

**THE FOSTER CARE EXPERIENCE  
AND REGULATION OF BEHAVIOR AND EMOTION**

by

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A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Bachelor of Arts in Psychological & Brain Sciences with Distinction

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## **ABSTRACT**

Children in foster care are at risk for emotional and behavioral regulation issues (Armsden, Pecora, Payne, & Szatkiewicz, 2000; McIntyre & Keesler, 1986). This may be because of the experience of foster care itself, which often includes unsafe environments and many transitions (Harden, 2004, Newton, Litrownik & Lansverk, 2000). While the current literature has found associations between self-regulation and specific elements of foster care (Lewis, Dozier, Ackerman & Sepulveda-Kozakowski, 2007; Newton, Litrownik & Lansverk, 2000; Oosterman, Schuengel, Bullens & Doreleijers, 2007), to date no study has used an observational measure of regulation or looked at traumatic reasons for removal. The current study examined associations between observed emotional and behavioral regulation in young foster children and their experiences in foster care. Documented experiences in foster care included age removed from biological parents, number of placements, time in current placement, permanency of placement, kinship caregiving, and traumatic reasons for removal from biological parents. Significant associations were found between all of the aforementioned foster care experiences and emotional and behavioral regulation abilities. The findings of this study indicate that factors contributing to a more unstable and traumatic experience in foster care are associated with poor ability to regulate emotion and behavior.

## **Chapter 1**

### **INTRODUCTION**

Early adversity has harmful effects on psychological, physiological, and emotional development in children, and foster children are particularly at risk for facing multiple types of early adversity. As of 2014, the US Department of Health estimated that there are over 415,000 children in foster care in the United States (2015). Thus, it is critical to understand the range of risks and consequences faced by these children.

Children in foster care are typically exposed to adversity before and after they enter the foster care system. Children enter the foster care system for a variety of reasons, including physical or sexual abuse, neglect, and parental substance abuse, parental mental health problems, or parental incarceration (Kohl, Edleson, English & Barth, 2005; Schneiderman, Connors, Fribourg, Gries & Gonzales, 1998). Once in the foster care system, children often have to deal with multiple placements and transitions. With each new placement, including the first, the children must form new attachments to their foster families and become acclimated to their new environment. These transitions in caregiving can have a negative influence on children's development, especially at a young age (Harden, 2004).

#### **Emotion and Behavior Regulation**

Children's emotion and regulation development are particularly at risk due to the many adversities faced by foster children, particularly the lack of consistent,

responsive caregivers. Behavior regulation consists of the ability to delay gratification, follow instructions, and inhibit impulsive or aggressive behavior (Suchodoletz, Trommsdorff, Heikamp, Wieber & Gollwitzer, 2009). Emotion regulation has been defined as “the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994). Early experiences within caregiving-child attachment relationships are believed to play a critical role in promoting the development of children’s self-regulatory capabilities (Kopp, 1982). Specifically, children develop independent self-regulatory capabilities through consistent interactions with responsive caregivers (Diener & Mangelsdorf, 1999; Harrist & Waugh, 2002). When children experience abusive or neglecting caregiving, or have constantly changing caregivers, these interactions critical to the development of self-regulatory capabilities are interrupted.

Consistent with this, foster children have increased problems with emotion and behavior regulation, as compared to children not in foster care (Armsden et al., 2000; McIntyre & Keesler, 1986). In particular, foster children have been found to display two and a half times the number of behavioral problems than the average child (Clausen, Lansverk, Ganger, Chadwick & Litrownik, 1998). Foster children also struggle with emotion regulation (Berking & Whitley, 2014). Foster children are significantly more likely than non-foster children to be diagnosed with attention-deficit/hyperactivity disorder, depression, and post-traumatic stress disorder (dosReis, Zito, Safer & Soeken, 2001; Facts about Foster Care).

Emotion and behavior regulation ability of foster children interacts with specific factors concerning their foster care experience. Placement instability, meaning

impermanent/multiple placements, can predict behavior regulation problems (Newton, Litrownik & Lansverk, 2000). The opposite is true as well. Behavior regulation problems can predict placement breakdown, causing the child instability (Lewis, Dozier, Ackerman & Sepulveda-Kozakowski, 2007; Oosterman, Schuengel, Bullens & Doreleijers, 2007). There has been no research into associations between emotion or behavior regulation and the reason that children are removed from their biological parents. This study examines the associations between characteristics of the child's early foster care experience and later regulation abilities.

### **Relative vs. Non-Relative Care**

An important consideration in the foster care field is the placement in relative care (kinship care), or a non-relative care. The existing research on stability of kinship care is inconclusive. Kinship care is often preferred over non-relative care due to its lower cost (Vanschoonlandt, Vanderfaellie, Van Holen, De Maeyer & Andries, 2012). In addition, related caregivers may be more familiar and therefore less of a disruption for children than non-related caregivers (Messing, 2006).

There is conflicting research regarding the question of whether kinship care provides a more stable placement for children in foster care. Some studies have found that placement with relatives is more stable (Vanschoonlandt, Vanderfaellie, Van Holen, De Maeyer & Andries, 2012). In contrast, Font and colleagues (2015) found no differences in stability between kinship care and non-kinship care after first two months in placement. These two months seem to be critical for non-related foster parents and their children to see if they are compatible, while a kinship caregiver would have this information from the start. As time in a single placement goes on, it is possible that non-related caregivers become more committed than they are early on.

