Ecological Systems in the Contexts of Foster Care and Parental Incarceration

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ECOLOGICAL SYSTEMS IN THE CONTEXTS OF FOSTER CARE AND PARENTAL INCARCERATION

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTORATE OF PHILOSOPHY

PROGRAM IN CLINICAL PSYCHOLOGY

BY
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CHICAGO, IL
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ABSTRACT

This bundled dissertation sought to advance research about children in the contexts of foster care and/or parental incarceration. The first study, “Developmental Differences in Children’s Visits with Their Parents in Jail,” expanded upon previous research of young children’s experiences visiting jail by including a sample of 3-17-year-olds. The study described children’s visitation through quantitative (measured by the Jail-Prison Observation Checklist) and qualitative (themes gleaned from observations of children’s visits with parents in jail) analyses with an ecological systems framework. The second longitudinal study, “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care,” considered individual (i.e., race, gender, emotional and behavioral adjustment) and microsystem factors (i.e., visitation with parents who are incarcerated) to inform recommendations for correctional systems and policymakers in the exosystems, macrosystems, and chronosystems. Finally, few studies consider greater ecological systems and the well-being of children in foster care. As such, the third study, titled “Ecological Disruptions and Well-being among Children in Foster Care,” examined the impact of multiple ecological disruptions (i.e., changes in or separation from siblings, friends, school, church, community) on children’s internalizing symptoms and externalizing behaviors over time. The combination of these three studies increases understanding about the complex, interactive factors that impact the well-being of children in the contexts of child welfare and/or parental incarceration.
CHAPTER ONE
INTRODUCTION

Integrated Introduction

The United States (U.S.) Children’s Bureau (2020) reported that 672,594 children were served by the child welfare system in 2019. Children enter foster care following concerns of maltreatment (emotional, physical, and sexual abuse; neglect) and/or dependency. Maltreatment is associated with emotional, social, behavioral, and health problems in the short- and long-term (e.g., Jonson-Reid et al., 2012; Norman et al., 2012). As such, emotional, physical, and sexual abuse, along with emotional and physical neglect are 5 of 10 adverse childhood experiences (ACEs; Felitti et al., 1998; Wade et al., 2017). The ACEs studies have been conducted to determine the impact of traumatic experiences occurring in childhood (i.e., ACEs) on individuals’ well-being over time (Felitti et al., 1998).

Turney and Wildeman (2017) conducted a study with a nationally representative sample of children in the U.S; they found that children with current or a history of foster care involvement were more likely to experience various ACEs (i.e., parental divorce or separation, death, incarceration, and abuse, along with violence exposure, a household member with mental illness, and a household member demonstrating substance abuse) compared to children who were not in foster care. Further, children in foster care were more likely to experience ACEs regardless of socioeconomic status (e.g., household income below the poverty line) and family structure (e.g., single-parent homes; Turney & Wildeman, 2017). The high prevalence of ACEs
among children in foster care is noteworthy, especially given the literature highlights that those who have experienced four or more ACEs are at higher risk for chronic physical illnesses, mental health illness, and risky behaviors over time, along with early death (e.g., Boullier & Blair, 2018; Jamora et al., 2009; Rebbe et al., 2018). Further, ACEs contribute to intergenerational transmission of foster care involvement and incarceration (e.g., McDonnell & Valentino, 2016; Norman et al., 2012; Strijker et al., 2008). As such, stakeholders highlight the importance of research to better understand risk and resilience among this population to inform prevention and intervention efforts (e.g., Child Welfare Information Gateway, 2017).

**Ecological Systems Framework and Foster Care**

Bronfenbrenner’s ecological systems theory (1979) lends a framework for understanding child development and well-being in the context of foster care. Bronfenbrenner (1979) highlighted the importance of considering children, their environments, and interactions across systems over time. His ecological framework includes the individual and their microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979, 1986). Ecological transitions, or changes in roles and/or contexts across systems, occur throughout development (Bronfenbrenner, 1979).

First, the microsystem includes proximal factors to the individual (i.e., home, family, classroom, religious affiliations, neighborhood, visiting a parent in jail; Bronfenbrenner, 1977, 1979). Children in foster care are often exposed to maltreatment (ACEs: physical, emotional, and sexual abuse; physical and emotional neglect). Research indicates that children in foster care have a high likelihood of exposure to other ACEs in the microsystem, including household mental illness and/or substance abuse, the incarceration of a relative, exposure to violence perpetrated against mothers, and divorce (Turney & Wildeman, 2017).
Further, children in foster care experience notable ecological transitions, or disruptions in their microsystems (Hong et al., 2011). They are separated from primary caregivers and often additional important figures (e.g., siblings, friends, religious community members, teachers) as they leave their homes and communities (Stukes Chipungu & Bent-Goodley, 2004). Separations from these individuals can serve as risk or protective factors. Children may need to be separated from these individuals for their safety (Berrick, 2006). Further, children may have the opportunity to establish positive relationships with new individuals (Chapman et al., 2004; Shook et al., 2009). However, separation can also be associated internalizing symptoms and externalizing behaviors, including maladjustment, loneliness, and a loss of sense of self (Berrick, 2006; Brooks-Gunn et al., 1997; Fawley-King et al., 2017; Stukes Chipungu & Bent-Goodley, 2004). Other microsystem considerations include children’s direct interactions with foster care representatives, who may determine whether and how children interact with their parents and other key figures (Sen & Broadhurst, 2011).

Second, the mesosystem involves interactions between microsystems (i.e., relationships between family and teachers, peers and family, home and jail; Bronfenbrenner, 1977, 1979). Connections between children’s parents, caregivers, and foster care representatives are relevant to the mesosystem (Hong et al., 2011). These interactions may impact whether and the circumstances in which children have contact with parents and other important figures. Relatedly, stress and discord in these relationships may impact children (Turanovic et al., 2012). In addition, relationships between the aforementioned parties along with school representatives, religious community members, and other key figures become important when children move and enter a new community (Hong et al., 2011).
Third, the exosystem includes systems that the child does not participate in; the exosystem consists of the greater social context that impacts children (i.e., caregiver employment, neighborhood, social services; Bronfenbrenner, 1977, 1979). Some children may have access to more resources upon entry into foster care; others may move to underresourced communities (Berrick, 2006; Fawley-King et al., 2017). Stigma related to foster care involvement also falls in the exosystem (Chambers et al., 2008; Greeson & Bowen, 2008), including caseworkers’ views about parents and children (Hollingsworth et al., 2010). Child welfare caseworkers and organizations set rules about visitation quantity and quality, services for parents and families, and resource allocation (Sen & Broadhurst, 2011).

Fourth, the macrosystem consists of distal factors, including laws, cultural considerations, racism, and disparities (Bronfenbrenner, 1977, 1979; Garbarino & Abramowitz, 1992). For example, children of color are disproportionately involved in the foster care system (Child Welfare Information Gateway, 2016), which relates to the intergenerational transmission of educational and financial insecurity, incarceration, and foster care involvement in communities of color (Kaufman & Zigler, 1989; McWey et al., 2013). Policies that perpetuate these disparities and shape the foster care experience fall in the macrosystem.

Lastly, the chronosystem includes changes in systems over time, or environmental and sociohistorical factors across historical time (i.e., attitudes of the current society, ideologies, trends in populations [e.g., economic crises, changing practices in foster care]; Bronfenbrenner, 1977, 1979, 1986). Recent awareness about the need to support children in foster care (Child Welfare Information Gateway, 2017) and more specifically, children in foster care with parents who are incarcerated (Child Welfare Information Gateway, 2015; Phillips & Bloom, 2017), falls in the chronosystem. The rise of mass incarceration over the past 40 years (Shlafer et al., 2019)
has corresponded with increased rates of foster care involvement (Swann & Sylvester, 2006). Despite the significant intersection between parental incarceration and child welfare involvement, empirical study of children in both of these contexts is scarce (Hayward & DePanfilis, 2007; Swann & Sylvester, 2006).

**Parental Incarceration**

Estimates of the number of children involved in both of the contexts of foster care and parental incarceration vary; approximately 15-20% of children in child welfare have a parent who is incarcerated (Johnson-Peterkin, 2003). There are two ways in which a child may come to experience both parental incarceration and foster care. First, children may enter child welfare when a parent who is a primary caregiver becomes incarcerated (Phillips & Dettlaff, 2009; Seymour, 1998). This becomes a dependency case in which the only entity available to care for the child is the foster care system (Phillips & Dettlaff, 2009; Seymour, 1998). Estimates suggest that 7% of children entered foster care in 2019 as dependency cases because of parental incarceration (United States Children’s Bureau, 2020). Second, parents’ criminal activities and/or the context of criminal involvement (i.e., poverty, substance use, domestic violence) may put families at a higher risk for abuse or neglect, and subsequent child welfare involvement (Phillips & Dettlaff, 2009; Seymour, 1998).

Increased attention has been directed to children in foster care with parents who are incarcerated (Child Welfare Information Gateway, 2015; Phillips & Bloom, 2017) given unique risk factors associated with parental incarceration. In addition to maltreatment, parental incarceration is an ACE (Wade et al., 2017). Parental incarceration can confer risk across ecological systems through incarceration-specific events (microsystem; e.g., witnessing the parent’s arrest; Dallaire et al., 2014; Dallaire & Wilson, 2010), attachment insecurity between
children and their parents who are incarcerated (microsystem; Main et al., 1985; Murray & Murray, 2010), ambiguous loss (microsystem and mesosystems; i.e., unclear physical or psychological loss of a loved one as perceived by the child and other family members; Arditti, 2005; Boss, 2004), and stigma (exosystem; Murray & Murray, 2010; Nesmith & Ruhland, 2008; Phillips & Gates, 2011). However, scholars posit that visits with parents who are incarcerated can serve as a protective factor (microsystem; Boswell, 2002; Maldonado, 2006; Poehlmann-Tynan, 2015; Shlafer & Poehlmann, 2010; Visher, 2013). Visits ameliorate feelings of isolation, rejection, and guilt experienced by children due to separation from parents, while allowing children to maintain their relationship and attachment to their parent (Maldonado, 2006; Poehlmann-Tynan, 2015; Poehlmann et al., 2010; Shlafer et al., 2015). However, no studies to date have explored visits in the contexts of both foster care and parental incarceration. Further, few studies have explored the quality of visits in solely the context of parental incarceration.

For example, only one study to date has described young children’s behavioral and emotional reactions to visiting parents in jail (Poehlmann-Tynan et al., 2015). Children experienced long wait and security procedures, which related to distress and proximity seeking with caregivers (Poehlmann-Tynan et al., 2015). Still, children expressed happiness and love towards their parent who was incarcerated (Poehlmann-Tynan et al., 2015). This study included children 2-6 years (Poehlmann-Tynan et al., 2015); more research on older children’s experiences visiting parents in jail is needed to describe their experiences and provide recommendations for families and facilities.

Further, research on visits in the contexts of both foster care and parental incarceration is necessary to not only inform intervention efforts that may leverage visits, but also advise policymakers (macrosystem). For example, The Adoption and Safe Families Act of 1997 (PL
105-89) sought to improve children’s health and safety in foster care. This Act (PL 105-89) requires states to terminate parental rights for children who have been in foster care for 15 of the past 22 months (Miller, 2006; Swann & Sylvester, 2006). Although this legislation is meant to reduce children’s time in foster care, it prevents parents who are incarcerated from taking custody of their children or remaining in their lives, as the average time served is 150 months in state prisons and 121 months in federal prisons (Halperin & Harris, 2004; Mumola, 2000).

**Overview of the Current Bundled Dissertation and Studies**

The current scholarship seeks to expand upon the aforementioned research about children in the contexts of foster care and/or parental incarceration and address gaps in the literature. The first proposed study, “Developmental Differences in Children’s Visits with Their Parents in Jail,” addressed the aforementioned gap in the literature about quality of visits between children and parents in jail to inform intervention efforts and policy. This study expanded upon the limited, previous research of young children’s (2-6 years) experiences visiting a parent in jail (Poehlmann-Tynan et al., 2015) by including a sample of children aged 3-17 years. The study described children’s visits through quantitative (pre-identified behaviors measured by the Jail-Prison Observation Checklist; Poehlmann, 2012) and qualitative analyses (themes gleaned from observations of children’s visits with jailed parents) with a developmentally-informed ecological systems framework. This manuscript provided recommendations for correctional settings, caregivers, and parents who are incarcerated to support children.

The second study, “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care,” addressed a gap in the literature about visits with parents of children in both of the contexts of foster care and parental incarceration. This longitudinal study considered individual (i.e., race, gender, emotional and behavioral
adjustment) and microsystem factors (i.e., visits with parents who are incarcerated) to inform recommendations for correctional facilities and policymakers in the exosystem, macrosystem, and chronosystem contexts. This manuscript was recently published in Children Youth Services Review (Hindt et al., 2020).

The third study is titled “Ecological Disruptions and Well-being among Children in Foster Care;” this manuscript is currently under peer review. Most studies about children in foster care focus on the association between a specific loss and maladjustment. Few studies consider the greater ecological system, or the impact of multiple ecological disruptions on the well-being of children in foster care. Thus this final, longitudinal study sought to address this gap in the literature by examining the impact of multiple ecological disruptions (i.e., changes in or separation from siblings, friends, school, church, community) on children’s internalizing symptoms and externalizing behaviors over time.

The combination of these three studies increase understanding about the complex, interactive factors that impact the well-being of children in the contexts of child welfare and/or parental incarceration. Importantly, these studies yield recommendations for families, correctional and child welfare agencies, policymakers, researchers, and other stakeholders.
CHAPTER TWO
DEVELOPMENTAL DIFFERENCES IN CHILDREN’S VISITS WITH THEIR PARENTS IN JAIL

Introduction

The United States (U.S.) maintains the largest population of individuals who are incarcerated in the world (International Centre for Prison Studies, 2020). The majority of individuals incarcerated in the U.S. are parents of minor children (Maruschak et al., 2010; Shlafer et al., 2019; Shlafer & Saunders, 2017); approximately five million children in the U.S. have experienced the incarceration of a co-resident parent (Murphey & Cooper, 2015). This number underestimates the total impact of parental incarceration, as children with non-residential parents with a history of incarceration were not included (Murphey & Cooper, 2015). Parental incarceration is associated with risk factors for poor developmental outcomes in children, including separation from caregivers, unstable living situations, parental substance abuse, stigmatization, and poverty (Eddy & Poehlmann, 2019). Such risk factors relate to higher rates of physical health problems, academic challenges, externalizing behaviors (i.e., aggression, delinquency, substance use), and internalizing symptoms (i.e., depression, anxiety; Murray & Farrington, 2008; Murray et al., 2009; Wildeman & Wakefield, 2014). Of note, individuals of color are disproportionately represented in the criminal justice system due to racism and systematic oppression (e.g., Anderson, 2019; Lee et al., 2015; Wildeman & Wang, 2017).
Children of color not only experience the risks associated with parental incarceration but also systemic racism.

Given that parental incarceration serves as a risk factor for maladjustment, the experiences of children in the context of parental incarceration are worthy of further study to inform prevention, intervention, and anti-racism efforts. In particular, children’s visiting experiences in jails require study, as the majority of individuals who have been incarcerated have spent time in jail (Sawyer & Wagner, 2019). Yet, research with parents in jail is limited due to challenges with methodology and generalizability across jails with varying policies (Poehlmann-Tynan, 2015; Poehlmann-Tynan & Pritzl, 2019). Jails are locally-governed correctional facilities that confine people before or after judicial decisions or sentencing, along with those serving short sentences (Shlafer et al., 2015). Jail policies (e.g., allotted visit length, who can visit) vastly differ between states and even counties within the same state (Shlafer et al., 2015). Shlafer and colleagues (2015) surveyed a jail in each state based on the most populous county to describe policies on visits between children and their parents. Among the 50 jails surveyed, three did not offer information about visits via phone or website, and one jail did not allow children under the age of 18 years to visit (Shlafer et al., 2015). The majority of jails (60%) offered barrier visits (stations in which conversation with the parent occurs via holes in a partition, through Plexiglas, or phone hook-up), 20% provided on-site video visits, 16% used off-site video visits, and 14% offered face-to-face visits without a barrier, otherwise known as contact visits, although physical touching or holding children is often limited or prohibited (Shlafer et al., 2015). In addition to visits, children can typically maintain contact with their parents via phone and mail, though costs associated with these forms of contact are often prohibitive.
Some scholars and advocates have expressed concerns about visits, especially when children are unable to touch their parents and must interact through a phone or barrier (e.g., Arditti et al., 2003; Dallaire et al., 2015). Others have expressed concerns about security procedures (e.g., metal detectors, frisking) that can be frightening for children (e.g., Dallaire et al., 2012). Yet, studies have broadly highlighted that any form of visits with parents who are incarcerated is important for children’s emotional and behavioral well-being, development, and attachment to their parent (Hindt et al., 2020; Maldonado, 2006; Poehlmann-Tynan, 2015; Poehlmann et al., 2010; Poehlmann-Tynan et al., 2017; Shlafer & Poehlmann, 2010). Given these conflicting narratives in the literature, Poehlmann and colleagues (2010) concluded that the effects of parent-child contact likely depend on the quality of visits. Visits are worthy of further exploration given these discrepant findings and so that visits may be leveraged as a protective factor for children with parents who are incarcerated.

