 age category ( $M = .72$ ;  $R = 0–5$ ), than in the 6–18 age category ( $M = 1.19$ ;  $R = 0–6$ ); 46.3% ( $N = 81$ ) of mothers had at least one child in out-of-home placement, while 23.4% ( $N = 41$ ) of mothers had their legal custody terminated with at least one child. The number of problems with children reported ranged from 0 to 4 ( $M = .98$ ). Parenting efficacy scores ranged from 14–48 ( $M = 34.9$ ), and Cronbach's alpha for reliability in this sample was .79. The number of individuals in mothers' personal networks who assisted with child-care ranged from 0–25, with a mean of 8.7 individuals assisting with child-care.

### Regression Results

Table 3 shows the results of the logistic regression model examining the effects of efficacy and assistance with child-care on likelihood of having at least one child in out-of-home placement for mothers with dual disorders. The final model was significant at  $\chi^2 = 40.86$ ,  $p < .001$ . Race ( $B = -.927$ ,  $SE = .382$ ,  $p = .015$ ), parenting efficacy ( $B = -.064$ ,  $SE = .029$ ,  $p = .027$ ), and number of children aged 6–18 ( $B = .651$ ,  $SE = .167$ ,  $p < .001$ ), were all significant. African-American mothers were 60% less likely ( $OR = .396$ ) than non-African-American mothers to have a child in out-of-home placement, and an increase of one child between 6–18 years of age nearly doubled the likelihood of having a child in out-of-home placement ( $OR = 1.917$ ). Assistance with child-care was significant in the second model ( $B = -.060$ ,  $SE = .030$ ,  $p = .042$ ), but lost significance once parenting efficacy was added to the model. A one-unit increase in parenting efficacy score was associated with a 6% less chance of a child being in out-of-home placement.

Table 4 displays results of the logistic regression model examining the effects of efficacy, and assistance with child-care on likelihood of having at least one child in the legal custody of someone else for mothers with dual disorders. The final model was significant at  $\chi^2 = 39.73$ ,  $p < .001$ . Race ( $B = -1.310$ ,  $SE = .456$ ,  $p = .004$ ) and number of children aged 6–18 ( $B = .409$ ,  $SE = .171$ ,  $p = .017$ ), were both significantly associated with likelihood of having at least one child in the legal custody of someone other than mother. Although assistance with child care was not significant, efficacy ( $B = -.094$ ,  $SE = .034$ , at  $p = .006$ ) was a

significant predictor of likelihood that mother has at least one child in the legal custody of someone else, with an odds ratio of .910. African-American mothers were 73% less likely than non-African-American mothers to have a child in the legal custody of someone else, and an increase of one child in the 6–18 age range increased the likelihood of having a child in the legal custody of someone else by 1.5 times.

Given that parenting assistance was significantly associated with out-of-home placement, but lost significance once parenting efficacy was added to the model, and given previous research (Angleley, et al., 2015) suggesting a mediating role for efficacy in the relationship between parenting support and parenting behaviors, we tested the potential for efficacy to mediate the relationship between parenting support and out-of-home placement. Efficacy fully mediated the relationship between assistance with child-care and likelihood of out-of-home placement (Table 5). The significant indirect effect of parental support on out-of-home placement through parenting efficacy was  $-.0226$  ( $SE = .0116$ ,  $z = -1.952$ ,  $p = .048$ ) and a total effect of  $-.0604$  ( $SE = .0297$ ,  $z = -2.035$ ,  $p = .042$ ). For custody status, the significant indirect effect of parental support on custody through parenting efficacy was  $-.0332$  ( $SE = .0144$ ,  $z = -2.298$ ,  $p = .022$ ) and a statistically insignificant total effect size of  $-.0325$  ( $SE = .0342$ ,  $z = -.9513$ ,  $p = .342$ ).

## Discussion

Findings from this study partially support our hypothesis that greater parenting efficacy and greater numbers of individuals who assist with child care would be associated with a lower likelihood of out-of-home placement and lower likelihood of loss of custody for children of mothers with dual disorders. In the final model, only parenting efficacy was associated with likelihood of having at least one child in out-of-home placement and likelihood of having at least one child in the legal custody of someone other than mother. Given that assistance with child-care was significantly associated with out-of-home placement before adding parenting efficacy to the regression model, we tested for possible mediation using bootstrapping analysis. Results supported our hypothesis that parenting efficacy fully mediated the relationship between assistance with child-care and likelihood of out-of-home placement and loss of custody.