The question is further complicated by the fact that children and caregivers in kinship and non-kinship care may vary systematically. Past research has shown that children are placed with or without kin for different reasons. Children placed in kinship care are more likely to be older, minority, not have disabilities, and have parents with substance abuse problems (Beeman, Kim & Bullerdick, 2000). Kinship caregivers also are generally lower income and lower education (Font, 2014).

The same contradictory results that have been found concerning kinship care and stability are present when studying kinship care and emotion and behavior regulation. Some studies found that children in kinship care have lower levels of behavior regulation issues than children in relative care (Wu, White & Coleman, 2015). Some studies found no relationship between kinship care and regulation (Vanschoonlandt, Vanderfaeillie, Van Holen, De Maeyer & Robberechts, 2013). Other studies have shown that children placed in kinship care have more behavioral issues than children in relative care (Richardson & Gleeson, 2012).

### **Current Study**

There is an important gap in the research to date. Previous studies on foster children and regulation issues have relied on self-report measures of behavior, such as the Child Behavior Checklist (CBCL) (Achenbach, 1991; Achenbach & Rescorla, 2000). Although the CBCL is a reliable and widely-used measure, like any self-report measure, it can have validity issues. For example, kinship caregivers tend to underreport behavior issues in comparison to non-related caregivers (Hegar & Rosenthal, 2009; Shore & LeProhn, 2002). Observational data are more reliable and valid than self-report measures. To date, no studies have examined the associations

between foster care experiences and behavior and emotion regulation using reliable, observational data.

The current study employs observational data on child behavioral and emotional regulation, and compares them with data on the child's foster care experience. The current study asks the following research question: Are early experiences in foster care associated with later abilities to regulate behavior and emotion in young foster children?

I predicted that early experiences related to a more instable and disruptive placement history, such as a later age of removal, a shorter time in the current placement, a larger number of placements, and less permanency of placement would be associated with less ability to regulate. I predicted that early experiences that could contribute to being exposed to a more negative environment, such as traumatic reasons for removal, such as parental substance abuse, parental incarceration, and parental mental health problems, would be associated with less regulation abilities. Finally, due to the conflicting literature concerning kinship placements, I made no prior prediction about associations with regulation abilities and analyses were explanatory.

## **Chapter 2**

### **METHODS**

#### **Participants**

The current study included data from 99 foster children and 79 foster parents (13 foster parents had two children enrolled in the study and three foster parents had three foster children enrolled in the study). Children were eligible for the study if they had been placed into the foster care system before the age of 20 months. Children were, on average, 28.4 months old when they entered the study ( $SD = 9.2$ ). Please see Table 2 for additional child and caregiver demographics and Table 1 for child caregiving history. The subjects in the present study were drawn from a larger randomized controlled trial designed to test the efficacy of the Attachment and Bio-Behavioral Catch-up (ABC) Intervention. There were no significant intervention differences in the measures utilized in this study.

#### **Procedures**

Participants were referred to the study by Child Protective Services. Caregivers were contacted by a staff member who explained the program to them. Participation in the study was voluntary and families were paid for each research visit. Data were collected when children enrolled in the study and at yearly research visits completed at the time of the child's birthday continuing until age 60 months (i.e., a 36-month visit, a 48-month visit, and a 60-month visit). Data regarding emotion and behavior regulation were collected at the first available post-intervention research visit.

Approval for the conduct of this research was obtained from the University of Delaware Institutional Review Board.

### **Measures**

*Disruptive Behavior Diagnostic Observation Schedule (DB-DOS)*. The Disruptive Behavior Diagnostic Observation Schedule (DB-DOS) was developed to measure disruptive behaviors in preschool age children (Wakschlag, Briggs-Gowan, et al., 2008a; Wakschlag, Hill, et al., 2008b). This procedure was designed to expose children to a series of frustrating tasks in order to study their coping skills, their ability to regulate behavior and emotions, and their ability to follow directions.

DB-DOS has three contexts during which the child is provided with varying levels of support. The Parent context is first, in which the child can receive support from the parent. Parents are instructed to engage in a series of activities and provide the child varying levels of support in each activity. The Examiner Present context is next, in which the child can rely on support from the examiner, who assumes a teacher-like role. Finally, the Examiner Busy context is last, in which the examiner retreats to the corner of the room and provides the child with minimal interaction and support. The child is required to complete a different series of tasks independently.

Each context of the DB-DOS is coded separately to assess the child's behavior on 24 different scales. Each scale is coded from 0 (absent) to 3 (high). The 24 scales are summed and then grouped to form three composite scores: anger dysregulation, behavioral dysregulation, and social competence. Anger dysregulation includes scales measuring the intensity of negative affect, predominance of negative affect, ease of elicitation of negative affect, rapid escalation of negative affect, difficulty recovering from negative affect, and coping with frustration. Higher scores on anger

dysregulation represent higher expression of anger and more difficulty regulating negative affect. The behavioral dysregulation scale assesses the child's competence, aggression, and oppositionality. Similar to the anger dysregulation scale, higher scores on the behavior dysregulation scale represent greater levels of difficulties with behavior regulation.

The DB-DOS was administered during the yearly post-intervention visits when children were 36, 48, and 60 months old. This study included the first available DB-DOS assessment when children ranged from 35.2 to 54.9 months old ( $M = 42.0$ ,  $SD = 5.1$ ). Coders were undergraduate and graduate student research assistants who were blind to other study information. Coders were trained by a senior graduate student. They established acceptable levels of inter-rater reliability on a set of training videos prior to coding for the present study.