Poehlmann-Tynan and colleagues (2015; 2017; 2020) conducted the only studies to date that described the emotional and behavioral reactions of young children visiting their parents at jails that offered Plexiglas barrier, video, or face-to-face visits. Many children experienced long wait times prior to visits (ranging 0-65 minutes) and security procedures, which related to children exhibiting distress and seeking contact with caregivers (e.g., sitting on laps, clinging to the caregiver’s leg, holding hands; Poehlmann-Tynan et al., 2015, 2017). Still, all children non-verbally and verbally expressed happiness and loving sentiments upon seeing their parents in jail (Poehlmann-Tynan et al., 2015). Children relied on their caregivers’ support during the visit, as evidenced by proximity seeking and caregiver-facilitated interactions with parents in jail (Poehlmann-Tynan et al., 2015). Poehlmann-Tynan et al. (2017) found that children’s behavior toward caregivers during visits was related to their attachment security to the caregiver.
Proximity seeking and distress increased as children stayed longer in the facility (Poehlmann et al., 2015, 2017). Visits lasted 12 to 45 minutes (Poehlmann et al., 2015). Some ended abruptly, leading to children becoming distressed (Poehlmann et al., 2015).

While Poehlmann-Tynan and colleagues (2015, 2017, 2020) have provided valuable information about young children’s (ages 2-8) experiences visiting their parents who are incarcerated, little is known about developmental differences in children’s visiting experiences. In particular, no studies have directly examined visits among older children and adolescents and their parents who are incarcerated. As such, the current mixed-methods study sought to explore developmental differences in visit experiences among children aged 3-17 years in four jails located in the metropolitan areas of Minnesota and Wisconsin. This study aimed to describe children’s visiting experiences through quantitative analysis of the Jail-Prison Observation Checklist (JPOC; Poehlmann, 2012) and qualitative analysis of researchers’ observations of children’s visits with parents in jail. Bronfenbrenner’s (1979, 1986) developmentally-informed ecological systems model was used to situate qualitative findings in children’s wider ecological contexts.

**Theoretical Framework**

Bronfenbrenner’s (1977, 1979, 1994; Bronfenbrenner & Ceci, 1994) bioecological framework consists of the individual, microsystem, mesosystem, exosystem, macrosystem, and chronosystem. At the center of the ecological framework is the individual and their characteristics (e.g., age, gender, race, behavioral functioning; Bronfenbrenner & Ceci, 1994). Next, the microsystem involves proximal factors to the individual (e.g., relationships, jail, home; Bronfenbrenner, 1977, 1979, 1994). Separation from parents due to incarceration; relationships with parents who are incarcerated, caregivers, and correctional staff; and visiting experiences fall
within the microsystem (Poehlmann et al., 2010). Children’s individual characteristics interact with microsystem factors (Poehlmann et al., 2010); for example, younger children may be rely on their caregivers in terms of when and how they visit their parent (Enos, 2001; Poehlmann et al., 2010). They may require extra support and facilitation of the parent-child interaction (Poehlmann et al., 2010; Poehlmann et al., 2015; Poehlmann, 2020). In contrast, older children may be less reliant on their caregivers for visits and may even have contact with their parent without their caregivers’ knowledge (Shlafer & Poehlmann, 2010). Older children may require less caregiver facilitation of the parent-child interaction given more advanced cognitive and verbal skills (Shlafer & Poehlmann, 2010). Unlike younger children, older children may exhibit more behavioral regulation and less proximity seeking given developmental differences in response to stress (Poehlmann et al., 2010; Zimmer-Gembeck & Skinner, 2011).

Next, the mesosystem involves interactions between microsystems (e.g., relationships between parents who are incarcerated and caregivers, home-jail interactions). Interactions between children’s parents, caregivers, and correctional staff are relevant to the mesosystem (Poehlmann et al., 2010). These interactions may influence the quantity and quality of children’s contact with parents who are incarcerated (Enos, 2001; Loper et al., 2009; Poehlmann et al., 2010; Poehlmann et al., 2008). Relatedly, stress and discord in these relationships may impact children (Poehlmann et al., 2010; Poehlmann, 2005).

Third, the exosystem involves the greater social context that children do not actively participate in; the exosystem impacts children (e.g., corrections agencies, stigma, poverty). Correctional staffs’ views of parents and children in the context of parental incarceration are relevant to the exosystem (Poehlmann et al., 2010). Further, correctional facilities set rules about
visits that influence quantity and quality of visits, along with services for parents and families (Poehlmann et al., 2010).

Fourth, the macrosystem involves distal factors and cultural considerations (e.g., laws, disparities, racism; Bronfenbrenner, 1979; Garbarino & Abramowitz, 1992). State and federal policies that dictate quantity, quality, type, and cost of visit (i.e., phone and mail; barrier, video, face-to-face visits) impact children and their families (Poehlmann et al., 2010). In addition, policies that perpetuate disproportionate representation of individuals of color and low socioeconomic status in correctional systems fall in the macrosystem (Garbarino & Abramowitz, 1992; Lee et al., 2015; Wildeman & Wang, 2017).

Finally, the chronosystem consists of environmental and sociohistorical factors across the life course, or the history of macrosystems (e.g., attitudes of society, ideologies, mass incarceration; Poehlmann et al., 2010). The intergenerational transmission of educational and financial insecurity, incarceration, and foster care involvement in communities of color fall in the chronosystem (Wakefield & Uggen, 2010). Other chronosystem considerations include the increase in incarceration rates over the past 40 years (Bureau of Justice Statistics, 2016; Carson, 2015) and the length of time individuals are incarcerated (Maruschak et al., 2010). The longer parents spend incarcerated, the less likely they are to have weekly contact with their children (Maruschak et al., 2010).

**Current Study**

The current mixed-methods study of developmental differences in the experiences of 3-17-year-olds visiting parents in jail used quantitative data from the JPOC (Poehlmann, 2012) and qualitative data from researchers’ observations of children’s visits with parents in jail. This study aimed to: (1) examine quantitative data, specifically associations between children’s age (years)
and JPOC variables, and (2) describe qualitative findings in relation to the microsystem, mesosystem, and exosystem contexts. Macrosystem and chronosystem considerations are discussed (i.e., recommendations for jails, caregivers and parents, and policymakers).

Method

Procedures

Data were collected as part of an intervention study examining the well-being of children with parents in jail using materials from Sesame Street. The Institutional Review Boards at the University of Minnesota Twin Cities and University of Wisconsin Madison, along with the leadership from four metropolitan jails (Site 1: Minnesota jail with Plexiglas barrier visits, Site 2: Minnesota jail with video visits, Site 3: Wisconsin jail with Plexiglas barrier visits, Site 4: Wisconsin jail with Plexiglas barrier visits) approved this study. Older children (9-17 years) only participated at the two Minnesota sites due to systematic variation in study protocols at the Minnesota and Wisconsin sites. Parents who were incarcerated, non-incarcerated caregivers, and children participated in the study. Parents who were in jail were recruited by research staff through group and one-on-one meetings. Caregivers were recruited by outreach from research staff, weekly information sessions facilitated by research staff, brochures in the visiting waiting areas, or caregivers’ conversations with research staff in the waiting areas at the jails. One child per family participated in the study, though visits often included more than one child. Families had to be proficient in English to participate. Parents in jail and caregivers consented for their own and their children’s participation; children between 9-17 years also provided written assent. Caregivers received $50 for participating in the study, young children (3-8 years) were given stickers and a book, and older children and adolescents (9-17 years) were given a $10 gift card.
for their participation. Due to jail regulations, parents in jail were unable to be compensated for their participation.

**Participants**

The sample included 101 children between the ages of 3-17 years with a mean age of 7.32 years (SD = 3.64). Most of the sample (48.5%) participated at Site 1, 18.8% at Site 2, 18.8% at Site 3, and 13.9% at Site 4. The majority (70.3%) of children were between 3-8 years (i.e., younger children), while 29.7% were between 9-17 years (i.e., older children). The majority of the sample was female (52.4%). Most were Caucasian (42.2%), followed by African American (21.6%), Hispanic (19.6%), Multi-racial (14.7%), and Asian or Native American (2%). Most children (65%) were being cared for by their mothers. The majority, 89.4%, of parents in jail were fathers. See Tables 1 and 2 for additional demographic information.

Table 1. Descriptive Statistics for Categorical Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Younger Children (n = 71)</th>
<th>Older Children (n = 30)</th>
<th>Total Sample (N = 101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Gender (Girls)</td>
<td>46.6</td>
<td>66.7</td>
<td>52.4</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>38.9</td>
<td>50.0</td>
<td>42.2</td>
</tr>
<tr>
<td>African American</td>
<td>25.0</td>
<td>13.3</td>
<td>21.6</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>18.1</td>
<td>23.3</td>
<td>19.6</td>
</tr>
<tr>
<td>Multiracial</td>
<td>15.3</td>
<td>13.3</td>
<td>14.7</td>
</tr>
<tr>
<td>Asian and Native American</td>
<td>2.8</td>
<td>0.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Visited Parent in Past</td>
<td>84.7</td>
<td>80.0</td>
<td>83.3</td>
</tr>
<tr>
<td>Caregiver Relationship</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mother</td>
<td>71.2</td>
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<td>65.0</td>
</tr>
<tr>
<td>Grandmother</td>
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</tr>
<tr>
<td>Stepparent</td>
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<td>3.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Other</td>
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<td>6.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Grandfather</td>
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<td>2.9</td>
</tr>
<tr>
<td>Father, Aunt, or Uncle</td>
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<td>3.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Caucasian</td>
<td>African American</td>
<td>Hispanic/Latinx</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>56.1</td>
<td>28.8</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>60.0</td>
<td>13.3</td>
<td>16.7</td>
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<tr>
<td></td>
<td>57.3</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>30.0</td>
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<tr>
<td>Partial College/Specialized Training</td>
<td>35.6</td>
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<tr>
<td>High School</td>
<td>34.2</td>
<td>26.7</td>
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<td></td>
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</tr>
<tr>
<td>Some High School</td>
<td>13.7</td>
<td>3.3</td>
<td>10.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High</td>
<td>5.5</td>
<td>0</td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 7th Grade</td>
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<td>10.0</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>57.5</td>
<td>70.0</td>
<td>61.2</td>
<td></td>
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<tr>
<td>Public Assistance</td>
<td>74.0</td>
<td>56.7</td>
<td>68.9</td>
<td></td>
<td></td>
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<tr>
<td>Medicaid</td>
<td>92.3</td>
<td>73.1</td>
<td>86.8</td>
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<tr>
<td>Gender (Men)</td>
<td>91.9</td>
<td>83.3</td>
<td>89.4</td>
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<td>43.3</td>
<td>49.7</td>
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</tr>
<tr>
<td>African American</td>
<td>31.1</td>
<td>23.3</td>
<td>23.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>14.9</td>
<td>23.4</td>
<td>13.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiracial</td>
<td>6.8</td>
<td>3.3</td>
<td>6.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian and Native American</td>
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<td>6.7</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Education</th>
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<th></th>
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<tbody>
<tr>
<td>College Graduate and/or Beyond</td>
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<td>13.8</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial College/Training</td>
<td>31.5</td>
<td>27.6</td>
<td>30.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>45.2</td>
<td>44.8</td>
<td>45.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>17.8</td>
<td>6.9</td>
<td>14.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High or &lt;7th Grade</td>
<td>2.7</td>
<td>6.9</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed Month Prior to Arrest</td>
<td>48.6</td>
<td>46.7</td>
<td>48.1</td>
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Table 2. Descriptive Statistics and Bivariate Correlations for Continuous Demographic Variables (N=101)

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Child Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Caregiver Age</td>
<td></td>
<td>.35**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parent in Jail Age</td>
<td></td>
<td>.37**</td>
<td>.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Caregiver Monthly Income</td>
<td></td>
<td>.15</td>
<td>.22*</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Caregiver Hours Worked per Week</td>
<td></td>
<td>.78</td>
<td>-.15</td>
<td>-.05</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Length of Public Assistance Receipt</td>
<td></td>
<td>.35*</td>
<td>.41*</td>
<td>.22</td>
<td>-.21</td>
<td>-.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Parent in Jail Sentence Length (Months)</td>
<td></td>
<td>-.16</td>
<td>-.19</td>
<td>-.14</td>
<td>-.13</td>
<td>.03</td>
<td>-.19</td>
<td></td>
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<tr>
<td>8. Total People in Household</td>
<td></td>
<td>-.8</td>
<td>.03</td>
<td>-.01</td>
<td>.13</td>
<td>-.08</td>
<td>.00</td>
<td>-.15</td>
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<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>1</td>
<td>3-18</td>
<td>7.32</td>
<td>3.64</td>
<td>4-71</td>
<td>38.14</td>
<td>13.37</td>
<td>18-53</td>
<td>34.30</td>
<td>8.49</td>
<td>14400</td>
<td>1662.84</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>0-1000</td>
<td></td>
<td></td>
<td>0-75</td>
<td>37.05</td>
<td></td>
<td>3-276</td>
<td>59.00</td>
<td></td>
<td>5-15330</td>
<td>845.61</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1-1000</td>
<td></td>
<td></td>
<td>1-50</td>
<td></td>
<td></td>
<td>5-1000</td>
<td></td>
<td></td>
<td>1-1000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p<.05, **p<.01.
Measures

Caregivers and parents in jail completed surveys with demographic and incarceration-related information prior to the visit or immediately after the visit. With the permission of caregivers and parents in jail, two trained researchers observed visits. Visits occurred through Plexiglas barriers at three sites and closed circuit television, or video visits, at one site. The research assistants did not interact with the family, but they could hear and see the target child. Research assistants completed the JPOC (Poehlmann, 2012) as they observed the child’s visit with their parent in jail. Once interrater reliability was established in the correctional setting, one to two researchers completed the JPOC at each visit (Poehlmann, 2012).

The JPOC allowed researchers to document: (1) general information about the visit experience, (2) security procedures, (3) the visit with the parent in jail (i.e., child behaviors and emotions), (4) global facility ratings, and (5) global child ratings (Poehlmann, 2012). Specifically, general information included the visit format (i.e., Plexiglas, closed circuit TV); the number of adults and children in the waiting and visit areas; and the length of the wait prior to visiting and the length of the visit (Poehlmann, 2012). General information also included ratings of the following during the wait, security, and visit: interactions with staff on a scale from 1-5 (1 = negative to 5 = positive); child affect (i.e., tired, confused, somber, fearful, sad, happy, angry, serious/somber, self-soothing behaviors, anxious); and child attachment behaviors towards the caregiver (i.e., staying in close proximity to the adult, holding adult’s hand, clinging to or other physical contact, crying, whining, pushing adult away, avoiding adult, hitting adult; Poehlmann, 2012). Second, researchers documented security procedures (i.e., metal detector, frisking adults and/or children, removing clothing, search of bags, asking to see parent ID or child’s birth certificate; Poehlmann, 2012). Third, researchers rated child behaviors (i.e., paying visual
attention, verbalizing, listening, responding, avoiding, looking at other visitors or individuals who were incarcerated) and emotions (i.e., fearful, sad, happy, excited, somber, angry, loving, confused, crying, whining) toward the parent in jail during the visit (Poehlmann, 2012). Fourth, global child ratings included activity level on a scale from 1 to 5 (1 = *very low activity* to 5 = *very high activity*), behavioral dysregulation (1 = *very high behavioral regulation* to 5 = *very high level of behavioral dysregulation*), and emotional lability (1 = *very low emotional lability* to 5 = *very high emotional lability*; Poehlmann, 2012). Fifth, global facility ratings consisted of noise level (1 = *quiet* to 5 = *loud*), cleanliness (1 = *very clean* to 5 = *very dirty*), and whether child-friendly materials were present (Poehlmann, 2012). Researchers also wrote detailed, open-ended descriptions of their observations throughout the wait, security, and visit, which provided the qualitative data for this study (Poehlmann, 2012). Finally, the researchers asked the family if the visit was representative of most of their visits. Open-ended responses were recorded.