## Implications for Practice

These findings are important as they expand knowledge of the relationship between parenting support and efficacy and the impact on children among a vulnerable population (mothers with dual disorders), and offer potential avenues for intervention. More than 70% of participating mothers also were diagnosed with depression, commonly known to diminish an individual's general sense of efficacy. Additionally, those with a dual disorder are especially vulnerable to sparser and less supportive networks than individuals with substance dependence only (Tracy & Biegel, 2006). Our findings expand on the work of Grant and colleagues (2011) who found that social support (specifically support for sobriety and having a supportive partner) increased the likelihood of mothers with addictions retaining legal custody of their children. Enhancing specific social network factors, especially assistance with child-care, may offer some opportunities for intervention that may positively



impact the family system. Additionally, the role of mental health disorders in eroding efficacy should be considered as a possible target for intervention in mothers with dual disorders. Finally, both this study and previous research (Angle, et. al., 2015) suggest that improving parenting support may improve both parenting efficacy and parenting behaviors.

Number of children aged 6–18 was significantly associated with both out-of-home placement and custody loss. This may in part be due to the very low SES of this sample and the resultant burden that increased number of children might have, especially in the absence of financial resources. It is also important to note that mothers who self-defined as African-American were significantly less likely than non-African American mothers to have a child in out-of-home placement and to have lost custody of a child. This contradicts previous research on the over-representation of Black families in the child welfare system (Morton, 1999). However, the availability of African-American family members to provide informal kinship care of children (Scannapieco & Jackson, 1996) may protect some mothers from losing legal custody of a child.

### Strengths and Limitations

This study examined parenting support and efficacy among an understudied group of poor, primarily African-American mothers, which, to our knowledge, has not been investigated before. Additionally, the examination of a specific social network variable rather than global social support is a novel approach to understanding parenting support among this population. There are limitations inherent in self-report data. Not all of the mothers in this study were abstinent from substances, and no accurate data to assess abstinence were collected along with the study measures to accurately assess and control for current substance use. Accurately measuring the custody and living status of the children of mothers with dual disorders is challenging, as these children frequently reside in multiple places in the informal custodial care of friends or relatives. Additionally, results of the mediation analysis should be taken with caution. Vanderweele, Valeri, and Ogburn (2012) suggest that measurement error may be high when examining mediation with cross-sectional data. Future research should examine relationships between parenting support and efficacy and their effect on parenting outcomes using a longitudinal design to more accurately establish mediation. Future research should also measure children's ages more specifically among mothers with a wider range of mental health disorders.

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**Table 1**

Demographic characteristics.

Characteristics		$M^*$ ( $SD^+$ )	Range	N (%)
Age		36.12	19–58	
Number of MHD <sup>a</sup>		2.31 (1.17)	1–5	
Number of SUD <sup>b</sup>		1.78 (.841)	1–6	
Race	Black			108(61.7%)
	Other			67(38.3%)
Education	< HS			70(40%)
	HS			105(60%)
<b>Substance</b>				
Alcohol				77(43%)
Marijuana				66(37.7%)
Amphetamine				2(1.2%)
Sedatives				8(4.8%)
Cocaine				105(60%)
Opiates				40(22.8%)
Hallucinogens				4(2.28%)
Inhalants				0
Phencyclidine (PCP)				7(4%)
<b>Mental Health Disorder</b>				
Generalized Anxiety				60(34%)
PTSD				102(58%)
Major Depression				137(78%)
Manic Episode				53(30%)

\* =Mean

\* =  $p < .05$ ;\*\* =  $p < .01$ ;\*\*\* =  $p < .001$ <sup>+</sup> =Standard Deviation<sup>a</sup> =mental health disorders<sup>b</sup> =substance use disorders

HS=High School

Table 2

Variable information.

Variables	Mean	Standard Deviation	Sample Range	Scale Range	$\alpha$
Parenting Efficacy	34.90	6.78	14–48	8–48	.79
Number who help with child care	8.70	6.90	0–25	0–25	
Number of children ages 0–5	.714	1.00	0–5	—	
Number of children ages 6–18	1.19	1.40	0–6	—	
Number of Problems with Children	.98	1.11	0–4	—	

 $\alpha$ =Cronbach's Alpha

**Table 3**

Logistic regression: Impact of parenting efficacy and assistance with child- care on likelihood of having at least one child living with someone else.