*Foster care history.* Information regarding foster children's caregiving history was provided by foster parents. Foster parents provided information about the age the child was removed from his or her biological parents, reason for removal from biological parents, the age of the child when he or she entered his or her current placement, the number of placements/transitions that the child experienced, whether the caregiver was a relative or not, and whether the foster caregiver was in the process of adopting or obtaining guardianship of the child. This information was confirmed and supplemented with a review of children's Division of Family Services record, when available. Any placement with a new caregiver was counted as one placement.

## **Chapter 3**

### **RESULTS**

#### **Preliminary Analyses**

Log transformations were conducted to normalize the negative skew of the anger and behavior dysregulation scores. Pearson correlations were run to evaluate the relationships between foster care history and anger dysregulation and behavior dysregulation scores in the examiner present (high support), examiner busy (low support), and parent contexts of the DB-DOS. See Table 3 for these data.

#### **Primary Analyses**

*Age first removed from biological parents.* A significant positive correlation was found between the age children were first removed from their biological parents and behavior dysregulation in the Examiner Busy Context of the DB-DOS ( $r = 0.29, p < 0.01$ ). The older children were when removed from their biological parents, the higher levels of behavior dysregulation demonstrated in the Examiner Busy Context (when children received little support from the examiner in the DB-DOS). However, no significant correlations were found between age of first removal and children's behavioral dysregulation in the Examiner Present Context (when they received high levels of support from the examiner) ( $r = 0.10, p = 0.28$ ), and in the Parent Context (when they received support from their foster parents) ( $r = -0.01, p = 0.99$ ). In addition, no significant correlations were found between age of removal and children's anger dysregulation in any contexts.

*Time in current placement.* Significant negative correlations were found between the time the child had been in their current placement and the level of anger dysregulation ( $r = -0.22, p < 0.05$ ) and behavior dysregulation ( $r = -0.28, p < 0.01$ ) in the Examiner Busy Context. No significant differences were identified in anger or behavior dysregulation in the Examiner Present or Parent Contexts.

*Reason for removal.* Children were reported to have been removed for a range of reasons, including physical abuse, sexual abuse, neglect, domestic violence, dependency, parent incarceration, parent substance abuse and parent mental health problems. No significant associations were found between child anger or behavior dysregulation and removal for physical abuse, sexual abuse, neglect, or domestic violence.

*Biological parent substance abuse.* Independent samples  $t$ -tests showed significant differences between children who were removed due to parental substance abuse and children removed for other reasons in anger and behavior dysregulation during the Parent Context of the DB-DOS. In the Parent Context, significantly higher levels of anger dysregulation were shown by children who were removed from biological parents due to substance abuse ( $M = 7.5, SD = 5.4$ ) than for children removed for other reasons ( $M = 3.9, SD = 4.4; t(95) = -3.47, p < 0.01$ ), as seen in Figure 1. These differences in anger dysregulation were not observed between these groups in the examiner contexts. However, differences approaching significant were also seen in behavioral dysregulation in the Parent Context between children who were removed due to parental substance abuse and children removed for other reasons. As with the anger dysregulation, higher levels of behavior dysregulation in the Parent Context were observed in children who were removed from biological parents due to

substance abuse ( $M = 6.0$ ,  $SD = 4.2$ ) than children removed for other reasons ( $M = 4.2$ ,  $SD = 4.0$ ,  $t(95) = -1.93$ ,  $p = 0.06$ ), as seen in Figure 2. These differences in behavior dysregulation were not present in the examiner contexts.

*Biological parent incarceration.* Significant differences in behavior dysregulation during the Parent Context of the DB-DOS were found between children removed due to biological parent incarceration and children removed for other reasons. Independent samples  $t$ -tests showed significantly higher levels of behavior dysregulation in the Parent Context in children who were removed from their biological parents due to parental incarceration ( $M = 6.7$ ,  $SD = 2.8$ ) than for children removed for other reasons ( $M = 4.9$ ,  $SD = 4.3$ ;  $t(95) = -2.07$ ,  $p < 0.05$ ), as seen in Figure 3.

*Biological parent mental health problems.* Independent samples  $t$ -tests, showed significant differences in anger and behavior dysregulation during the Examiner Busy Context between children who were removed from their biological parents due to parent mental health issues and children removed for other reasons. Children removed because of parent mental health problems showed significantly higher levels of anger dysregulation in the Examiner Busy Context ( $M = 8.9$ ,  $SD = 5.5$ ), compared with children removed for other reasons ( $M = 3.9$ ,  $SD = 3.7$ ;  $t(96) = -2.56$ ,  $p < 0.05$ ), as seen in Figure 4. These differences in anger dysregulation were not observed in the Examiner Present Context and the Parent Context. Similar results were found in behavior dysregulation in the Examiner Busy Context. Children who were removed from their biological parents due to parental incarceration ( $M = 8.1$ ,  $SD = 5.9$ ) showed significantly higher levels of behavior dysregulation in the Examiner Busy Context than children removed for other reasons ( $M = 4.0$ ,  $SD = 4.9$ ;  $t(96) = -$

2.00,  $p < 0.05$ ), as seen in Figure 4. These differences in behavior dysregulation were not observed in the Examiner Present Context and the Parent Context.