**Analytic Plan**

**Quantitative Analyses**

Quantitative data from the surveys and the JPOC were compiled and analyzed using SPSS v. 24. First, descriptive statistics and bivariate correlations described demographic characteristics and JPOC variables. Second, logistic regression analyses and bivariate correlations were employed to specifically examine associations between age (measured as a continuous variable in years) and categorical (logistic regression) and continuous (bivariate correlations) JPOC variables. In particular, separate logistic regression models were conducted for each categorical JPOC variable. The independent variable in each logistic regression was age (years) and the dependent variable was a categorical JPOC item. Bivariate correlations between age (years) and continuous JPOC variables were also presented.
**Qualitative analyses**

The detailed, open-ended descriptions of researchers’ observations during the wait, security, and visits were analyzed using a qualitative descriptive approach (Sandelowski, 2000). Qualitative descriptive methodologies allow for detailed summaries of narratives while staying true to the original data (Sandelowski, 2000, 2010). The present study sought to report children’s experiences visiting a parent in jail, with special considerations given to developmental differences in visits. Content analysis was employed to analyze these data. This form of analysis focuses on the content and contextual meaning of narratives to reveal explicit or inferred meaning (Hsieh & Shannon, 2005). Two coders independently read each narrative to get “a sense of the whole” (Sandelowski, 1995; p. 373). Then, the two coders developed meaning units, or groups of words or phrases that related to a main idea (Graneheim & Lundman, 2004). Next, the coders independently aggregated these meaning units into themes that epitomized the key details of the narratives (Graneheim & Lundman, 2004). The coders met with the principal investigator to discuss and come to consensus on the key themes, develop an understanding of how the themes encapsulated the overarching experiences of the children in the sample, and situate the themes within the ecological systems framework (Bronfenbrenner, 1977, 1997, 1994).

**Results**

**Quantitative Results**

**Demographic Information**

See Tables 1 and 2 for descriptive statistics and bivariate correlations for the demographic information. Bivariate correlations revealed significant, positive associations between the ages of the child, caregiver, and parent in jail. There were also significant positive correlations between the length of public assistance receipt and child age as well as with
caregiver age, in that older children and caregivers were more likely to receive public assistance for a longer time. Caregiver age was positively associated with income; older caregivers had higher incomes.

**Jail-Prison Observation Checklist**

See Tables 3 and 4 for descriptive statistics and bivariate correlations for the JPOC variables. Bivariate correlations revealed that more people present in the jail waiting rooms and visit areas was associated with longer wait times before children could visit their parents. Relatedly, more people present in the visit area associated with less time children spent visiting their parents. In terms of staff ratings, more positive interactions with staff while entering the facility were associated with longer visits. In contrast, positive interactions with staff during the visit related to shorter visits. Children with higher activity levels, emotional lability, and behavioral dysregulation had poorer interactions with staff. Facility ratings revealed that the noise level increased as the number of adults present increased. The facility was observed to be less clean when more people were present.

**Age and Jail-Prison Observation Checklist variables.**

**Child Affect and Behavior During Wait.** Logistic regressions were performed with age (continuous variable in years) as the independent variable and JPOC categorical items as the dependent variables (Table 5). Logistic regression revealed that older child age was associated with increased likelihood of exhibiting serious/somber affect during the wait prior to visiting, $\chi^2(1) = 10.56, p = .001$. Older age was also associated with lower likelihood of holding caregivers’ hands at entry, $\chi^2(1) = 15.68, p < .001$, and while waiting, $\chi^2(1) = 7.21, p = .007$; clinging while waiting, $\chi^2(1) = 6.85, p = .009$, and during visits, $\chi^2(1) = 9.20, p = .002$; whining during visits, $\chi^2(1) = 7.27, p = .007$; and pushing during visits, $\chi^2(1) = 7.73, p = .005$. There were
no significant differences in the length of the wait or visit, interactions with staff, other forms of child affect, and other child attachment behaviors toward caregivers by child age.

**Security Procedures.** Logistic regression analyses suggested that older children were more likely to be required to take off their shoes during security compared to younger children, $\chi^2(1) = 7.47, p = .006$. There were no other age differences in terms of security procedures.

**Visit with Parent in Jail.** Logistic regression revealed that older children were less likely to whine, $\chi^2(1) = 10.57, p = .001$, and less likely to avoid their parent in jail, $\chi^2(1) = 10.23, p = .01$, compared to younger children. Older children were also less likely to be distracted by others during the visit, $\chi^2(1) = 11.77, p = .001$. In terms of emotions, older children were less likely to exhibit confusion, $\chi^2(1) = 8.25, p = .024$, and anger, $\chi^2(1) = 8.80, p = .003$, towards the parents in jail. However, older children were more likely to cry when visiting their parent compared to younger children, $\chi^2(1) = 15.54, p = .030$. There were no significant associations between age and other ratings of behaviors and emotions toward the parents in jail.

**Global Child Ratings.** Bivariate correlations suggested that older children demonstrated less hyperactivity and behavioral dysregulation than younger children. There were no other associations between age and global child ratings.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Younger Children</th>
<th>Older Children</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n = 71))</td>
<td>((n = 30))</td>
<td>((N = 101))</td>
</tr>
<tr>
<td>General Information</td>
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<td></td>
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<tr>
<td>Type of Visit</td>
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<td></td>
<td></td>
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<tr>
<td>Plexi</td>
<td>85.1</td>
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<td>79.4</td>
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<td>Closed Circuit TV</td>
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<tr>
<td>Tired</td>
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<td>Confused</td>
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Mean 7.32 7.77 2.40 6.25 1.98 24.66 37.89 2.98 2.95 3.18 3.15 1.68 2.95 2.22 2.80
SD 3.64 8.84 3.63 5.98 2.76 24.19 21.76 0.85 0.77 0.78 1.03 0.89 1.00 1.13 0.99

Note. *p<.05, **p<.01. Min=Minutes. Interact=Interaction. Dysreg=Dysregulation. Interactions with staff ranged from 1=negative to 5=positive. Noise level ranged from 1=quiet to 5=loud. Cleanliness ranged from 1=very clean to 5=very dirty. Child activity level ranged from 1=very low activity to 5=very high activity. Child behavioral dysregulation ranged from 1=very high behavioral regulation to 5=very high level of behavioral dysregulation. Child emotional lability ranged from 1=very low emotional lability to 5=very high emotional lability.
Table 5. Logistic Regression Summary Table Examining Relations Between Age (Years) and Categorical JPOC Variables

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<td>0.90-1.12</td>
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<tr>
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<td>0.06</td>
<td>0.92</td>
<td>2.00</td>
<td>.157</td>
<td>0.81-1.03</td>
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<td>0.79</td>
<td>2.40</td>
<td>.122</td>
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<td>-0.01</td>
<td>0.07</td>
<td>1.00</td>
<td>0.01</td>
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<tr>
<td>Happy</td>
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<td>0.99</td>
<td>0.04</td>
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<td>1.27</td>
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<td>0.37-0.84</td>
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<tr>
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<tr>
<td>Handhold</td>
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<td>0.76</td>
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<td>0.59-0.96</td>
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<tr>
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<td>0.08</td>
<td>0.83</td>
<td>5.78</td>
<td>.016*</td>
<td>0.72-0.97</td>
</tr>
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</table>
Crying     -0.54  0.68  0.58  0.62  .432  0.15- 2.24  
Whining    -0.44  0.24  0.65  3.40  .065  0.41- 1.03  
Pushing    -0.26  0.25  0.77  1.14  .286  0.48- 1.25  
Avoiding   -0.10  0.10  0.90  1.11  .293  0.74-1.09  
Hitting    -0.31  0.21  0.74  2.20  .138  0.49- 1.10  

Visit Attachment
Proximity   -0.09  0.06  0.92  2.04  .154  0.81- 1.03  
Handhold    -0.48  0.26  0.62  3.37  .067  0.37-1.03  
Clinging    -0.19  0.07  0.83  7.94  .005**  0.73- 0.94  
Crying      -0.08  0.11  0.92  0.58  .448  0.75- 1.14  
Whining     -0.22  0.09  0.80  5.70  .017  0.67- 0.96  
Pushing     -0.39  0.19  0.67  4.57  .033*  0.47- 0.97  
Avoiding    -0.11  0.08  0.89  2.12  .146  0.77- 1.04  
Hitting     -0.29  0.19  0.75  2.36  .124  0.52- 1.08  

Visit with Parent in Jail
Child Behaviors
Visual      0.03  0.29  1.03  0.01  .930  0.59- 1.79  
Verbal      0.57  0.32  1.77  3.22  .073  0.95- 3.31  
Listen      14.78 1145.2 2623241.4 0.00 .990 0.00- 0.00  
Respond     14.78 1145.2 2623241.4 0.00 .990 0.00- 0.00  
Avoid       -0.16  0.06  0.85  6.56 .010*  0.76- 0.96  
Look at Others -0.20  0.06  0.82 10.24 .001** 0.72 0.93

Child Emotions
Fearful     -0.12  0.10  0.88  1.68 .195  0.73- 1.07  
Sad         -0.07  0.06  0.93  1.36 .244  0.83- 1.05  
Happy       0.33  0.17  1.39  3.68 .055  0.99- 1.95  
Excited     -0.08  0.06  0.93  1.56 .212  0.82- 1.04  
Somber      0.04  0.06  1.04  0.44 .509  0.93-1.16  
Angry       -0.48  0.22  0.62  4.80 .029*  0.40- 0.95  
Loving      0.06  0.07  1.06  0.72 .397  0.92- 1.23  
Confused    -0.19  0.08  0.83  5.08 .024  0.71- 0.98  
Crying      0.16  0.09  1.17  3.37 .066  0.99- 1.34  
Whining     -0.68  0.10  0.77  7.82 .005** 0.63- 0.92

Note. *p < .05, **p < .01. CI = confidence interval. Separate logistic regression models were run for each of the above dependent variables (independent variable = age [years]). Crying, whining, and pushing at entry were not included in logistic regression analyses given no children exhibited these behaviors.
Qualitative Results

Microsystem

Child Characteristics. Qualitative analysis revealed differences in children’s emotion regulation and behavioral functioning throughout the visiting experience. Younger children tended to exhibit more anticipation prior to visiting along with emotional lability, hyperactivity, and apparent negative (i.e., anxiety) or positive (i.e., excitement) emotions throughout the experience. Younger children also demonstrated more dysregulation (i.e., running) and disengagement before and during visits (i.e., coloring, reading). Self-soothing took the form of thumb sucking, hyperactivity, and imaginative play. In general, younger children exhibited less stamina for long waits and visits. They were more distracted by the jail environment and other visitors compared to older children. For example, the following described a three-year-old girl during a long visit: “The child starts to get restless towards the end of the visit and engages in self-talk…The child plays in an empty Plexiglas stall, sighs, and shouts, “Dada!” at the incarcerated parent.”

Older children were more likely to demonstrate flat affect and boredom, along with less emotional lability. For example, the following described a 14-year-old female, “[She] seems kind of bored…very still, stoic, doesn’t move around a lot, very still and somber. Tends to have shorter responses…[She] leans against a wall and is short with her mom.” Dysregulation and disengagement differed from younger children, as older children tended to silently disengage, look away, and look at their hands. Older children were more likely to verbally insult adults than younger children. Self-soothing among older children consisted of playing with their hair or hands, looking at their phone (at sites where phones were allowed), or tapping the table. Older
children demonstrated more stamina for long waits and visits. Yet, similar to younger children, they occasionally became distracted by the jail environment and other visitors.

**Caregiver Support and Attachment Behaviors.** Regardless of age, it was noteworthy that many caregivers used developmentally appropriate ways to support their children emotionally with comforting words and physically via hand-holding, hugs, and other forms of affection. For example, the following was written about an 8-year-old’s experience with her caregiver as she waited to visit her father, “The stepmom says [there is] no reason to be nervous. The child braids her hair while she stands next to her stepparent and waits. [The] stepmom asks the child questions about her book and rubs her back.”

Whereas most caregivers supported their children, regardless of age, there were some developmental differences in how children sought support. Younger children were more likely to seek proximity to their caregivers. For example, the following described a 7-year-old boy’s experience: “[The] child hugged [his] grandmother and uncle while grandmother talked to the inmate…Child gives uncle bunny ears…Child is leaning on grandma’s knees and stomach.”

Older children were less likely to seek proximity to their caregivers. Instead, they were more likely to withdraw from the family. However, some older children took a leadership role in the family and provided support to their caregivers and/or siblings. For example, a 12-year-old girl “encouraged her younger sister to talk; her little sister was shy.”

**Attachment Behaviors to the Parent in Jail.** Across ages, children’s attachment behaviors toward their parents in jail were also evident, despite the limitations of the barrier and video visits. The parent-child dyads had typical conversations about everyday topics (e.g., school, sports, home life). For example, the following described an interaction between an 8-year-old girl and her father in jail: “…they talk about a tooth that fell out. She smiles and looks at
mom. She opens her mouth and shows dad. The dad jokes with her about something, points, and laughs.” Parents in jail often supported their children in problem solving and discipline. For example, the following described an interaction between a 15-year-old and her father in jail:

The child started talking about some social problems she is having at school – girls talking about her. Then she started crying. Dad talked to her for a long time and she just listened. After a while, she composed herself. Dad seemed to be encouraging her.

Both children and their parents demonstrated verbal (e.g., “I love you,” “I miss you”) and nonverbal forms of affection (e.g. placing hands on the Plexiglas, playing games through the glass). For example, an 8-year-old girl was described as follows: “Dad starts crying. Child continues to listen and write with her hand on the window. She says I miss you and I wish I could hug you. She hugs through the window.”

In terms of developmental differences, younger children were more likely to seek physical contact with their parent who was in jail. Many placed their hand on the Plexiglas or even sat on the table or shelf, as close to the glass as possible. For example, the following described a 3-year-old: “Child stands and sits on the Plexiglas ledge. Child puts their nose on the glass to the parent. The parent does the same and the child slaps the glass twice.” The following describes another 3-year-old: “Doesn’t seem to understand the concept of phone to communicate with dad and wanders a lot. Trying to touch wall to get closer to incarcerated parent, not sure if he understands Plexiglas.”

**Family Interactions.**

**Structure of Visits.** Families exhibited various patterns in their visits, which tended to fall in one of the following four categories: turn taking, caregiver-focused, target child-focused, and other children-focused. First, some families took turns. For example, one family noted on the outset that each individual would have ten minutes to speak with the parent who was in jail.
Another example is illustrated by a 9-year-old boy and his siblings as they visited their mother in jail, “The boys started playing rock, paper, scissors to determine who gets the phone next.”

In contrast, other families tended to have one individual who was the focus of the visit. For example, the following described a 9-year-old girl: “Mom was talking for a long time and child was getting impatient. Started asking many questions and whining.” In another example, the sibling of a 6-year-old was the focal point of the conversation: “The older child started talking to dad right away…The dad tried to engage the target child but the older child kept talking over again….Older child really vied for Dad’s attention. When Dad spoke to target child, older child would jump in and answer.”

Facilitation of Interactions. Caregivers and older siblings often facilitated interactions between younger children and their parents who were in jail. For example, the following was written about an 11-year-old girl: “Caregiver tells the child to tell her mother about cats; she does, standing and leaning against the wall while talking to Mom.” Younger children in particular often needed more redirection when they became distracted or exhibited dysregulation, whereas older children were more capable of sustaining longer, independent conversations with the parent in jail.

Sibling Interactions. Lastly, sibling interactions were salient. Siblings often bothered one another or had disagreements about turn taking. Arguments were especially noteworthy when there were age differences between siblings. On a few occasions, visits ended early when a younger sibling was dysregulated or tired. For example, the following described a 12-year-old’s experience: “Mom busy comforting younger sister. Visit ended because little sister was tired.”
In addition, older siblings in particular often took on caregiving roles when they had younger siblings. For example, the following described a 12-year-old girl supporting her younger siblings:

Target child interacted with the incarcerated parent and assisted younger children in interacting...The family, including the target child, played with the baby a lot and passed him around, held him up for the incarcerated parent to see. The target child left [the] visit to manage other children, but came back when she had them under control...When incarcerated parent said, “I love you,” to other kids, the target child encouraged them to say it back to him...

**Jail Talk.** Another noteworthy theme involved conversations related to the correctional environment. Many times, the caregiver or the parent in jail explained aspects of the jail environment (e.g., metal detector) to children, often in developmentally appropriate ways. For example, the following described an 8-year-old’s experience: “A man in the next booth had to leave because the man ‘lost his visit.’ Mom explains what that means to [the children], you are naughty if you lost a visit.” Children often asked questions or made comments about jail, such as, “When are you getting out?” and “I’m going to break you out!” Younger children were observed to ask questions about life in jail, including, “Where do you eat and sleep?” and “What do you do here?” Both younger and older children asked parents about their friends in jail.

Among young children in particular, there was occasionally ambiguity about the jail setting. Some children were never told that their parent was in jail. For example, the following was written about a 4-year-old girl: “The child asks her mom, ‘Mommy, is this daddy’s work?’ Mom responds, ‘Yes!’” There were also instances when the topic of jail was used as a warning. For example, the following described a 4-year-old’s experience, “Mom threatens child: ‘If you get up from this chair and the lady guard sees you, she is going to call the police and they are going to come through the door and get you.’”
Saying Goodbye.

*Reasons Visits End.* A salient aspect of visiting was the moment children told their parents in jail goodbye. The following were reasons visits ended: the target child or sibling became dysregulated, the caregiver wanted the visit to end, the family ran out of time (i.e., 30 minute video visit, end of visiting hours), or the child needed to use the restroom. At the facilities with barrier visits, the restrooms were located in the nonsecure waiting area. As such, if anyone had to leave the secure visiting area to go to the bathroom, they were not allowed to reenter to visit again. This was particularly challenging for young children.