Independent Variables	Model 1				Model 2				Model 3			
	B	SE	Odds Ratio	95% CI	B	SE	Odds Ratio	95% CI	B	SE	Odds Ratio	95% CI
Constant	.949	1.073	2.582		1.901	1.186	6.695		3.913	1.531	50.057	
Age	-.027	.023	.973	.931–1.017	-.044	.024	.957	.912–1.004	-.044	.025	.957	.912–1.005
Race	-.898*	.358	.407	.202–.821	-.762*	.367	.467	.227–.958	-.927*	.382	.396	.187–.836
Education	-.156	.252	.856	.522–1.402	-.142	.256	.867	.525–1.432	-.035	.265	.966	.574–1.624
Number of children 0–5	.025	.216	1.026	.671–1.567	-.004	.218	.996	.649–1.528	-.059	.223	.943	.608–1.460
Number of children 6–18	.559***	.152	1.749	1.299–2.455	.659***	.164	1.933	1.402–2.666	.651***	.167	1.917	1.383–2.659
Problems with children	.003	.167	1.003	.724–1.391	.021	.169	1.021	.733–1.423	-.007	.172	.993	.709–1.391
Help with child care					-.060*	.030	.941	.888–.998	-.040	.031	.960	.903–1.021
Parenting Efficacy									-.064*	.029	.938	.886–.993

  

$\chi^2=31.444$ ***; Pseudo R <sup>2</sup> = .225;	$\chi^2 = 4.371$ *	$\chi^2 = 5.047$ *
-2LL= 203.919	$\chi^2 = 35.815$ ***; Pseudo R <sup>2</sup> = .253;	$\chi^2 = 40.862$ ***; Pseudo R <sup>2</sup> = .284;
	-2LL= 199.549	-2LL= 194.501

\* =p<.05;

\*\* =p<.01;

\*\*\* =p<.001

B=Unstandardized Regression Coefficient

SE=Standard Error

CI=Confidence Interval

R<sup>2</sup>=Variance accounted for

-2LL=Log Likelihood

**Table 4** Logistic regression: Impact of parenting efficacy and assistance with child-care on likelihood of having at least one child in the legal custody of someone other than mother.

Independent Variables	Model 1				Model 2				Model 3				
	B	SE	Odds Ratio	95% CI	B	SE	Odds Ratio	95% CI	B	SE	Odds Ratio	95% CI	
Constant	.600	1.266	1.823		1.118	1.383	3.058		4.177	1.818	65.143		
Age	-.044	.029	.957	.904–1.014	-.053	.031	.948	.892–1.007	-.055	.032	.946	.889–1.007	
Race	-1.04*	.407	.354	.159–.785	-.953*	.417	.386	.170–.874	-1.3**	.456	.270	.110–.659	
Education	-.246	.307	.782	.429–1.426	-.241	.308	.786	.429–1.438	-.113	.315	.893	.482–1.657	
Number of children 0–5	.255	.230	1.290	.822–2.026	.240	.230	1.271	.809–1.997	.181	.233	1.198	.759–1.892	
Number of children 6–18	.407***	.153	1.503	1.113–2.029	.448**	.162	1.566	1.140–2.152	.409*	.171	1.505	1.077–2.102	
Number of Problems with Children	.035	.197	1.036	.704–1.525	.049	.199	1.050	.710–1.553	.029	.203	1.029	.692–1.531	
Help with child-care					-.033	.034	.968	.905–1.035	.001	.036	1.001	.932–1.074	
Parenting Efficacy									-.094*	.034	.910	.851–.973	
				$\chi^2=30.733$ ***; Pseudo $R^2=.246$ ; -2LL= 157.644					$\chi^2 = 8.070$ ** $\chi^2 = 39.732$ ***; Pseudo $R^2=.311$ ; -2LL= 148.645				

\* =p<.05;  
\*\* =p<.01;  
\*\*\* =p<.001

B=Unstandardized Regression Coefficient  
SE=Standard Error  
CI=Confidence Interval  
 $R^2$ =Variance accounted for  
-2LL=Log Likelihood



**Table 5**

Bootstrapped total and indirect effects of parental support on likelihood of out-of-home placement and custody loss via parenting efficacy.

	Parenting Support				z-score
	Effect	SE	95%-LLCI	95%-ULCI	
Out-of-home Placement					
Total	-.0604	.0297	-.1186	-.0022	-2.035*
via Parenting Efficacy	-.0226	.0128	-.0528	-.0019	-1.942*
Custody Loss					
Total	-.0325	.0342	-.0995	.0345	-.9513
via Parenting Efficacy	-.0332	.0144	-.0707	-.0088	-2.298*

\* =  $p < .05$ ;

\*\* =  $p < .01$ ;

\*\*\* =  $p < .001$

SE=Standard Error

LLCI=Lower Limit Confidence Interval

ULCI=Upper Limit Confidence Interval