*Number of placements.* No significant correlations were found between number of placements and anger and behavior dysregulation in any contexts with number of placements as a continuous variable. Number of placements was operationalized as a categorical variable, with two categories: children who were in one placement continuously since birth with children who had experienced multiple placements. An independent samples  $t$ -test showed differences in behavior dysregulation in the Examiner Busy Context at a level approaching significance ( $t(96) = -1.93, p = 0.06$ ). Non-significantly higher levels of behavior dysregulation were exhibited by children with more than one placement ( $M = 4.8, SD = 5.4$ ) than children with one placement ( $M = 2.6, SD = 3.3$ ), as seen in Figure 6. No significant differences between these groups were found in behavior dysregulation in the Examiner Present Context and Parent Context. In addition, no significant differences in anger dysregulation were observed in any of the contexts.

*Permanency of placement.* Independent samples  $t$ -tests showed a significant difference between children in permanent placements and children in temporary placements. In the Examiner Busy Context, children in temporary placements ( $M = 6.3, SD = 5.6$ ) had significantly higher behavior dysregulation than children in permanent placements ( $M = 3.3, SD = 4.5; t(96) = 3.16, p < 0.01$ ), as seen in Figure 7. No significant differences were observed in the Examiner Present Context or the Parent Context for behavior dysregulation, or any of the contexts for anger dysregulation.

*Relative Caregivers.* Independent samples *t*-tests showed a significant difference between children who were placed with relative caregivers and children placed with non-relative caregivers. Children placed with relative caregivers ( $M = 8.7$ ,  $SD = 6.3$ ) showed significantly higher behavior dysregulation in the Examiner Busy Context than children placed with non-relative caregivers ( $M = 3.6$ ,  $SD = 4.5$ ;  $t(96) = -3.17$ ,  $p < 0.01$ ), as seen in Figure 8. No significant differences were observed in the Examiner Present Context or the Parent Context for behavior dysregulation, or any of the contexts for anger dysregulation.

Table 1 Descriptive Statistics for Foster Children's Caregiving Histories

<b>Child Variables</b>	
Number of placements	
Mean ( <i>SD</i> )	2.3 (1.0)
Range	1 – 7
Age first removed from biological parent, Mo.	
Mean ( <i>SD</i> )	12.6 (12.4)
Range	0 – 41.9
Age entered current placement, Mo.	
Mean ( <i>SD</i> )	16.2 (14.0)
Range	0 – 42.5
Time with caregiver at assessment, Mo.	
Mean ( <i>SD</i> )	25.8
Range	0 – 50.7
Reason for removal, No. (%)	
Physical or sexual abuse	13 (13.1)
Neglect	46 (46.5)
Caregiver incarceration	14 (14.1)
Caregiver substance abuse	52 (52.5)
Dependency (inability to care for child)	74 (74.7)
Caregiver mental health problems	9 (9.1)
Domestic violence	15 (15.2)
Prenatal exposure to drugs or alcohol	22 (27.5)
<b>Caregiver Variables</b>	
Placement type, No. (%)	
Non-relative	84 (84.8)
Relative	15 (15.2)
Time been foster parent	
Mean ( <i>SD</i> )	4.5 (6.4)
Range	0 – 44.8
Number of foster children cared for to date	
Mean ( <i>SD</i> )	11.1 (31.0)
Range	1 – 240

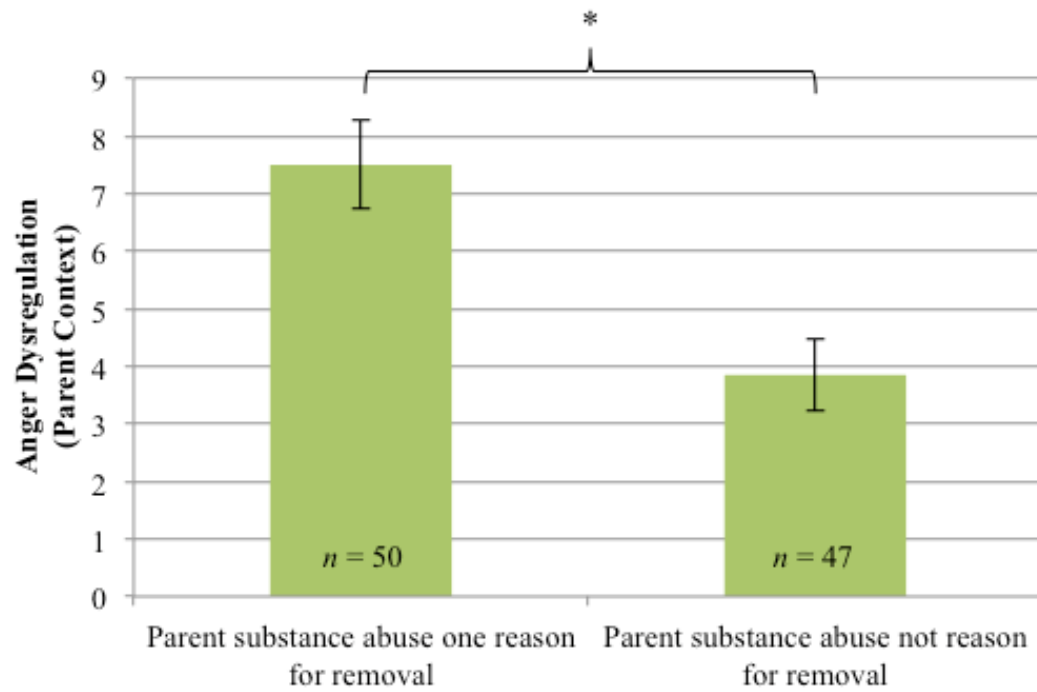
Table 2      Demographic Characteristics for Children and Parents