*Positive or Neutral Endings.* Visits were observed to have either positive/neutral or negative endings. When endings were considered positive, children often had a chance to say goodbye. Many sought physical contact (i.e., hands on the Plexiglas). Caregivers often facilitated the end of visits and provided warnings that the visits would end soon.

*Negative Endings.* Other visits were observed to end negatively, often when they ended abruptly without notice. For example, the following was written about a 14-year-old girl visiting her father: “The visit ended kind of abruptly because visiting hours were over. Everyone said, ‘I love you.’ Child teared up at the end of the visit.” There were occasionally disagreements between caregivers and siblings about when visits should end. Some caregivers were observed to argue with the parent in jail or become emotionally overwhelmed, which often escalated situations and led to the family leaving the visit earlier than expected. Some children argued when they did not want the visit to end. This led to some tantrums among younger children. In contrast, older children often became teary and withdrawn, but no meltdowns were observed. Some children were withdrawn and ignored their family throughout the visit, but then became
upset when they were not ready to leave. For example, the following described a 3-year-old’s experience:

    Child is completely nonverbal through entire visit. As Dad gets up to leave, the child cries and screams...Mom begins to cry, because child is crying. Child has looked blankly through Plexiglas up until it is time to leave – totally loses it. Is crying all the way through the lobby until he left.

**Mesosystem and Exosystem**

**Caregiver Stress.** Caregivers’ and other family members’ anxiety around the visiting procedures was noteworthy. In particular, there was anxiety and distress when procedures were unclear. For example, the following described an 8-year-old and her family during a barrier visit:

    They had trouble getting the phones to work. Both adults got very frustrated. Eventually they started shouting through the glass. Dad was really escalated [frustrated]. Mom eventually got so frustrated that she called him an [expletive], gave him the finger, and told him to get over himself...Phones still didn’t work. They talked through the slot for a few more minutes.

**Parent-caregiver Interactions.** Related to the previous quote, there were times when the caregiver or parent in jail became emotional, but this was not explained to the child. When this occurred, the child, regardless of age, often became confused, upset, and withdrawn. For example, the following described a 10-year-old’s experience: “Caregiver was very upset, started crying. Target child moved away from caregiver, avoided looking at her, then started crying as well. [She] turned toward wall in order to hide her tears. All of the other children got sad and quiet too. Target child took a long time to compose herself.”

    Parents and caregivers occasionally had conversations that might be considered inappropriate for children. For example, the following was written about a 14-year-old girl’s experience, “The caregiver shared that the parent has been on drugs…The caregiver becomes emotional as she mentioned it has been a year since having a ‘clean’ conversation.” While this
may have been appropriate depending on the maturity of this adolescent, other conversations were deemed inappropriate for the child’s age. For example, the following interaction occurred between a 5-year-old’s parents:

The adults talked about an upcoming move. Mom told incarcerated parent that he could not move in with her when he is released…Mom got very impatient and asked the incarcerated parent if he knows a certain woman. Then said, “She says one of her kids is yours.”

**Corrections Environment.** Issues with procedures and policies in the jails were observed. Many families struggled with the lockers in the waiting room where they had to leave their belongings prior to visiting. This frequently led to anxiety, even prior to the security and visit. Moments of distress were particularly salient when many children were not able to visit their parent in jail because they were not on the visit list, they were not a biological child, the caregiver was not a legal guardian, the caregiver was not on the visit list, or the facility was on lockdown. In addition to these issues, many families endured long waits prior to visits. These long waits occasionally related to miscommunication issues. For example, one parent in jail was getting a haircut and staff forgot to call him for the visit, leading to a long wait for the family.

Interactions with staff were also noteworthy. Some staff had positive interactions with families, including patience with families and young children’s range of behaviors. Other guards let things “slide.” While this helped families in some situations, this also led to inconsistencies between visits and among staff, leading family members to be confused about various policies and protocols when they came back to visit. Other families had negative interactions with staff. For example, the following was written about a 4-year-old, “The child was very happy and active during security; the child waved to the guard. The staff reminded the grandma that kids can’t be running around.”
In terms of security, the machinery, noises and seriousness of the procedures sometimes increased children’s anxiety or concern. For example, the following described an 8-year-old’s experience: “Child and Grandma were explaining the metal detector to the little brother. Child seemed briefly worried when he realized Grandma’s walker was metal but Grandma assured him it would be okay.”

The visiting settings also presented challenges for families. Visits typically occurred in tight spaces, which were uncomfortable for large families and mobile children. Many children fell off of the visiting stools: “Child fell off stool at start of visit, comforted by Grandpa. Child did not want to talk to Dad, Dad obviously concerned.” As noted earlier, there was no restroom in the visiting areas. As such, visits had to end when children needed to use the restroom.

Issues with technology were also common. Some families were unsure how to use the phones (Plexiglas visits) or video system during visits. Young children often could not reach the phones. For video visits, the headsets rarely fit the children. Even when children were able to access the phones or headsets, the volume was often too loud or too quiet. This was particularly challenging for children with special needs or sensory issues. Occasionally, the phones in Plexiglas visits did not work. Of note, the video system in every video visit that was observed had at least one technological issue; the headset or sound did not work or the video system randomly shut off in the middle of the visit.

In general, the jail environment was occasionally messy and crowded. In one of the jails, the waiting area was often occupied with people without homes and seeking shelter. At all of the jails, there were incidents in which visitors were described as loud and had inappropriate conversations, which sometimes upset children. On the other hand, three of the jails had appropriate materials for children (i.e., books, stickers, and/or coloring books); two had these
materials in the waiting room and one had materials in the visit area. These objects were helpful during waits and visits; they were objects for the parent in jail, caregiver, and child to focus on and normalized the situation. These materials were also useful when children did not want to engage in the visit. Rather than running around the visiting area and risking expulsion, children could occupy themselves with these materials.

**Discussion**

The present mixed-methods study sought to describe the experiences of children visiting parents in jail, with special attention to age-related developmental differences. This goal was achieved through analysis of quantitative data from the JPOC (Poehlmann, 2012) and qualitative data from researchers’ observations of children’s visits with their parents in jail. Of note, the demographic data from the present study aligned with previous work highlighting the disproportionate representation of families of color in the contexts of correctional systems. Although the majority of the sample was Caucasian, individuals who were African American, Latinx/Hispanic, Multiracial, and Asian or Native American were overrepresented in the present sample relative to the populations of Minnesota and Wisconsin (United States Census Bureau, 2019).

The quantitative results revealed that the number of people present for visits and interactions with staff related to visit length. Positive interactions with staff during entry to the facility related to longer visits. In contrast, positive interactions with staff during the visit were associated with shorter visits. Staff may have been more involved when visits were cut short, offering more opportunities for positive interactions. Children’s behaviors were associated with staff interactions; children with high activity levels, emotional lability, and behavioral dysregulation had poorer interactions with staff. Further, younger children were more likely than
older children to exhibit such behavioral and emotional challenges. Young children may require more support in terms of regulation in the jail setting to avoid conflict with staff (Poehlmann et al., 2010; Poehlmann et al., 2015; Poehlmann, 2020), especially given interactions with staff may influence the quantity and quality of children’s visits with parents (Enos, 2001; Loper et al., 2009; Poehlmann et al., 2010; Poehlmann et al., 2008).

Findings about the emotional and behavioral functioning of younger children aligned with Poehlmann and colleagues’ (2015, 2017) observations of 2-6-year-olds visiting their parents in jail. In the present study, older children were less likely to exhibit behavioral and emotional challenges along with attachment-seeking behaviors with caregivers compared to younger children. Younger children more overtly exhibited negative and positive emotions throughout the visit experience. In contrast, older children were more likely to exhibit serious/somber affect. These observations align with previous research suggesting that older children are less reliant on their caregivers for support in regulating emotions and behavior, given developmental differences in responses to stress (Poehlmann et al., 2010; Shlafer & Poehlmann, 2010; Zimmer-Gembeck & Skinner, 2011). Yet, older children were more likely to cry during visits, which suggested emotional distress that may not have been apparent during the entire visit experience. This finding highlights the importance of providing emotional support to older children, even when they appear less reactive than younger children.

The qualitative analyses were consistent with quantitative analyses and the literature regarding age differences in emotional and behavioral regulation (e.g., Poehlmann et al., 2010; Zimmer-Gembeck & Skinner, 2011); older children demonstrated more regulation compared to younger children. Relatedly, age differences among siblings within families presented some challenges. Many siblings of varying ages struggled to share time with their parent and
determine when the visit would end. Older siblings often took on caregiving roles in the visit context. While research on other populations (e.g., foster care) has extensively examined the caregiving role of siblings (e.g., Herrick & Piccus, 2005), few studies have considered caregiving roles that older siblings may possess when a parent is incarcerated.

Regardless of age, qualitative findings revealed that caregivers generally supported children in the jail setting. Previous research highlights the importance of caregiver warmth and responsiveness, and the impact on behavioral and emotional adjustment among children in the context of parental incarceration (Mackintosh et al., 2006). Importantly, children of all ages and their parents in jail continued to maintain typical, positive parent-child interactions despite the barriers of incarceration. Such positive interactions may relate to children’s emotional well-being and maintenance of their relationships with their parents in jail (Maldonado, 2006; Poehlmann-Tynan, 2015; Poehlmann et al., 2010). Overall, these qualitative and quantitative results informed recommendations related to the macrosystem and chronosystem, or more specifically, recommendations for correctional facilities, families, and future research.

**Macrosystem- and Chronosystem-Level Recommendations**

**Recommendations for Correctional Systems**

Correctional facilities should put forth efforts to create an environment suitable for families, such as those outlined by Peterson and colleagues (2019) in the *Model Practices Guide for Parents in Prison and Jail: Reducing Barriers to Family Connections*. First, facilities should offer clear communication about visits on their websites, including information about visiting with children. Facilities may consider offering specific visiting hours for families, but it would be important that families also be allowed to visit at other times to avoid being overly restrictive. Dedicated family visiting may also decrease the likelihood that children would be confronted
with inappropriate content, which occasionally happened in the current study (e.g., other visitors speaking with profanity, visitors having contentious visits). Correctional staff who prefer working with children and families could work during these family hours. In general, correctional staff would benefit from education and training about child development. On site, facilities could create a child-friendly visiting environment, including child-friendly materials (e.g., books) and settings (e.g., pictures on the walls). Staff should be encouraged to use clear communication with one another and visitors. For example, it would be useful if staff could explain long wait times to families, within reason. Staff could be reminded of policies and encouraged to consistently implement policies to avoid confusion and promote equitable treatment across families.

Of note, correctional settings should seek to improve technology, given the pervasive technological issues in this study. Phones in barrier visits often malfunctioned or families were unsure how to access the phones. The video visits had at least one technological issue (i.e., shut off early, never turned on) in every observation in this study. These findings are particularly noteworthy given facilities pay for these contracted services, as do families visiting in some facilities.

From a policy perspective, stakeholders should consider how policies create barriers to visits for families. For example, sites had different rules about who could bring children for visits (i.e., biological parents, legal guardians), which children could visit parents in jail (i.e., age requirements, biological children, adopted children) and what materials were required (i.e., birth certificate). Further, staff inconsistently implemented these policies, leading to confusion and frustration among families. Correctional facilities are encouraged to reduce limitations placed on families regarding who can bring children for visits and which children can visit. This is
particularly important given families of color are disproportionately represented in correctional settings (Lee et al., 2015; Wildeman & Wang, 2017). Within communities of color, social support networks often support child development (e.g., Chatters et al., 2002; Ebaugh & Curry, 2000; Gaylord-Harden et al., 2007). Placing limitations on who can bring children for visits and which children can visit could negatively impact children’s relationships with parent figures who are incarcerated. Many children are raised by caregivers who are not their biological parent, but they still have an important relationship.

Lastly, facilities could consider policies regarding the format of visits. If their facilities allow, contact visits could be prioritized. People who are incarcerated have reported preferring face-to-face visits (Celinska & Siegel, 2010; Foster, 2012; Mignon & Ransford, 2012). Studies also suggest that face-to-face visits may normalize the visiting experience and make children feel more comfortable (Nesmith & Ruhland, 2008; Poehlmann et al., 2010). Future research on visit format and child well-being is warranted.

**Recommendations for Caregivers and Parents**

The following recommendations may be difficult to enact in reality, given the jail setting and caregiving can be unpredictable and stressful. When possible, preparation for visits can be helpful (Poehlmann & Pritzl, 2019). Caregivers could prepare for potentially long wait times with toys, particularly for younger children. Children could also be prepped prior to visiting. Caregivers could explain jail procedures and the setting, to the best of their knowledge, with the level of detail depending on the maturity and age of the child. Older children may be able to manage more details about the jail environment. Allowing children to view pictures of the correctional facility on the website prior to visiting can help children know what to expect. Of course, this can be challenging when many jail websites lack information (Shlafer et al., 2015).
In general, families should be prepared for the unexpected (i.e., miscommunication, technological issues, lockdown).

It is also important for caregivers to allow themselves time to feel prepared and reflect on their emotions. While it is reasonable and expected that caregivers may feel various emotions during the visit, parents may explain their feelings and the circumstances in a developmentally appropriate manner to reduce their children’s concern and the ambiguity around such situations. Caregivers may consider having separate visits for themselves and their children, if possible. However, separate visits can be challenging when families in the context of parental incarceration experience high rates of adversity and poverty, which relates to less time for visits with busy work schedules and less access to affordable childcare (e.g., Eddy & Poehlmann, 2019). Further, correctional policies may make multiple visits harder. When separate visits are unnecessary or not practical, families could consider planning how to share the visit time prior to the visit.

Caregivers may also consider how to support their child’s behavioral regulation during the visit. Caregivers and parents could identify and respond to their children’s and their own emotions. Caregivers may also facilitate parent-child interactions without forcing them. If possible, caregivers and parents could try to allow time to say goodbye. It can be helpful for the family to process the visit and related emotions following the visit. Caregivers may also consider a reinforcement or reward (e.g., if you remain seated for X amount of time, you earn a sticker; after X stickers, we will get to choose the book we read before bedtime) for children’s cooperation during the visit.
Limitations

Limitations of the study must be considered. Families in the present study occasionally talked about the research project (i.e., compensation, Sesame Street), which did not represent a typical interaction in the visit setting. Children occasionally sought interactions with the researchers as they observed; a few demonstrated indiscriminate friendliness towards the research staff despite researchers ignoring bids for attention and redirecting when appropriate. Families were occasionally distracted by the researchers (e.g., asked what they were writing, looked in their direction, asked to use their paper and pen). Still, most seemed unaware of or actively ignored the researchers’ presence, as evidenced by the discussion of serious subjects and caregiver reports that the visits were representative of other visits. Further, there were plenty of other distractions in the jail setting; if a child wanted to ignore the visit, they found ways to do so regardless of the researchers’ presence.

Another limitation related to selection effects. The sample only included families present at jails for visits. The sample did not include families who may have been economically underresourced or lived too far away to visit, which is common among this population (Christian, 2005; Christian et al., 2006; Poehlmann et al., 2010). Further, the sample did not include older children who may have strained relationships with their parents in jail or caregivers, and therefore refused to visit. In addition, the sample did not include caregivers who had particularly conflictual relationships with the parents in jail and did not bring the children for visits. Instead, the present sample may have only included families with relatively positive relationships, which may explain why positive aspects of visits were noted throughout. Future research should consider families who do not visit parents in jail regularly, and relatedly, children’s well-being. In addition, older children were only enrolled at the Minnesota sites,
which limited generalizability to other locations and comparisons with children recruited from the Wisconsin sites.

Conclusions

In sum, this study offers the first observational study of older children and adolescents’ experiences visiting their parents in jail, along with a comparison to younger children’s experiences. This study yielded important recommendations for correctional facilities, families, and future research. Future research should relate the quality and quantity of visits with children’s short- and long-term outcomes. Research should also explore reasons that prevent families from visiting and the related impact on children.
CHAPTER THREE
VISITS WITH FATHERS INVOLVED IN THE CRIMINAL JUSTICE SYSTEM AND BEHAVIORAL OUTCOMES AMONG CHILDREN IN FOSTER CARE

Introduction

The United States (U.S.) maintains the largest incarcerated population in the world (International Centre for Prison Studies, 2020). Most of these individuals are parents of color, specifically fathers; approximately five million children have experienced the incarceration of a co-resident parent at some point in their lives (Glaze & Maruschak, 2010; Murphey & Cooper, 2015). Children with parents who are incarcerated are disproportionately involved in the child welfare system (Berger et al., 2016; Phillips et al., 2004; Turney & Wildeman, 2017; Wildeman et al., 2018). Research with a nationally representative sample revealed that 40.1% of children in foster care had experienced the incarceration of a parent at some point in their lives (Turney & Wildeman, 2017). Children may come to experience both child welfare involvement and parental incarceration given similar contexts (i.e., poverty, racism, systematic discrimination, substance use, domestic violence) put families at risk for these experiences (e.g., Seymour, 1998). Less often, children enter foster care when their primary caregiver becomes incarcerated. This becomes a dependency case in which the only entity available to care for the child is the foster care system. Estimates suggest that 7% of children entered foster care in 2018 as dependency cases because of parental incarceration (United States Children's Bureau, 2019). Children may be
more likely to enter foster care as dependency cases when a mother is incarcerated versus a father (e.g., Glaze & Maruschak, 2010).