<b>Child Characteristics (<i>n</i> = 99)</b>	
Child Age, Months	
Mean ( <i>SD</i> )	42.0 (5.1)
Range	35.2 – 54.9
Sex, No. (%)	
Male	53 (53.5)
Female	46 (46.5)
Race, No. (%)	
White	33 (33.3)
African American	56 (56.6)
Biracial	10 (10.1)
Other	0 (0.0)
Ethnicity, No. (%)	
Hispanic	8 (8.1)
Not Hispanic	91 (91.9)
<b>Caregiver Characteristics (<i>n</i> = 79)</b>	
Caregiver Age, Years	
Mean ( <i>SD</i> )	45.3 (10.2)
Range	23.0 – 76.6
Sex, No. (%)	
Male	4 (5.1)
Female	75 (94.9)
Race, No. (%)	
White	37 (46.8)
African American	39 (49.4)
Biracial	2 (2.5)
Other	1 (1.3)
Ethnicity, No. (%)	
Hispanic	3 (3.8)
Not Hispanic	76 (96.2)

Table 3        Correlations Among Variables

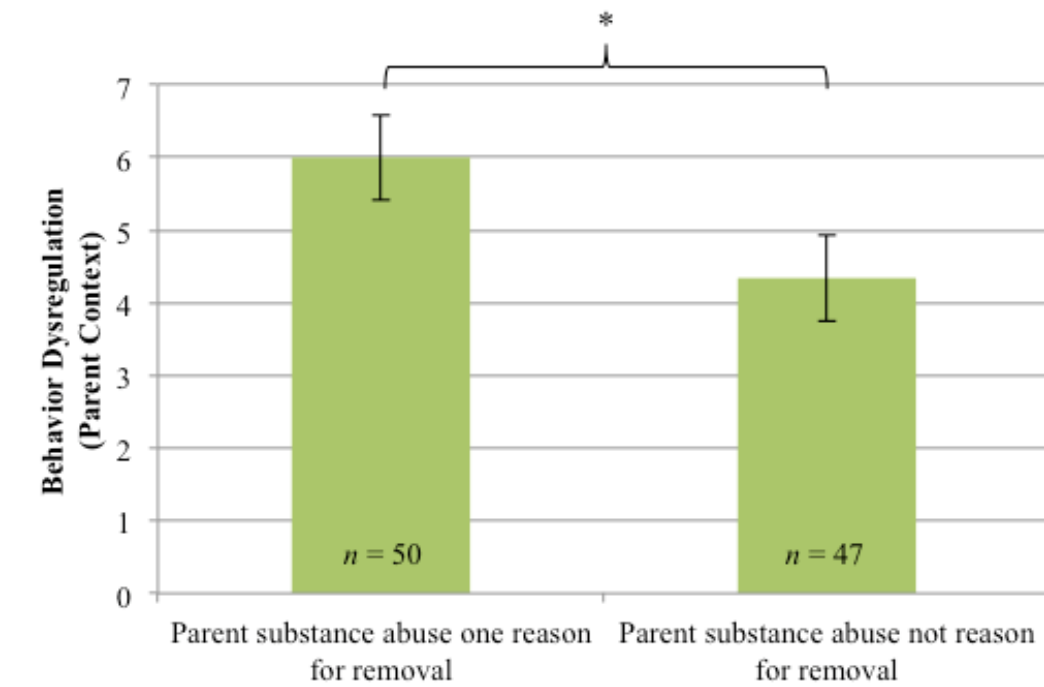
$*p < 0.05$ ,  $**p < 0.01$

Figure 1 Parent Substance Abuse & Anger Dysregulation in Parent Context



\*  $p < 0.05$

Figure 2 Parent Substance Abuse & Behavior Dysregulation in Parent Context



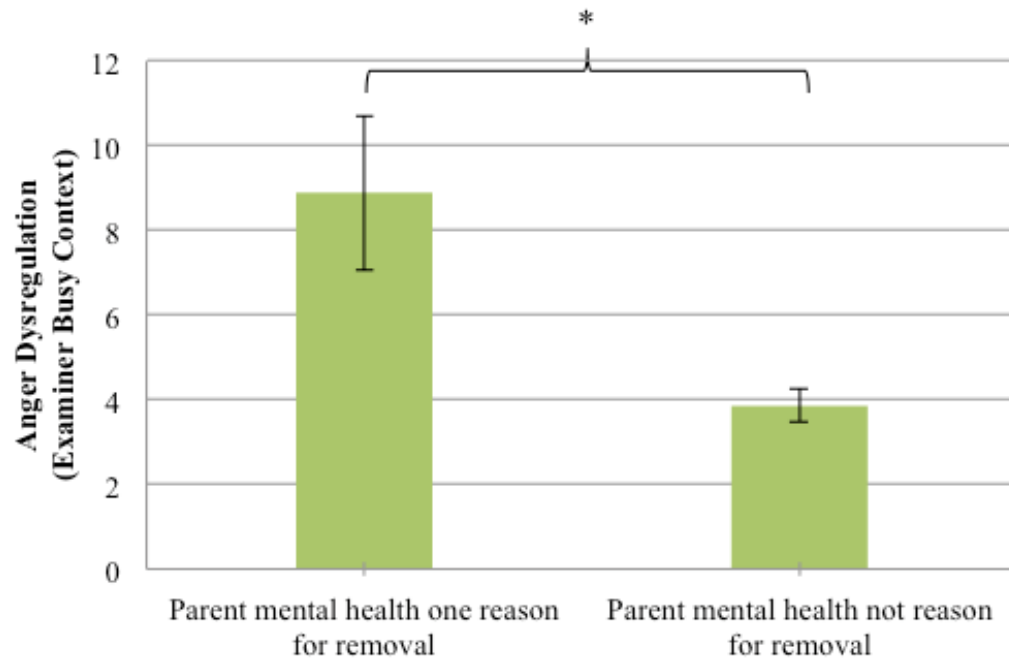
\*  $p < 0.05$

Figure 3 Parent Incarceration & Behavior Dysregulation in Parent Context



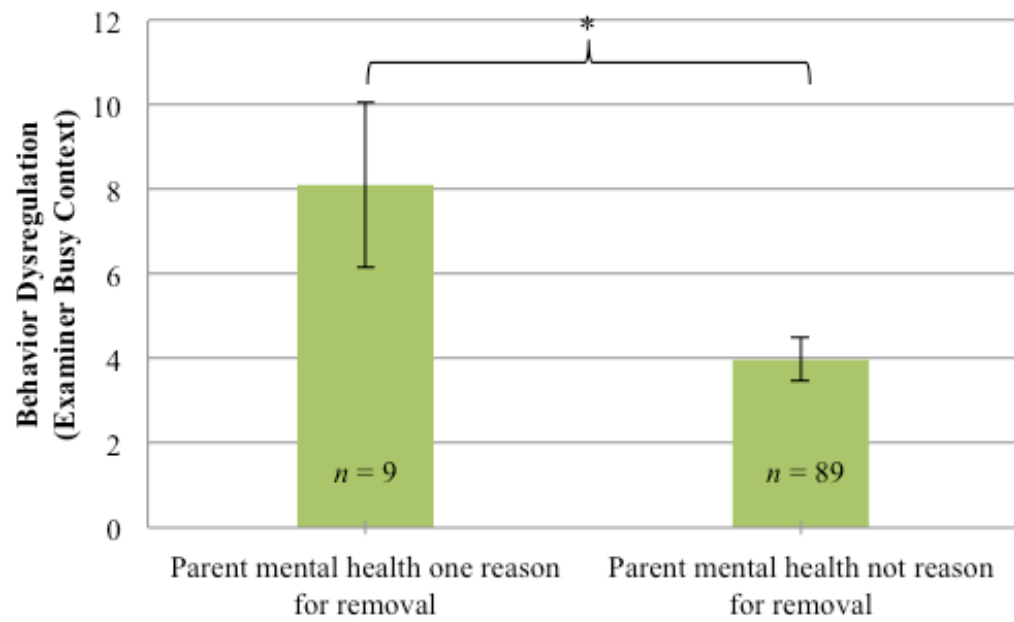
\*  $p < 0.05$

Figure 4 Parent Mental Health Issues & Anger Dysregulation in Examiner Busy Context



\*  $p < 0.05$

Figure 5 Parent Mental Health Issues & Behavior Dysregulation in Examiner Busy Context