Despite the overlap between child welfare involvement and parental incarceration, little is known about children who are affected by both experiences. The present study examined the relation between paternal criminal justice involvement (i.e., biological fathers incarcerated upon children’s entry into foster care) and internalizing symptoms and externalizing behaviors among children who entered foster care due to maltreatment (i.e., neglect and/or physical, sexual, and/or emotional abuse) or as dependency cases, with special consideration of gender and racial differences. Further, this study investigated whether in-person visiting with fathers served as a protective factor.

**Foster Care Involvement and Parental Incarceration**

Research about children’s experiences in both of the contexts of parental incarceration and foster care is limited but worthy of additional study, given the potential for cumulative risk and poor emotional and behavioral outcomes. Available research suggests that children in both of these contexts, versus one, experience more challenges; Phillips and colleagues (2004) revealed that parents who were incarcerated and had children in foster care were younger and more likely to have experienced substance abuse or other psychiatric disorders compared to those without children in foster care (Phillips et al., 2004). Parents who were incarcerated and who had children in foster care also exhibited histories of poor parenting (e.g., harsh discipline; Phillips et al., 2004). Relatedly, children in foster care with parents who were incarcerated demonstrated higher rates of adverse developmental outcomes, including clinically significant emotional and behavioral problems (Phillips et al., 2004).
**Foster Care**

Given the lack of additional research about children in the contexts of foster care and paternal incarceration, we turn to research within these distinct contexts. Maltreatment and child welfare involvement have been linked to children’s emotional and behavioral problems (e.g., Braga et al., 2017; Vasileva & Petermann, 2018). Children may lack the cognitive skills to process maltreatment and are still undergoing physiological and social-emotional development; maltreatment inhibits their ability to cope with stressors and may result in emotional and behavioral maladjustment (Lansford et al., 2002). In addition, maltreatment often co-occurs with family dysfunction (Bai et al., 2016) and can negatively impact children’s attachment schemas, or trust that they will be cared for in a warm and responsive manner (Ainsworth, 1989; Sroufe, 1989). Children learn to suppress their needs and emotions, which can lead to internalizing symptoms and externalizing behaviors (Crittenden & Ainsworth, 1989; Howe, 2005).

**Parental Incarceration**

Paternal incarceration in itself can be associated with negative emotional and behavioral outcomes among children. Researchers have theorized four, interrelated ways in which paternal incarceration relates to children’s well-being: attachment insecurity, incarceration-specific events, ambiguous loss, and stigmatization. First, insecure attachment may develop with separation from fathers and feelings of isolation (Murray & Murray, 2010). A study by Shlafer and Poehlmann (2010), which included a sample of primarily fathers who were incarcerated, revealed that children without contact with their incarcerated parent had more feelings of alienation than children with contact. Paternal incarceration can further impact children’s attachment to remaining caregivers, as dynamic living situations and stress can perpetuate a general sense of insecurity (Murray & Murray, 2010).
Second and relatedly, paternal incarceration can alter children’s perceptions of their fathers (Murray & Murray, 2010), particularly when children witness incarceration-specific events (i.e., criminal activity, arrest, court proceedings). These events can be stressful and confusing for children (Dallaire & Wilson, 2010). Thus, incarceration-specific events have been linked to emotional and behavioral problems cross-sectionally and over time (Dallaire & Wilson, 2010; Dallaire et al., 2014). In addition, children may model their fathers’ behavior, especially if they are witnessing these incarceration-specific events, which results in increased externalizing behaviors (e.g., substance abuse, aggression; Jones, 2002; Weintraub & Gold, 1991).

Third, family members may not discuss fathers’ incarceration due to stigma, which can also negatively impact children’s representations of their fathers and ability to process their emotions (Murray & Murray, 2010). Further, qualitative studies have revealed that many children keep their parents’ incarceration status a secret to avoid bullying; peers have been documented to target those with incarcerated parents (Boswell, 2002; Nesmith & Ruhland, 2008; Shlafer & Poehlmann, 2010). Ultimately, externalizing behaviors may be a natural and protective response to stigma and bullying (Murray & Murray, 2010; Phillips & Gates, 2011).

Finally, lack of communication about paternal incarceration can relate to ambiguous loss, or the unclear physical or psychological loss of a loved one (Boss, 2004). Children may be uncertain about their father’s role in the family and begin to question their own belonging to the family (Bates et al., 2003). Further, fathers have noted that prior to incarceration, their roles involved providing protection, support, guidance, and discipline to children (Arditti, 2005). The separation caused by incarceration can make it difficult to maintain the family system, especially when fathers can no longer fulfill their typical role in the family and other caregivers dictate the child-father relationship (Dyer et al., 2012). Ambiguous loss has been linked to internalizing
symptoms and externalizing behaviors among children in the context of parental incarceration (Bocknek et al., 2009).

In sum, paternal incarceration and related attachment insecurity, incarceration-specific events, stigma, and ambiguous loss have been linked to the development of children’s internalizing symptoms and externalizing behaviors. To further clarify the relation between paternal incarceration and emotional and behavioral concerns, it is important to consider gender and racial differences.

**Paternal Incarceration and Gender differences.** Some studies have suggested that paternal incarceration can affect boys and girls differently (Gabel & Shindledecker, 1993; Geller et al., 2009; Wildeman, 2010). For example, drawing on teachers’ reports of children with fathers who were incarcerated, one study found that boys were more likely to exhibit externalizing behaviors and girls were more likely to exhibit attention problems (Gabel & Shindledecker, 1993). As a caveat, the study drew on a small sample of subjects and did not control for other variables related to paternal incarceration (Gabel & Shindledecker, 1993). A more recent investigation of children with fathers who were incarcerated controlled for confounding variables, such as parental drug use and socioeconomic status, and still found that boys were more likely to exhibit externalizing behaviors than girls (Geller et al., 2009).

In a large sample of children with fathers who were incarcerated, children’s mothers reported higher rates of internalizing symptoms among girls compared to boys (Kinner et al., 2007). These gender differences can persist into adulthood. For example, research has shown that young women with fathers who were incarcerated reported higher rates of internalizing symptoms and depression than young men with fathers who were incarcerated (Roettger & Boardman, 2012).
The differential impact of paternal incarceration on behavioral adjustment among boys and girls may be explained by gender differences in response to stress. With many stressors, boys are more likely to present with externalizing behaviors, while girls may exhibit internalizing symptoms (Cummings et al., 2000). This may be due in part to gender stereotypes that promote agency and competition among boys, and interpersonal communication among girls (Cummings et al., 2000). The role that fathers play in the lives of sons may also explain gender differences (Lundberg et al., 2007). Fathers are often more involved with the caregiving and discipline of sons (Lundberg et al., 2007). Thus, the loss of fathers may be particularly difficult for boys and result in externalizing behaviors (Geller et al., 2012). In addition, social learning theory (e.g., Bandura & Walters, 1959) suggests that children model, or observe and imitate parents’ behaviors. Children are more likely to identify with and model their same-gender parents’ behaviors (Chang et al., 2003). This gender identification effect has been shown to be most prominent among fathers and sons (Lytton & Romney, 1991). Thus, boys’ modeling of fathers’ behaviors may lead to more externalizing behaviors, aggression, and delinquency (Jones, 2002; Weintraub & Gold, 1991).

**Paternal Incarceration and Racial differences.** People of color experience disproportionate contact with the criminal justice system due to racism and systematic oppression (Anderson, 2019; Lee et al., 2015; Wildeman & Wang, 2017). The experience of paternal incarceration is not the same for every child in the U.S; thus, it is important to consider racial differences in the experience of paternal incarceration. Studies have produced conflicting findings. Some suggest that the negative outcomes of paternal incarceration are more pronounced among children of color, given children of color experience racism absent of paternal incarceration, along with stigma related to paternal incarceration (Craigie, 2011; Pager
et al., 2009). However, a growing body of research suggests that children of color, particularly African American children, adjust better than White children in response to paternal incarceration (Barbarin, 1993; Murray et al., 2011; Swisher & Waller, 2008). Given the disproportionate representation of people of color in correctional facilities and mistrust of the criminal justice system, families of color may be more likely than White families to understand paternal incarceration as an external stressor (Blumstein, 1993; Hagan et al., 2005; Pettit & Western, 2004; Sampson & Bartusch, 1998; Swisher & Waller, 2008). Paternal incarceration might be considered common and understood as a product of racism and systemic oppression in communities of color (Miller, 2007; Roberts, 2004; Swisher & Waller, 2008; Western, 2006), whereas paternal incarceration could be more stigmatizing in White communities where it is not viewed in this way (Murray et al., 2011; Swisher & Waller, 2008). Families in White communities might distrust fathers who are incarcerated more than they distrust the correctional system (Swisher & Waller, 2008).

It is essential to highlight that these emerging findings should not be solely viewed as encouraging; while this field clearly wants to encourage psychological adjustment among populations, these findings are concerning given families of color must continually adapt to adversity while systematic racism remains (Anderson, 2019; Miller, 2007). Further, while children may adapt to adversity, they do so at the expense of other forms of psychological and physical harm over time (e.g., increased allostatic load and related physiological concerns; Anderson, 2019). Ultimately, expecting families of color to adjust to systematic oppression (e.g., disproportionate contact with the criminal justice system) perpetuates institutional racism and intergenerational transmission of poverty, incarceration, and child welfare involvement, to name a few concerns, among communities of color (Anderson, 2019; Miller, 2007). Efforts need to be
focused on encouraging psychological well-being while also eliminating racial disparities in the criminal justice system and creating innovative and community-based alternatives to punitive approaches.

**Visiting as a protective factor.** Although paternal incarceration is a risk factor, visits with fathers who are incarcerated could serve as a protective factor. Children benefit from maintaining contact with fathers who are incarcerated and have no history of violence against children or other family members (Maldonado, 2006). Visits with fathers could alleviate feelings of isolation, rejection, and guilt, which allows children to sustain their relationships with and attachment to their fathers (Maldonado, 2006; Poehlmann et al., 2010; Poehlmann-Tynan, 2015; Shlafer et al., 2015), particularly when visits are enhanced by an intervention (e.g., parents’ preparation for visits; Poehlmann et al., 2010). Visits may reduce stigma and ambiguous loss, as children can see their fathers, assess their safety, and better understand the correctional environment in which they are living (Maldonado, 2006). Visits allow fathers to continue parenting while incarcerated.

**The Current Study**

The current longitudinal study examined 1) the relation between paternal incarceration (i.e., biological fathers incarcerated upon children’s entry into foster care) and internalizing symptoms and externalizing behaviors among children in foster care and explored 2) gender, 3) race, and 4) in-person visits as potential moderating factors. Analyses controlled for Time 1 internalizing symptoms and externalizing behaviors along with age, kin involvement, maltreatment severity, and community violence. Kin involvement included kin and fictive kin, or important figures in children’s lives who may not be biologically related (e.g., coach, family friend, religious leader). Kin involvement has been shown to predict the well-being of children in
foster care and thus was included as a covariate (e.g., Leon & Dickson, 2019; Blakely et al., 2017). Maltreatment severity is also associated with the mental health of children in foster care (Norman et al., 2012). Community violence was included as a covariate given rates of violence were high in the study location and have been related to emotional and behavioral outcomes (Fowler et al., 2009).

Based on previous research on attachment, ambiguous loss, and social learning theory, along with gender and racial differences in the experience of paternal incarceration, it was hypothesized that 1) paternal incarceration would be associated with increased externalizing behaviors and internalizing symptoms, 2) girls would experience greater internalizing symptoms whereas boys would exhibit greater externalizing behaviors, 3) children who were not African American would experience more internalizing symptoms and externalizing behaviors, and 4) in-person visits would buffer against the association between paternal criminal justice involvement and increased internalizing symptoms and externalizing behaviors.

**Method**

**Participants**

The present study was part of a larger project titled the “Recruitment and Kin Connections Project (RKCP),” which was conducted with the Illinois Department of Children and Family Services (DCFS). The RKCP expanded upon traditional child welfare practices by identifying and promoting the involvement of extended family, fictive kin, and community support groups in the lives of children in foster care. The sample consisted of children who entered the care of the DCFS in Cook and Will Counties between October 1, 2011 and October 1, 2014.
A sample of 413 children participated in the study. Of those, 291 (70.5%) had three or more assessments, which are required for longitudinal analysis. Some children exited foster care prior to the completion of multiple assessments. Nonetheless, no statistically significant differences were found between children with three or more and children with less than three data points in terms of age, gender, race, reason for entry into care, maltreatment severity, kin involvement, Time 1 internalizing symptoms and externalizing behaviors, or levels of community violence. Child welfare cases in which fathers were the perpetrators were also removed from analyses. In most instances, these fathers were prohibited from contacting their children due to child maltreatment. The current study involved only fathers who were allowed to have contact with their children. After removing children with fewer than three assessments and whose fathers were perpetrators, 274 children remained for analysis.

Descriptive statistics were computed for the overall sample (N = 274) and for children with (n = 43) and without (n = 231) fathers who were incarcerated when children entered foster care (see Table 6). Children’s average age upon entry into foster care was 10.18 years (SD = 2.36). The sample consisted of slightly more girls (55.5%) than boys. The majority was African American (66.1%), followed by Latinx (12.8%), Multi-Racial (14.2%), Caucasian (6.6%), and Asian (0.4%). Children most often experienced neglect (70.1%), followed by physical (32.1%) and sexual (6.2%) abuse. Approximately 9.5% of children entered foster care as dependency cases. Children had an average of 7.17 (SD = 7.40) kin involved in their lives. Nearly one fourth of all children – with and without fathers who were incarcerated – had at least one visit with their fathers.

Children with fathers incarcerated upon entry into care were slightly younger (M = 9.49, SD = 2.48) than children without incarcerated fathers (M = 10.31, SD = 2.32), t (56.55) = 2.03, p
= .048 (Levene’s test suggested unequal variances [F = 0.50, p = .035]; thus, degrees of freedom were adjusted from 272 to 56.55). Children with fathers who were incarcerated also had more involved kin (M = 10.14, SD = 10.22) than children without incarcerated fathers (M = 6.61, SD = 6.63), t (48.80) = −2.18, p = .034 (Levene’s test suggested unequal variances [F = 12.24, p = .001]; thus, degrees of freedom were adjusted from 272 to 48.80). No significant differences were found between children with and without incarcerated fathers in terms of community violence, physical abuse, sexual abuse, emotional abuse, neglect, maltreatment, internalizing symptoms, and externalizing behaviors.

Table 6. Descriptive Statistics for Variables Used in Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fathers who were Incarcerated (n = 43)</th>
<th>Fathers who were not Incarcerated (n = 231)</th>
<th>Total Sample (N = 274)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Mean (SD)</td>
<td>%</td>
</tr>
<tr>
<td>Child Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age*</td>
<td>9.49 (2.48)</td>
<td>10.31 (2.32)</td>
<td>10.18 (2.36)</td>
</tr>
<tr>
<td>Gender (Girls)</td>
<td>62.8</td>
<td>54.1</td>
<td>55.5</td>
</tr>
<tr>
<td>African American</td>
<td>62.8</td>
<td>66.7</td>
<td>66.1</td>
</tr>
<tr>
<td>Kin Involvement**</td>
<td>10.14 (10.22)</td>
<td>6.61 (6.63)</td>
<td>7.17 (7.40)</td>
</tr>
<tr>
<td>Paternal Visits</td>
<td>30.2</td>
<td>22.5</td>
<td>23.7</td>
</tr>
<tr>
<td>CANS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Violence</td>
<td>0.35 (0.61)</td>
<td>0.39 (0.66)</td>
<td>0.38 (0.65)</td>
</tr>
<tr>
<td>Maltreatment</td>
<td>3.63 (2.32)</td>
<td>3.66 (2.03)</td>
<td>3.66 (2.07)</td>
</tr>
<tr>
<td>Internalizing</td>
<td>1.30 (1.35)</td>
<td>1.41 (1.57)</td>
<td>1.43 (1.54)</td>
</tr>
<tr>
<td>Externalizing</td>
<td>0.53 (1.03)</td>
<td>0.68 (1.23)</td>
<td>0.65 (1.20)</td>
</tr>
</tbody>
</table>

*Note. *p < .05, **p < .01; CANS = Child and Adolescent Needs and Strengths.

**Procedures**

The DCFS provided a list of eligible participants: children between the ages of 6 and 13 years entering care. Illinois requires that an Integrated Assessment (IA) be completed by a licensed mental health professional within 45 days of children’s entry into the DCFS care
through Temporary Custody. The purpose of the IA is to make placement decisions and develop a service plan that meets the needs of the families. IAs were conducted through in-person interviews with children, parents, foster parents, and other key people involved in the case. Information was gathered about medical, social, developmental, familial, educational, and mental health histories, as well as the functioning levels of all individuals interviewed. The IA also included information about children’s family composition, history of abuse or neglect, and previous placement experiences. IAs were uploaded to the Illinois DCFS Statewide Automated Child Welfare Information System (SACWIS) database.

**Measures**

**File Reviews**

Graduate-level research assistants completed file reviews of the SACWIS database. The accuracy of this information was verified through phone interviews with each child’s caseworker. File reviews and confirmation with caseworkers yielded demographics along with the following variables within 45 days upon entry into care (i.e., when IAs are completed; Time 1): covariates (i.e., child age and family involvement [number of involved kin]), biological fathers’ incarceration status (yes or no), child gender (girl or boy), child race (African American or non-African American), and in-person visits with fathers (yes or no). Race was later coded dichotomously given concerns about power (the majority of the sample was African American [66.1%]) and research suggesting the outcomes of African American children may differ from the rest of the sample. Of note, data were not collected about the facilities in which fathers were incarcerated, fathers’ incarceration status in the past or throughout children’s time in foster care, or maternal incarceration status.
Child and Adolescent Needs and Strengths (CANS)

The Child and Adolescent Needs and Strengths (CANS; Lyons, 2009, 2017) assessment was completed with the IA upon children’s entry into care and quarterly (every three months) while children remained in foster care. Mental health professionals who have established 85% rating accuracy complete the CANS in Illinois. The CANS assessment is a 105-item questionnaire used to guide treatment and case planning for children in foster care (Lyons, 2017). The tool evaluates the needs and strengths of children across seven areas of functioning: trauma experience, traumatic stress symptoms, strengths, life domain functioning, acculturation, behavioral and emotional needs, and risk behaviors (Lyons, 2017). For each CANS item, severity ratings are recorded on a four-point Likert scale from 0 to 3; “0” indicates no evidence of needs or strengths, “1” suggests a need for monitoring or preventative activities, “2” suggests a need to address the problem, and “3” indicates a need for immediate or intensive action (Lyons, 2017). The CANS manual provides detailed descriptions of the ratings for each item (Lyons, 2017).

A child maltreatment severity index was calculated by summing the severity ratings of the following items on the CANS: physical abuse, sexual abuse, emotional abuse, and neglect. Items from the CANS were selected via principal components analysis to create the following scales: externalizing behaviors (α = 0.82; i.e., anger control, attention deficit/impulse control, conduct, danger to others, delinquency, oppositional behavior, sexual aggression) and internalizing symptoms (α = 0.73; i.e., adjustment to trauma, anxiety, depression, somatization, traumatic grief/separation; (Jhe Bai et al., 2016; Leon et al., 2016; Leon et al., 2016). Cronbach’s alpha coefficients were above the criterion for acceptable internal consistency (Nunnally, 1978). These scales have been used in cross-sectional and longitudinal studies and have demonstrated
concurrent validity (e.g., Hindt et al., 2019; Jhe Bai et al., 2016; Leon, Bai et al., 2016). In the present study, the following served as covariates and were measured via the CANS upon children’s entry into foster care (i.e., Time 1): child maltreatment severity, community violence (single CANS item), internalizing symptoms, and externalizing behaviors. Internalizing symptoms and externalizing behaviors measured via the CANS every three months served as the outcome variables.

These outcomes were positively skewed due to a large number of zeros on the CANS items. Data transformations (e.g., log-transformation) often result in violations of statistical assumptions of tests (e.g., normality of residuals). Therefore, CANS items were recoded into dichotomous count data; “0” and “1” were recoded to “0” (absence of a problem), and “2” and “3” were recoded to “1” (presence of a problem). A “2” or “3” was chosen to indicate a presence of a problem based on item anchorings and how the CANS assessment is used clinically. Caseworkers are only required to address a problem if an item on the CANS assessment is rated as a “2” or a “3.” CANS items were summed to employ a Hierarchical Generalized Linear Model (HGLM) with Poisson-distributed outcomes consisting of count data. The mean and standard deviation of the internalizing symptoms and externalizing behaviors have been shown to be equivalent (Leon et al., 2016); therefore, the model was run using the over-dispersion feature in HGLM.

**Statistical Analyses**

**Descriptive Statistics**

Descriptive statistics were generated on demographic information and outcome measures. Correlations among variables in the study were performed prior to multivariate analyses.
**Multi-level Modeling**

Multi-level modeling via HGLM (Bryk & Raudenbush, 1992) was employed to account for unbalanced data. CANS assessments were conducted quarterly (i.e., three-month intervals). However, the number and timing of CANS assessments varied, as assessments were not always completed on an exact quarterly basis and children with longer stays in the Illinois foster care system received more CANS assessments. The time variable was measured and modeled to handle such unbalanced data. HGLM differs from traditional regression tools (i.e., Ordinary Least Squares Regression), but the statistics (e.g., beta weights) and interpretations (i.e., positive or negative values indicating associations with dependent variables) are comparable (Bryk & Raudenbush, 1992).

A three-level multi-level model was applied to the data. The intensity of internalizing symptoms and externalizing behaviors was modeled as a function of the quarter after entry into care (Level 1). Two parameters were estimated: the intercept and the slope. The slope was the parameter of interest in this longitudinal study. At Level 2 (child level), child characteristics at Time 1 were used to predict the Level-1 slope parameter. At Level 3, children were nested within family. Level-2 Time 1 (i.e., time invariant) variables (e.g., paternal incarceration) were used to predict the slope trajectories of internalizing symptoms and externalizing behaviors. Per Mathieu and colleagues (2012), the current study’s sample size was underpowered to detect significant cross-level interaction effects. Yet, Mathieu and colleagues (2012) highlight that this tends to be the norm in this field and that researchers should use less strict criteria, especially in newer areas of research. Thus, these analyses were still deemed appropriate but may be limited in conclusions that can be drawn, in that the sample is underpowered to detect smaller effect sizes.
Results

Descriptive Statistics

Correlations ranged from low (e.g., −0.08 for the relation between internalizing symptoms and visits) to moderate (e.g., 0.32 for kin involvement and visits). None of the correlations were high enough to suggest that multicollinearity could affect the interpretation of the HGLM analysis (see Table 7).

Table 7. Correlations Among Variables Used in Analyses

<table>
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<th>1</th>
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<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
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</tr>
<tr>
<td>2. Gender</td>
<td>.074</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. African American</td>
<td>.096</td>
<td>-.084</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Kin Involvement</td>
<td>-.184**</td>
<td>-.026</td>
<td>.006</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Paternal Visits</td>
<td>-.223**</td>
<td>-.036</td>
<td>.019</td>
<td>.317**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Community Violence</td>
<td>.074</td>
<td>.008</td>
<td>.255**</td>
<td>-.017</td>
<td>.012</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Maltreatment</td>
<td>.091</td>
<td>.022</td>
<td>&lt;.001</td>
<td>.044</td>
<td>-.020</td>
<td>.290**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Internalizing</td>
<td>.087</td>
<td>-.026</td>
<td>.141*</td>
<td>-.136</td>
<td>-.082*</td>
<td>.262**</td>
<td>.298**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. Externalizing</td>
<td>.228**</td>
<td>-.130*</td>
<td>.069</td>
<td>-.183**</td>
<td>-.111*</td>
<td>.207**</td>
<td>.194**</td>
<td>.272**</td>
<td>--</td>
</tr>
<tr>
<td>10. Paternal Incarceration</td>
<td>-.127*</td>
<td>.064</td>
<td>-.030</td>
<td>.174**</td>
<td>.066</td>
<td>-.023</td>
<td>-.006</td>
<td>-.036</td>
<td>-.043</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01; CANS = Child and Adolescent Needs and Strengths

Hierarchical Generalized Linear Model (HGLM) Analyses

Unconditional growth curve analyses showed that the mean trajectories for internalizing symptoms and externalizing behaviors had nonzero intercepts and nonzero slopes. Internalizing symptoms and externalizing behaviors changed over time, as demonstrated by the significant variances of the intercepts and slopes. Twelve variables were used for the conditional models (see Tables 8 and 9), including those yielding main effects (i.e., CANS Time 1 [internalizing and externalizing]; paternal incarceration status upon entry into foster care; paternal visits upon entry into foster care; child gender, age, and race [African American]; kin involvement; community violence; maltreatment severity) and those yielding interaction effects (i.e., paternal incarceration by race [African American], paternal incarceration by gender, paternal incarceration by visits).
**Internalizing Symptoms**

**Main Effects.** Time 1 internalizing symptoms were negatively associated with the slope of internalizing symptoms over time ($\beta_{14} = -0.04$, $p < .001$). Visits were significantly associated with changes in internalizing symptoms over time ($\beta_{16} = 0.09$, $p = .017$); children with at least one paternal visit had a mean internalizing symptom slope trajectory that was 10% higher than those without visits. Overall, kin involvement was also significantly associated with changes in internalizing symptoms over time ($\beta_{21} = -0.01$, $p < .001$). Each one-unit increase in the standardized score of kin involvement was associated with a 1% decrease in the slope of internalizing symptoms. As expected, each one-unit increase in the severity of maltreatment was associated with a 1% increase in the slope of internalizing symptoms ($\beta_{22} = 0.01$, $p = .027$). Paternal incarceration; child gender, age, and race; and community violence were not associated with changes in internalizing symptoms over time.

**Interaction Effects.** The interactions between paternal incarceration and gender, paternal incarceration and race, and paternal incarceration and visits were not significantly related to changes in internalizing symptoms over time.

**Externalizing Behaviors**

**Main Effects.** Time 1 externalizing behaviors were negatively associated with the slope of externalizing behaviors over time ($\beta_{14} = -0.04$, $p < .001$). Paternal incarceration upon entry into foster care was significantly associated with greater externalizing behaviors over time ($\beta_{15} = 0.18$, $p = .025$). Those with fathers who were incarcerated had a mean externalizing behavior slope trajectory that was 20% higher than those without incarcerated fathers. Visits were also significantly associated with changes in externalizing behaviors over time. Children with at least
one visit had a mean externalizing behavior trajectory that was 9% higher than for those without visits ($\beta_{16} = 0.08$, $p = .012$).

Community violence was negatively associated with externalizing behaviors, such that each one-unit increase in the standardized score of community violence was associated with a 5% decrease in the slope of externalizing behaviors ($\beta_{22} = -0.05$, $p < .001$). As expected, maltreatment severity was associated with externalizing behaviors over time ($\beta_{23} = 0.01$, $p = .003$); each one-unit increase in the standardized score of maltreatment severity was associated with a 1% increase in the slope of externalizing behaviors. Child gender, age, and race along with kin involvement were not associated with changes in internalizing symptoms over time.

**Interaction Effects.** Analyses revealed a significant interaction between incarceration and race ($\beta_{20} = -0.14$, $p = .032$). African American children with fathers who were incarcerated had a mean externalizing behavior slope trajectory that was 13% lower than that of the remainder of the sample. An interaction was also found between paternal incarceration and visits ($\beta_{25} = -0.17$, $p = .008$). The mean externalizing behavior slope trajectory of children with fathers who were incarcerated and had at least one in-person visit was 16% lower than that of the remaining sample. The relation between paternal incarceration and gender was not significantly associated with changes in externalizing behaviors over time.
Table 8. Multi-level Poisson Model (Population-Average) for CANS Internalizing Symptom Trajectories

<table>
<thead>
<tr>
<th>Fixed Effects</th>
<th>Coeff.</th>
<th>SE</th>
<th>p</th>
<th>ERR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $\beta_{13}$</td>
<td>0.128</td>
<td>.055</td>
<td>.020</td>
<td>1.14</td>
<td>1.02, 1.27</td>
</tr>
<tr>
<td>CANS Time 1 (Ext./Int.) $\beta_{14}$</td>
<td>-0.038</td>
<td>.008</td>
<td>&lt;.001</td>
<td>0.96</td>
<td>0.95, 0.98</td>
</tr>
<tr>
<td>Paternal Incar. $\beta_{15}$</td>
<td>-0.069</td>
<td>.079</td>
<td>.383</td>
<td>0.93</td>
<td>0.80, 1.09</td>
</tr>
<tr>
<td>Paternal Visits $\beta_{16}$</td>
<td>0.094</td>
<td>.039</td>
<td>.017</td>
<td>1.10</td>
<td>1.02, 1.19</td>
</tr>
<tr>
<td>Child Gender $\beta_{17}$</td>
<td>-0.022</td>
<td>.024</td>
<td>.363</td>
<td>0.98</td>
<td>0.93, 1.03</td>
</tr>
<tr>
<td>Child Age $\beta_{18}$</td>
<td>-0.006</td>
<td>.005</td>
<td>.189</td>
<td>0.99</td>
<td>0.98, 1.00</td>
</tr>
<tr>
<td>Child Race (African American) $\beta_{19}$</td>
<td>-0.046</td>
<td>.027</td>
<td>.090</td>
<td>0.95</td>
<td>0.91, 1.01</td>
</tr>
<tr>
<td>Paternal Incar. X Race (African American) $\beta_{20}$</td>
<td>0.095</td>
<td>.080</td>
<td>.231</td>
<td>1.10</td>
<td>0.94, 1.28</td>
</tr>
<tr>
<td>Kin Involvement $\beta_{21}$</td>
<td>-0.007</td>
<td>.001</td>
<td>&lt;.001</td>
<td>0.99</td>
<td>0.99, 1.00</td>
</tr>
<tr>
<td>Community Violence $\beta_{22}$</td>
<td>&lt;.000</td>
<td>.018</td>
<td>.989</td>
<td>1.00</td>
<td>0.97, 1.04</td>
</tr>
<tr>
<td>Maltreatment $\beta_{23}$</td>
<td>0.012</td>
<td>.005</td>
<td>.027</td>
<td>1.01</td>
<td>1.00, 1.02</td>
</tr>
<tr>
<td>Paternal Incar. X Gender $\beta_{24}$</td>
<td>0.097</td>
<td>.060</td>
<td>.106</td>
<td>1.10</td>
<td>0.98, 1.24</td>
</tr>
<tr>
<td>Paternal Incar. X Visit(s) $\beta_{25}$</td>
<td>-0.011</td>
<td>.067</td>
<td>.871</td>
<td>0.99</td>
<td>0.87, 1.13</td>
</tr>
</tbody>
</table>

Table 9. Multi-level Poisson Model (Population-Average) for CANS Externalizing Behavior Trajectories

<table>
<thead>
<tr>
<th>Fixed Effects</th>
<th>Coeff.</th>
<th>SE</th>
<th>p</th>
<th>ERR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $\beta_{13}$</td>
<td>-0.034</td>
<td>.056</td>
<td>.545</td>
<td>0.97</td>
<td>0.87, 1.08</td>
</tr>
<tr>
<td>CANS Time 1 (Ext./Int.) $\beta_{14}$</td>
<td>-0.038</td>
<td>.007</td>
<td>&lt;.001</td>
<td>0.96</td>
<td>0.95, 0.98</td>
</tr>
<tr>
<td>Paternal Incar. $\beta_{15}$</td>
<td>0.182</td>
<td>.081</td>
<td>.025</td>
<td>1.20</td>
<td>1.02, 1.41</td>
</tr>
<tr>
<td>Paternal Visits $\beta_{16}$</td>
<td>0.083</td>
<td>.033</td>
<td>.012</td>
<td>1.09</td>
<td>1.02, 1.16</td>
</tr>
<tr>
<td>Child Gender $\beta_{17}$</td>
<td>-0.011</td>
<td>.022</td>
<td>.612</td>
<td>0.99</td>
<td>0.95, 1.03</td>
</tr>
<tr>
<td>Child Age $\beta_{18}$</td>
<td>0.009</td>
<td>.005</td>
<td>.093</td>
<td>1.01</td>
<td>1.00, 1.02</td>
</tr>
<tr>
<td>Child Race (African American) $\beta_{19}$</td>
<td>0.020</td>
<td>.025</td>
<td>.424</td>
<td>1.02</td>
<td>0.97, 1.07</td>
</tr>
<tr>
<td>Paternal Incar. X Race (African American) $\beta_{20}$</td>
<td>-0.141</td>
<td>.066</td>
<td>.032</td>
<td>0.87</td>
<td>0.76, 0.99</td>
</tr>
<tr>
<td>Kin Involvement $\beta_{21}$</td>
<td>-0.002</td>
<td>.002</td>
<td>.179</td>
<td>1.00</td>
<td>0.99, 1.00</td>
</tr>
<tr>
<td>Community Violence $\beta_{22}$</td>
<td>-0.048</td>
<td>.013</td>
<td>&lt;.001</td>
<td>0.95</td>
<td>0.93, 0.98</td>
</tr>
<tr>
<td>Maltreatment $\beta_{23}$</td>
<td>0.012</td>
<td>.004</td>
<td>.003</td>
<td>1.01</td>
<td>1.00, 1.02</td>
</tr>
<tr>
<td>Paternal Incar. X Gender $\beta_{24}$</td>
<td>-0.068</td>
<td>.054</td>
<td>.205</td>
<td>0.93</td>
<td>0.84, 1.04</td>
</tr>
<tr>
<td>Paternal Incar. X Visit(s) $\beta_{25}$</td>
<td>-0.175</td>
<td>.065</td>
<td>.008</td>
<td>0.84</td>
<td>0.74, 0.95</td>
</tr>
</tbody>
</table>
Discussion

The current study was designed to fill gaps in knowledge about children in foster care with fathers who were incarcerated. Specifically, this study employed HGLM to 1) elucidate the relation between paternal incarceration and internalizing symptoms and externalizing behaviors; 2) examine gender and 3) race as moderating factors; 4) and explore in-person visiting as a potential protective factor while controlling for Time 1 internalizing symptoms and externalizing behaviors along with age, kin involvement, maltreatment severity, and community violence.