\*  $p < 0.05$

Figure 6 Number of Placements & Behavior Dysregulation in Examiner Busy Context

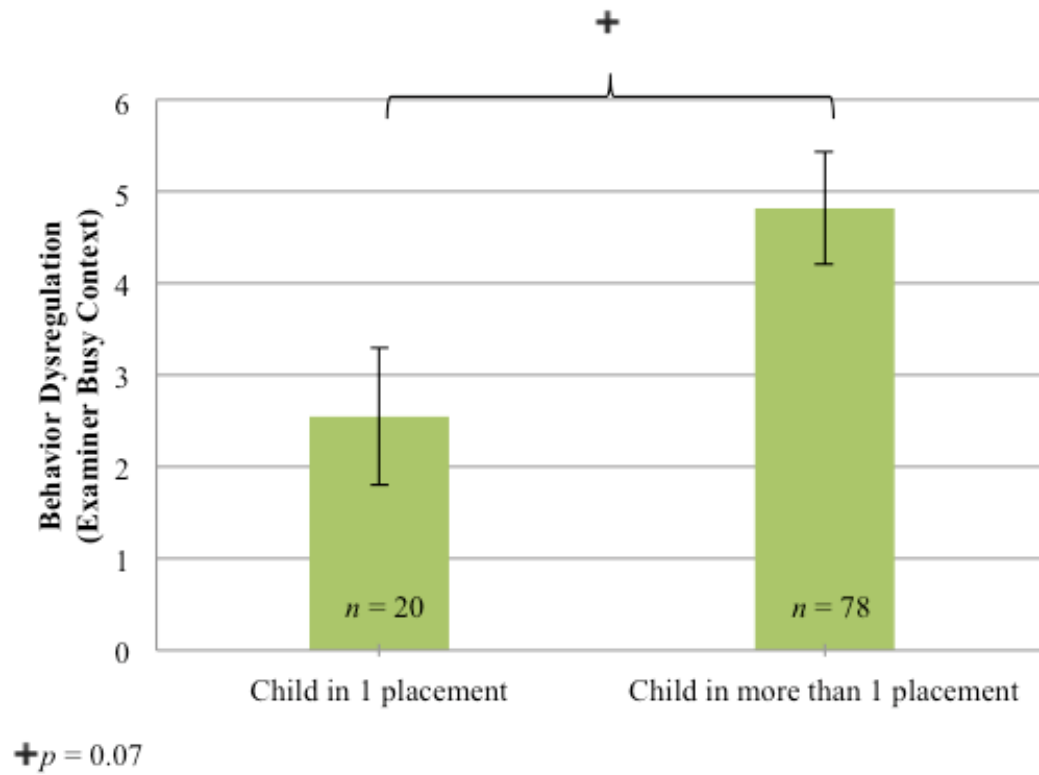
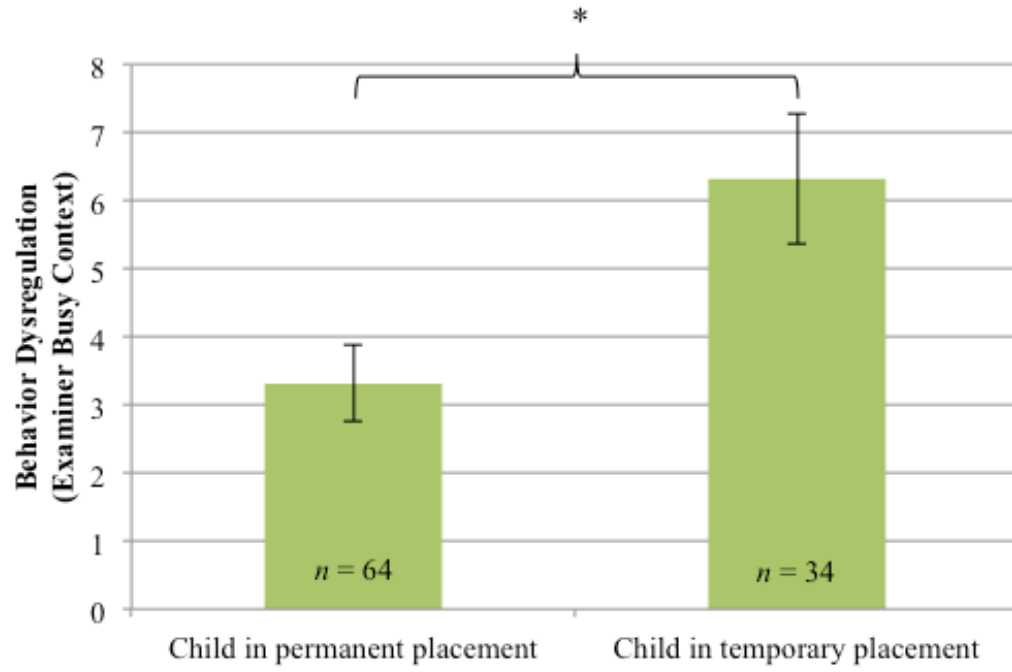
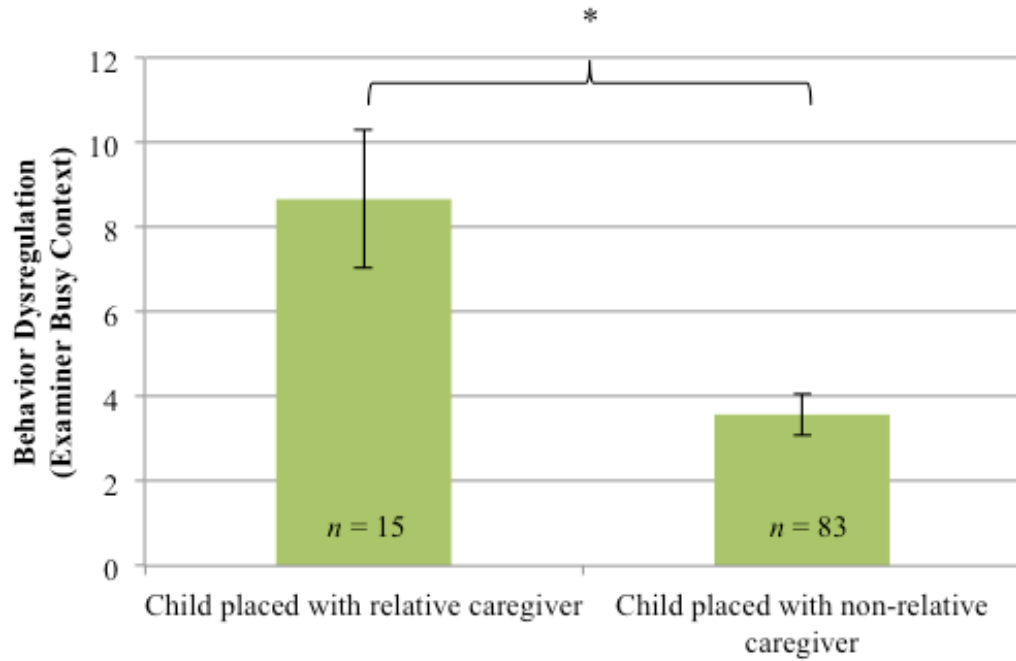


Figure 7      Permanency of Placement & Behavior Dysregulation in Examiner Busy Context



\*  $p < 0.05$

Figure 8      Figure 8 Relative and Non-relative Caregivers & Behavior Dysregulation in Examiner Busy Context



\*  $p < 0.05$

## **Chapter 4**

### **DISCUSSION**

This study used observational methods to assess the influence of foster care history on the development of children's anger and behavior regulation capabilities. Several factors were found to be associated with higher levels of behavior dysregulation in the most demanding context, the Examiner Busy context, when children were provided little support from the examiner. These factors linked with higher levels of behavior dysregulation included older age at first removal from biological parents, removal due to biological parent mental health issues, a shorter length of time in current foster placement, being in a non-permanent placement, and being placed in kinship care. Removal due to biological parent mental health issues and a shorter length of time in current foster placement were also associated with higher levels of anger dysregulation in the Examiner Busy Context. In addition, removal due to parental substance abuse or incarceration was linked with higher levels of anger and behavioral dysregulation when the child interacted with the foster parent.