First, HGLM results revealed that paternal incarceration was significantly associated with externalizing behaviors but not internalizing symptoms. Gender did not moderate the relation between paternal incarceration and externalizing behaviors. Race served as a moderator, such that the detrimental outcomes of incarceration were less pronounced among African American children. Finally, of particular interest to this study, the association between paternal incarceration and increased externalizing behaviors was buffered by paternal visits.

In terms of other findings, HGLM analyses revealed that maltreatment severity was associated with higher levels of internalizing symptoms and externalizing behaviors, which aligns with previous research (e.g., Braga et al., 2017; Vasileva & Petermann, 2018). As expected, kin involvement was associated with decreased internalizing symptoms over time (e.g., Leon & Dickson, 2019). Contrary to expectations, community violence related to decreased externalizing behaviors. Research has suggested that the relation between community violence and externalizing behaviors is most pronounced among adolescents, whereas the current sample included younger children (Fowler et al., 2009). An unexpected finding revealed that among the entire sample (i.e., those with and without incarcerated parents), paternal visits were associated
with increased internalizing symptoms and externalizing behaviors, which will be discussed further below.

**Paternal Incarceration**

Paternal incarceration was significantly associated with higher levels of externalizing behaviors over time among children in foster care, which is consistent with findings from previous research with non-foster care samples (Geller et al., 2009, 2012; Murray & Farrington, 2005; Murray, Farrington, & Sekol, 2012; Swisher & Roettger, 2012; Wilbur et al., 2007). Children may respond to the traumatic loss of a father, related confusion, and stigmatization with anger, fear, and aggression (Geller et al., 2009, 2012; Swisher & Roettger, 2012; Wilbur et al., 2007). In addition, children have been shown to model their fathers’ externalizing behaviors (e.g., criminality, aggression; Murray & Farrington, 2005). Challenges with externalizing behaviors can be long-lasting and have been linked to future criminal misconduct (Murray & Farrington, 2005; Murray et al., 2012). For example, Roettger and Swisher (2011) revealed that children who experienced the incarceration of their father were at increased risk for arrest by 25 years of age (Roettger & Swisher, 2011). Paternal incarceration seems to have long-term consequences for children and perpetuate the intergenerational transmission of poverty, violence, and contact with the criminal justice system (e.g., Widom & Wilson, 2015). From a cumulative risk perspective, paternal incarceration might be another risk factor for poor developmental outcomes among children in the foster care system and further transmission of poverty across generations.

Paternal incarceration was not significantly related to internalizing symptoms, which aligned with some previous research (Craigie, 2011; Murray et al., 2012; Wildeman, 2010). Yet, other studies have revealed an association between paternal incarceration and internalizing
symptoms (Bocknek et al., 2009; Geller et al., 2009; Murray & Farrington, 2005, 2008; Wilbur et al., 2007; Wildeman, 2010). These inconsistent findings may be due to the variety of tools used to measure internalizing symptoms and samples with different ages. In the current study, the internalizing scale included CANS items assessing trauma, which differed from other measures of internalizing symptoms (e.g., Child Behavior Checklist). In addition, the current study and others that did not find a link between paternal incarceration and internalizing symptoms included younger samples (Craigie, 2011; Wildeman, 2010). Young children are less likely to exhibit internalizing symptoms in response to stress; the prevalence of internalizing symptoms tends to increase as children age and enter adolescence (Leve et al., 2006).

**Gender Differences**

Similarly, gender differences in internalizing symptoms and externalizing behaviors may not have been detected given stress responses tend to differentiate as children age, with internalizing symptoms becoming more prevalent in later childhood and adolescence (Leve et al., 2006). In addition, this sample only included fathers who were incarcerated. Perhaps gender differences would emerge with the inclusion of mothers who are incarcerated, especially given evidence that girls and boys tend to model the behavior of their same-gender parent (e.g., Chang et al., 2003). Finally, it is possible that gender is less of a salient factor in the relation between paternal incarceration and children’s outcomes.

**Racial Differences**

A significant interaction between paternal incarceration and race revealed that African American children did not experience the same magnitude of deleterious externalizing outcomes as other children. This finding aligns with research suggesting that children of color adjust better than White children in the context of paternal incarceration (Barbarin, 1993; Murray et al., 2011;
Swisher & Waller, 2008). Paternal incarceration may be viewed as the norm and less stigmatizing in communities of color (Blumstein, 1993; Hagan et al., 2005; Pettit & Western, 2004; Roberts, 2004; Sampson & Bartusch, 1998; Swisher & Waller, 2008). More research on racial differences in the experience of paternal incarceration is warranted, including an exploration of children’s responses to the incarceration of their fathers, with particular attention to how it affects their own expectations for possible future incarceration.

While the results may seem encouraging, this finding is alarming given children of color must continually adapt to adverse experiences and systematic racism (Anderson, 2019; Miller, 2007). The average rate of incarceration is highest among individuals who are African American, followed by Latinx, and White (Nellis, 2016; Wagner, 2012). African American individuals are imprisoned at a rate 5.1 times greater than White individuals (Nellis, 2016). The disproportionate representation of young males of color in the correctional system has been explained by a number of factors: racism, biases in decision-making in the criminal justice system, and structural, social disadvantages in communities of color (i.e., poverty, lack of educational resources, unemployment, community violence; Blumstein, 1993; Garland et al., 2008; Nellis, 2016; Pettit & Western, 2004). Thus, practitioners, researchers, and other stakeholders should not only focus on promoting psychological adjustment among children in the context of incarceration, but also focus on eliminating disparities and promoting health equity to effectively support children and families of color (Anderson, 2019; Miller, 2007).

Visiting as a Protective Factor in the Context of Paternal Incarceration.

While paternal incarceration was associated with externalizing behaviors, this outcome was attenuated for children who had at least one visit with their fathers. This finding aligns with previous research about the positive outcomes of visits in the context of paternal incarceration.
(Boswell, 2002; Maldonado, 2006) and expands this area of research by including a sample of children in foster care. Visits allow children an opportunity to process feelings of fear, guilt, shame, and rejection related to their fathers’ incarceration (Maldonado, 2006). Additionally, children can assess their fathers’ well-being and dispel concerns for their safety (Maldonado, 2006). Of significant importance, children can continue to develop a relationship with their fathers during incarceration and their child welfare involvement (La Vigne et al., 2005; Poehlmann et al., 2010; Poehlmann-Tynan, 2015; Shlafer et al., 2015).

Fathers who are incarcerated may also benefit from visits with their children; previous research has shown that visits with children reduce recidivism among mothers who are incarcerated (McClure et al., 2015). If fathers can also avoid reincarceration, they could offer a viable placement option for children in foster care. As such, children in foster care should be given the opportunity to visit with fathers, as the long-term implications are noteworthy and favorable.

**Visiting in the Child Welfare System**

Children in foster care who had visits with fathers involved with the criminal justice system exhibited fewer externalizing behaviors. Contrary to expectations, however, among the entire sample regardless of paternal criminal justice involvement, at least one visit with fathers was associated with increased internalizing symptoms and externalizing behaviors. This finding is dissimilar to previous research that suggests father involvement in the context of child welfare is important for children’s well-being (e.g., Amato & Gilbreth, 1999; Leon, Bai et al., 2016; National Family Preservation Network, 2012). Visits allow children to maintain relationships with their fathers and process feelings of guilt and loneliness associated with separation (Cantos...

Perhaps that while broadly, father involvement is beneficial for children in foster care, visits may be associated with poor behavioral outcomes depending on the consistency, timing, quantity, and quality of visits and relationships; unfortunately, these data were not collected as part of the present study. Previous research has shown that inconsistent visits result from barriers faced by children and their fathers (e.g., lack of transportation, poverty), including a systematic bias against fathers (Franck, 2001; O’Donnell et al., 2005). Child welfare practices have been shown to favor mothers over fathers, as caseworkers place less attention on fathers’ involvement, spend less time engaging fathers, and gather less information about fathers (Bellamy, 2009; Franck, 2001; O’Donnell et al., 2005; O’Donnell, 2001). In terms of timing issues, children may exhibit behavioral problems shortly after a visit, but these problems often decrease in the long-term (Cantos et al., 1997). Quantity of visits has also been linked to children’s well-being (Cantos et al., 1997). More frequent visits with biological fathers have been associated with fewer internalizing symptoms and externalizing behaviors (Cantos et al., 1997). Visits are important for children to maintain their attachment to their fathers, but this can be difficult when there are long periods of time (i.e., 30 days or greater) without a visit (Kuehnle & Ellis, 2002). Children’s relationships with their fathers prior to and during separation, along with perceptions of their foster families should also be considered (Cantos et al., 1997). Children may feel ambivalent or negatively towards visits with their fathers if they are struggling to reconcile feelings of love and loyalty for their foster caregivers and fathers (Cantos et al., 1997).
Limitations

Data collection was limited given paternal incarceration (coded as yes or no) and the occurrence of at least one visit (coded as yes or no) were documented within 45 days of entry into foster care through the IA and confirmed at slightly later times depending on when caseworkers could be contacted by research assistants. The number of children in foster with fathers who were incarcerated was low in this sample, as paternal incarceration was measured in this limited period of time – within approximately 45 days of children entering foster care. Fathers’ incarceration statuses prior to and throughout children’s time in foster care were unknown. In addition, the location in which fathers were incarcerated was unknown; fathers may have been incarcerated in jail or prison. It is possible that the specific location of the fathers’ incarceration may impact children’s functioning. Another limitation was the lack of data about mothers’ incarceration status.

Data collection about visits was also limited. Information about the timing, quantity, consistency, quality, and location of visits was unavailable. Visits could have occurred in a correctional facility or other location, which may have affected children’s behavior. Further, given the frequency with which individuals cycle in and out of prisons and jails, a father might have been incarcerated when his child entered foster care but he could be released by the time visits occurred. Therefore, this study might actually have captured whether visits with fathers recently involved in the criminal justice system were beneficial for children, rather than visits at correctional facilities while fathers were incarcerated. Still, the literature suggests that visits, including those occurring in correctional facilities, are important for children (Johnston, 1995; Poehlmann-Tyan, 2015).
Children’s relationships with their fathers before and after separation along with perceptions of their foster families were not considered in the current investigation and have been shown to be related to the quantity and quality of visits (see Cantos et al., 1997). In addition, this research was conducted in an urban, Midwestern area and the results might not apply to other communities. Corrections and child welfare policies differ across states and even counties. As such, generalizable studies about paternal incarceration and child welfare are difficult to undertake. Finally, conclusions may be limited given the sample was underpowered to detect smaller effect sizes.

**Future Directions**

Findings suggested that children from different communities vary in their reaction to paternal incarceration. As such, it is important that future research explore the mechanisms by which children develop behavioral outcomes in the context of paternal incarceration in various communities, and that prevention and intervention efforts take into consideration variations in communities’ experiences of paternal incarceration. In addition, this study focused on biological fathers, but in reality, children often have father figures who may not be blood relatives. Future studies should consider how the incarceration of any father figure impacts children. The impact of maternal incarceration is also worthy of further study, especially given children may be more likely to enter foster care as dependency cases when a mother is incarcerated versus a father (e.g., Glaze & Maruschak, 2010). Future studies should consider how other incarceration-specific experiences (e.g., witnessing criminal activity, arrest, and/or court proceedings) may affect children in foster care. Finally, future research should provide more detail about the quantity and quality of visits, and how these factors relate to children’s outcomes.
Conclusions

This study revealed that paternal incarceration was associated with higher rates of externalizing behaviors but not internalizing symptoms among children in foster care. This association was attenuated among African American children and children who visited their fathers. These results highlight the importance of efforts promoting psychological adjustment among communities of color while actively taking steps to eliminate disparities and promote health equity (Anderson, 2019; Miller, 2007). Findings also support visits between fathers involved in the criminal justice system and children in foster care. Practitioners, researchers, and other stakeholders are encouraged to consider and further develop best policies and practices for visiting (e.g., Poehlmann-Tyan & Pritzl, 2019; Cramer et al., 2017). This study lays the foundation for future research in the contexts of foster care and parental incarceration.
CHAPTER FOUR
ECOLOGICAL DISRUPTIONS AND WELL-BEING AMONG CHILDREN IN FOSTER CARE

Introduction

Children in foster care are separated from primary caregivers when concerns of abuse, neglect, and/or dependency arise, and they are placed with other caregivers. While separation from primary caregivers may be necessary to ensure well-being, children may also be separated from their familiar ecological system (Bruskas & Tessin, 2013; Chapman et al., 2004; Samuels, 2009; Stukes Chipungu & Bent-Goodley, 2004). Bronfenbrenner’s (1979) ecological framework exemplifies the dynamic experiences of children as they enter foster care (Hong et al., 2011).

The ecological framework consists of the microsystem, or proximal factors that directly impact children (e.g., maintenance or loss of relationships with community members, church officials, teachers, friends, siblings; Bronfenbrenner, 1977, 1979, 1994). Next, the mesosystem involves relationships among microsystems (e.g., relationships between teachers and foster parents, foster parents and biological parents; Bronfenbrenner, 1977, 1979, 1994). The exosystem involves settings in which the child does not actively participate; this system consists of the greater social context that affects children (e.g., stigma experienced at a new school, poverty). Next, the macrosystem includes cultural factors (e.g., leaving cultural familiarity to live in a new community with a different ethnic group, socioeconomic status; Bronfenbrenner, 1977, 1979,
Finally, the chronosystem includes sociohistorical considerations (e.g., view of families in foster care over time; Bronfenbrenner, 1977, 1979, 1994). Of note, ecological transitions, or changes in roles and/or contexts across systems, occur throughout development (Bronfenbrenner, 1979).

Bronfenbrenner (1977, 1979, 1994) and other theoretical work specific to foster care (Hong et al., 2011) highlight the importance of considering multiple risk factors across systems to understand child well-being. Yet, the majority of child welfare research has focused on describing ecological disruptions without examining associated outcomes or relating one ecological disruption (e.g., changing schools) to outcomes. For example, Sullivan and colleagues (2010) conducted a retrospective study on the relation between number of school changes and academic progress and behavioral problems among children in foster care. School changes related to increased behavioral problems while controlling for whether children were in the appropriate grade based on their age (Sullivan et al., 2020). School changes were not significantly associated with internalizing symptoms or academic progression (Sullivan et al., 2010). While such work has merit, we hypothesize that additional variables may impact children’s outcomes, such as connection to community, school, friends, and church. Of note, few studies have examined the impact of separation from church on children’s well-being. Studying multiple ecological disruptions in one model allows researchers to examine variables that might better account for variation in outcomes.

Additional limitations in this literature include the use of retrospective or cross-sectional methodologies, along with the exclusion of baseline mental health and maltreatment severity as covariates. These covariates are important given the strong relation with children’s well-being (e.g., internalizing symptoms and externalizing behaviors; Norman et al., 2012). While Fawley-
King and colleagues (2017) included five ecological disruptions, their study was limited by cross-sectional design and an inability to control for baseline mental health. However, a strength of their study was the inclusion of all variables in linear and poisson regressions to examine the relation between changes in neighborhoods, schools, friends, and siblings, along with infrequent contact with biological mothers on children’s mental health (internalizing symptoms and externalizing behaviors), social functioning, attitudes towards school, and relationships with their foster family while controlling for child demographics and placement factors (Fawley-King et al., 2017). Results indicated that children who had contact with their biological mothers more than once a month had more mental health concerns (Fawley-King et al., 2017). Changing schools related to improved mental health outcomes and children separated from siblings were more likely to get along with peers (Fawley-King et al., 2017).

The present study sought to expand the literature by examining the impact of multiple ecological disruptions (i.e., changes in or separation from siblings, friends, school, church, community), each described further below, on children’s long-term internalizing symptoms and externalizing behaviors. This study controlled for baseline child well-being, demographic variables (i.e., child age, gender, and race), and maltreatment severity. A particular strength of the current study is the inclusion of all variables in one model, thereby controlling for factors that might influence other variables. This holistic approach increases external validity by examining the greater ecological context.