#### **Regulating with No Support—A Question of Stability**

This study found that children with parental mental health issues, multiple placements, and temporary placements are at risk for regulation problems when they have no support. It is noteworthy that these children were not significantly different from other foster children in the Examiner Present and Parent Contexts. This indicates that either children cannot internally support themselves enough to regulate efficiently, or they feel that they do not have to when they are not being supported or supervised.

This may pose problems because these at-risk children will not always be supported supervised. As they grow up, this could manifest as oppositional or conduct problems. A possible solution to this is identifying the children at risk for these negative outcomes, and addressing behavioral issues and teaching coping skills.

The older children were when they were removed from their biological parents, the more difficulty they had regulating behavior. This finding was limited to when the child is alone and must regulate with no external support. Also, the longer a child was in a single placement, the better he or she could regulate both behaviors and emotions. This may be due to the child having more time to acclimate to his or her placement. The generally higher comfort level may translate into better emotion and behavior regulation when the child is given no external support. Regardless of why this relation exists, the findings clearly indicate that unsupported self-regulation, both emotionally and behaviorally, is associated with a longer duration of a single placement.

The findings of this study suggest that multiple placements negatively affect a child's ability to regulate his or her behavior without support. Similarly, children in temporary placements had more trouble regulating behavior by themselves than children in permanent placements. These findings may indicate either that behavioral issues may lead to placement changes, or that placement changes lead to behavioral issues, or both.

Children in kinship care also had more trouble regulating behavior in the Examiner Busy Context than children in non-relative care. This finding is especially noteworthy considering the debate on which type of placement is more stable for the child. This study can conclude that in terms of behavioral regulation, non-relative care

shows better associations than kinship care. A related caregiver may be more lenient and understanding of a child's bad behavior, so the children do not feel the need to regulate themselves. This theory is supported by another study's finding that kinship caregivers report fewer behavior issues than non-related caregivers, although teachers assessed children in kinship care as having more behavior issues (Hegar & Rosenthal, 2009). More research should be done on why this relation exists, in order to address this issue.

### **Regulating with the Support of a Parent**

Children removed from their biological parents due to parental substance abuse problems or incarceration displayed significantly higher anger and behavioral dysregulation when interacting with their foster parent than foster children removed for other reasons. It is noteworthy that these children were not significantly different than other foster children in the Examiner Present and Examiner Busy Contexts. It is unfortunate that these children do not benefit from the support of their caregivers, while they do regulate efficiently in the presence of an examiner as compared to other foster children. A possible solution to this is identifying these at-risk children, and working on parent-child relationships to build up secure attachments. Children who were removed because of substance abuse had significantly more trouble regulating emotion and behavior with the support of their caregiver. The fact that for these children, support from their caregivers was not enough to help them regulate normally indicates that the substance abuse of biological parents can affect the relationship between the child and his or her new caregiver. Children removed from their biological parents because of parental incarceration had significantly more trouble regulating behavior than other foster children with support from their caregivers. This

may be due to feelings of abandonment, and so the children have trouble trusting their new caregivers for support.

### **Limitations**

Limitations of this study include the self-report nature of the Foster Care Interview. Whereas this measure is straightforward in asking objective information of the caregiver, the caregiver may not have all of the requested information, or may accidentally report incorrect or inconsistent information. Fortunately, the Foster Care Interview data were supplemented by the children's Division of Family Services record (if available), which should decrease the likelihood of any inaccuracies.

Another limitation is sample size. Some of the groups within samples (i.e. children who were removed because of parental mental health issues) had very low sample sizes, negatively affecting their statistical power. It would be interesting to replicate this study with a larger sample to replicate these findings.

### **Strengths**

All of the findings support the original hypothesis, which stated that factors contributing to a less stable or more traumatic foster experience will be associated with poor emotion and behavior regulation. Placement stability is likely linked to better regulation because a stable placement provides a consistent family. Regulation is something that must be developed, and children's development is facilitated by a stable family (Harden, 2004). The main strength of this study is its observational measure of behavior. The DB-DOS is a reliable and valid measure, and was coded with a high rate of inter-rater reliability. This potentially makes the findings in this study more accurate than studies relying on the CBCL.

### **Implications on Social Work Practice and Social Policy**

This study identifies a multitude of risk factors for foster children's ability to regulate behavior and emotion: being older when removed from biological parents, being in the current placement for a shorter amount of time, parental substance abuse, parental incarceration, parental mental health issues, multiple placements, temporary placements, and kinship care. Many of these risk factors are easily identifiable by case workers. Once children with these risk factors are identified, case workers should address the possible outcomes stemming from the risk factors as detailed above. Conversely, it would be a good idea to identify children who already have issues regulating emotion and behavior, and actively avoid placing them multiple times, in temporary placements, or in kinship care.

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