**Separation from Siblings**

Separation from siblings represents a significant microsystem disruption and can present challenges for children in foster care. Children in qualitative studies have reported that they preferred to be placed with siblings (Herrick, 2002; Knipe & Warren, 1999). Siblings placed
together have exhibited resilience in the face of adversity (Herrick & Piccus, 2005; Wojciak et al., 2018), including fewer mental health, social, and academic challenges (Hegar & Rosenthal, 2009; Hegar & Rosenthal, 2011; Smith, 1995; Smith, 1998; Tarren-Sweeney & Hazell, 2005). Based on research regarding the importance of sibling relationships in child welfare, federal law mandates that agencies make efforts to keep siblings together unless siblings pose a threat to one another (U.S. Public Law 110-351). Nevertheless, studies with nationally representative samples have reported that 65.6-80% of children have been separated from at least one sibling while in foster care (Fawley-King et al., 2017; Hegar & Rosenthal, 2011; Wojciak et al., 2013).

Children have reported disappointment, grief, loneliness, and worry related to sibling separation (Harrison, 1999; Herrick & Piccus, 2005; Timberlake et al., 1982; Whiting & Lee, 2003). From a developmental perspective, children are at risk of believing that separation from siblings is deserved and a form of punishment for which they are responsible, which may relate to feelings of guilt (Harrison, 1999; Timberlake et al., 1982). Further, children lose the opportunity to lean on their siblings for support during this traumatic time. Children participating in a qualitative study highlighted that their siblings experienced similar adversity and could have supported each other in processing this trauma had they been kept together (Whiting & Lee, 2003; Wojciak et al., 2013). Given these aforementioned emotional challenges, sibling separation has been related to internalizing symptoms and externalizing behaviors among children in foster care (Leathers, 2005; Linares et al., 2007).

Other studies have not found a relation between separation from siblings and emotional and behavioral outcomes (Fawley-King et al., 2017; Hegar & Rosenthal, 2011). Many separated siblings are able to maintain contact via visits or see each other at school. Further, siblings are often separated due to concerns of harm against one another. Of note, variability in findings
about sibling separation may be explained in part by different ways of measuring sibling separation – some studies only consider children living without siblings, while others include children who were separated from one sibling but continue to live with at least one other sibling (Fawley-King et al., 2017).

**Changes in Friends**

Many children have experienced difficulties maintaining friendships in foster care (Berrick, 2006), which can create another microsystem disruption. Nearly half (46.5%) of a nationally representative sample of children in foster care no longer saw their friends (Fawley-King et al., 2017). Research has highlighted that maintaining friendships may serve as a protective factor among children in foster care (Mariscal et al., 2015; Melkman, 2015) and losing friendships is associated with distress (Berrick, 2006; Chambers et al., 2008). Children in foster care not only struggle with the loss of old friendships, but also face the challenge of making new friends. Adolescents participating in a qualitative study by Del Quest and colleagues (2012) discussed difficulties making new friends, especially given mobility with frequent placement changes. Further, children have reported that they kept their foster care status a secret among new peers and friends due to concerns of social stigma (Chambers et al., 2008; Finkelstein et al., 2002); stigma falls in the exosystem. Such secrecy and stigma have been associated with externalizing behaviors and internalizing symptoms (e.g., depressive symptoms) among children in foster care (Chambers et al., 2008; Finkelstein et al., 2002; Perry, 2006).

In contrast, some work suggests that children may benefit from removal from friends and exposure to new peers. Approximately half of the children in Johnson and colleagues’ (1995) study reported that children in their new neighborhoods were friendlier and easier to get to know
than those in their old neighborhoods. Further, children have benefited from moving away from
friends who engaged in deviant behaviors (Shook et al., 2009; Van Ryzin & Leve, 2012).

School Moves

Previous studies have presented variable estimates of children who change schools upon entry into foster care; Fawley-King and colleagues (2017) reported that 57-93% of children transferred schools while in foster care (Chapman et al., 2004; Conger & Rebeck, 2001; Fries et al., 2014; Johnson et al., 1995; Pears et al., 2015). Pears and colleagues (2015) reported that children in foster care were four times more likely to change school districts compared to same-aged peers of similar socioeconomic status.

Changing schools presents a microsystem disruption and can have implications for mesosystems (e.g., foster parent-teacher relationships) and exosystems (e.g., teachers’ perceptions of foster care, resources). With such changes in school settings, children in foster care have experienced gaps in schooling (Yu, 2002), missed or retook lessons (Conger & Finkelstein, 2003; Pears et al., 2015), and lost credits (Weinberg & Luderer, 2004). Further, students who changed schools had to develop new relationships with teachers (Pears et al., 2015). School staff required time to determine appropriate instruction (Grigg, 2012), sometimes resulting in disrupted special education services (Stone, 2007). Thus, such school disruptions have related to poor academic, emotional, and behavioral outcomes (Berrick, 2006). Sullivan and colleagues (2010) found that school moves at any age related to increased externalizing behaviors among children in foster care; only school moves during the high school period were associated with increased internalizing symptoms. Such behavioral, social, and emotional problems may arise as children’s academic settings lack continuity and predictability (Sullivan et
Thus, children have reported stress and anxiety as they adjusted to new school settings (Finkelstein et al., 2002; Johnson et al., 1995).

Despite these challenges, school moves have also been associated with positive outcomes (Berrick, 2006). In studies with nationally representative samples, the majority (55-69%) of children indicated that that their new schools were “better” than their previous schools (Chapman et al., 2004; Fawley-King et al., 2017). Fawley-King and colleagues (2017) reported that children who changed schools had fewer emotional, behavioral, and social problems compared to those who did not change schools (Fawley-King et al., 2017). Positive outcomes may be related to improved resources and opportunities in new schools (Berrick, 2006; Fawley-King et al., 2017).

**Changes in Church**

Places of worship can serve as microsystems. The maintenance of spiritual community can serve as a protective factor for children in foster care (Jackson et al., 2010; Stukes Chipungu, & Bent-Goodley, 2004). For example, a study of adolescents in child welfare revealed that religious involvement related to fewer externalizing behaviors (Scott et al., 2006). Scholars have highlighted the importance of spiritual communities among people of color (exosystems), as religion has promoted a sense interdependence, racial pride, and connectedness (Falicov, 1999; Harvey & Rauch, 1997; Stukes, Chipungu & Bent-Goodley, 2004). However, religious involvement may also be associated with poor outcomes among some children in foster care. For example, some LGBTQIA+ children may experience emotional challenges related to religious involvement depending on the religious communities’ views (Jacobs & Freundlich, 2006).

Overall, spirituality among children in foster care is underresearched, including the number of children who experience disruptions in religion.
Changes in Community

Children in foster care who stay in their communities of origin experience minimized microsystem, mesosystem, and exosystem disruptions (e.g., familial and cultural disruptions; Berrick, 2006). As such, the Adoption Assistance and Child Welfare Act of 1980 stipulates that child welfare agencies must exercise due diligence to place children close to their former caregivers’ homes (U.S. Public Law 96-272). Yet, studies with nationally representative foster care samples reveal that the majority of children (72.2-87%) have been removed from their communities (Chapman et al., 2004; Fawley-King et al., 2017).

Moving neighborhoods has been associated with poor outcomes. Children who leave their communities may have difficulties maintaining relationships and involvement in activities (Fawley-King et al., 2017; Hyde & Kammerer, 2008). Further, children may experience separation from their culture (e.g., language, religion, traditions; Berrick, 2006; Stukes Chipungu & Bent-Goodley, 2004), which has been related to internalizing symptoms, particularly a loss of sense of self and belonging (Greeson & Bowen, 2008). In a qualitative study by Hyde and Kammerer (2008), children described challenges adjusting to new communities, different cultures, and new relationships with peers and mental health providers upon entering foster care.

Changing communities can be particularly concerning for children of color (Stukes Chipungu & Bent-Goodley, 2004), who are disproportionately represented in the foster care system (macrosystem; Child Welfare Information Gateway, 2016). Yet, the majority of non-kin foster parents are white (Child Welfare Information Gateway, 2019). Communities of origin have served as safe contexts for children of color to learn how to navigate challenges faced throughout development (e.g., racism, discrimination; Stukes Chipungu & Bent-Goodley, 2004). Further, children of color have described stigmatization when placed in white communities
(Greeson & Bowen, 2008; Whiting & Lee, 2003). Lastly, reliance on social support networks for the nurturance of children is important within many communities of color (e.g., Chatters et al., 2002; Ebaugh & Curry, 2000; Gaylord-Harden et al., 2007; Stukes Chipungu & Bent-Goodley, 2004). In contrast with such values, the foster care system has placed emphasis on promoting independence (Samuels & Pryce, 2008; Stukes Chipungu & Bent-Goodley, 2004).

Of note, some studies have not found a link between changing communities and internalizing and externalizing behaviors (Fawley-King et al., 2017). Further, similar to findings related to school changes, children sometimes report benefit in changing their community. In a nationally representative sample, approximately half (54%) of the children who moved indicated that their new neighborhood was “better than where they lived before” (Chapman et al., 2004). Children in foster care may benefit from changing neighborhoods when there are concerns of violence or lack of resources (Berrick, 2006; Chapman et al., 2004; Huang & Ryan, 2014).

**Current Study**

This study expanded existing research by exploring the impact of five, salient ecological disruptions (i.e., changes in or separation from siblings, friends, school, church, community) on children’s long-term internalizing symptoms and externalizing behaviors in an urban Midwestern location while controlling for baseline child well-being, demographic variables (i.e., child age, gender, and race), and maltreatment severity. Child age, gender, race, and maltreatment severity are often included as covariates in the context of child welfare (Greeson et al., 2011; Pecora et al., 2009). Further, maltreatment severity has been associated with internalizing symptoms and externalizing behaviors among children in foster care (Norman et al., 2012). As described above, the literature presents conflicting findings about the impact of ecological disruptions, which complicates hypotheses. However, given more evidence on the negative impact of disruptions
after experiencing maltreatment and removal from familiar contexts, the authors hypothesize that disruptions in siblings, friends, school, church, and community will relate to increased internalizing symptoms and externalizing behaviors.

Method

Participants

This study used data from a larger project of children in foster care, which was approved by the Institutional Review Boards at the Illinois (IL) Department of Child and Family Services (DCFS) and Loyola University Chicago. The DCFS provided researchers at Loyola University Chicago with a list of participants (6-13-year old children entering foster care in Cook and Will Counties between October 1st, 2011 and June 1st, 2014).

A sample of 490 children participated in the study. Of those, 359 (73.3%) had data on ecological disruptions. This information was collected a few months into the study period in an effort to capture the ecological disruptions described by caseworkers during the interviews with research assistants. In terms of outcome variables, three or more assessments were required for longitudinal analysis. Some children exited foster care prior to the completion of multiple assessments; of the 359 participants with ecological disruption data, 211 (58.8%) had the data required for internalizing symptom and 196 (54.6%) had data required for externalizing behavior longitudinal analyses. According to independent samples t-tests and chi-square tests of independence, no statistically significant differences were found between children included and not included in the sample for internalizing and externalizing analyses in terms of gender, race, reason for entry into care, maltreatment severity, or Time 1 internalizing symptoms and externalizing behaviors. However, there was a significant difference in age, such that children included in the internalizing analyses were older ($n = 211, M = 10.23, SD = 2.37$) than those not
included in analyses \((n = 279, M = 9.63, SD = 2.35)\). Similarly, those included in externalizing analyses were older \((n = 196, M = 10.38, SD = 2.33)\) than those not included in analyses \((n = 294, M = 9.70, SD = 2.35)\).

In sum, the sample included 211 participants with a mean age of 10.23 \((SD = 2.37)\). The majority \((55.0\%)\) were female. Most children were African American \((57.3\%)\), followed by 12.8\% Latinx, 19.0\% Multiracial and Asian, and 10.9\% white. Reasons for entering foster care included neglect \((73.9\%)\), physical abuse \((29.4\%)\), and sexual abuse \((9.5\%)\). See Table 10 for demographic information.

Table 10. Descriptive Statistics \((N = 211)\)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Valid (n)</th>
<th>%</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>211</td>
<td></td>
<td>10.23 (2.37)</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>211</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>211</td>
<td>57.3</td>
<td></td>
</tr>
<tr>
<td><strong>Reasons for Entry into Foster Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect</td>
<td>211</td>
<td>73.9</td>
<td></td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>211</td>
<td>29.4</td>
<td></td>
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<tr>
<td>Sexual Abuse</td>
<td>211</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td><strong>Ecological Disruptions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siblings</td>
<td>211</td>
<td>46.9</td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>211</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>211</td>
<td>64.0</td>
<td></td>
</tr>
<tr>
<td>Church</td>
<td>211</td>
<td>10.0</td>
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</tr>
<tr>
<td>Community</td>
<td>211</td>
<td>12.8</td>
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<tr>
<td><strong>CANS</strong></td>
<td></td>
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<tr>
<td>Maltreatment</td>
<td>211</td>
<td></td>
<td>3.76 (1.99)</td>
</tr>
<tr>
<td>Internalizing</td>
<td>211</td>
<td></td>
<td>1.43 (1.31)</td>
</tr>
<tr>
<td>Externalizing</td>
<td>196</td>
<td></td>
<td>0.72 (1.29)</td>
</tr>
</tbody>
</table>

*Note. CANS = Child and Adolescent Needs and Strengths at Time 1.*
Measures

File Reviews

The DCFS granted access to the Statewide Automated Child Welfare Information System (SACWIS) database. The SACWIS database included an Integrated Assessment (IA) for each participant. The IL DCFS uses the IA to guide service planning and placements for children in foster care. Licensed mental health professionals complete the IA within 45 days of children entering the child welfare system. The IA includes interviews with children, caregivers, and other individuals involved in the case regarding developmental, medical, social, mental health, educational, familial, maltreatment, and placement histories of children, along with the functioning of all people involved. Research assistants reviewed participants’ IAs and collected information about demographics (i.e., child age, gender, race), maltreatment history (i.e., neglect, physical and sexual abuse), and ecological disruptions (i.e., changes in or loss of siblings, friends, school, church, community).

Trained research assistants coded ecological disruptions dichotomously as 0 = no or 1 = yes. Children were reported as 1 = yes for experiencing separation from siblings if they were removed from at least one sibling. Losing any number of friends, enrolling in a new school, and no longer attending their church of origin qualified for 1 = yes for these ecological disruptions. Community disruption was measured as 1 = yes if children were removed from community and/or community supports (e.g., extracurricular activities, community programing, mentorship programs). Research assistants then verified this information with caseworkers through phone interviews.

A minority (10.9%) of caseworkers were not available for an interview. Research assistants were still able to glean all of the relevant information from these children’s file
reviews. Data that were not verified were still used in analyses, given significant changes rarely resulted from interviews with caseworkers. Further, independent samples t-tests and chi-square tests of independence did not reveal differences between children whose caseworkers were or were not contacted in terms of age; maltreatment severity; Time 1 internalizing symptoms and externalizing behaviors; race; neglect; physical abuse; sexual abuse; and ecological disruptions (i.e., friends, school, church, community). Chi-square tests of independence indicated that more boys (65.2%) were among children whose caseworkers were not interviewed compared to those who were interviewed (42.6%; $\chi^2 = 4.25, p = .039$). Children whose caseworkers were not interviewed had a higher rate of sibling separation (73.9%) than those whose caseworkers were interviewed (43.6%; $\chi^2 = 7.55, p = .006$).

**Child and Adolescent Needs and Strengths**

The outcomes for the present study (internalizing symptoms, externalizing behaviors) and one covariate (maltreatment severity) were drawn from the Child and Adolescent Needs and Strengths (CANS; Lyons, 2009; see Appendix A). The CANS is a tool used to guide service planning in child welfare (Lyons, 2009). Caseworkers in Illinois complete the CANS at the same time as the IA and quarterly while children are in care. DCFS caseworkers must achieve 85% accuracy in completing the CANS prior to administering this measure in the field. The CANS is a 105-item questionnaire that assesses the needs and strengths of children and their caregivers across multiple domains (i.e., trauma experience, traumatic stress symptoms, strengths, life domain functioning, acculturation, behavioral and emotional needs, risk behaviors; Lyons, 2017). Each CANS item has a severity rating on a four-point Likert-type scale: 0 indicates no evidence of needs or strengths, 1 indicates a need for monitoring or prevention, 2 indicates that a problem needs to be addressed, and 3 indicates the need for immediate or intensive action
Items from the CANS (physical abuse, sexual abuse, emotional abuse, neglect) were summed to create a child maltreatment severity index. Through principal components analysis, items from the CANS were selected to represent externalizing behaviors and internalizing (Jhe Bai et al., 2016; Leon et al., 2016a; Leon et al., 2016b). The listwise deletion technique was used to address missing data; missing data were too significant to estimate (i.e., CANS Time 1, later CANS time points). The following items created the internalizing symptoms scale: depression, anxiety, somatization, traumatic grief/separation, and adjustment to trauma ($\alpha = .691$) and the externalizing behaviors scale: oppositional behavior, conduct, attention deficit/impulse control, anger control, danger to others, sexual aggression, and delinquency ($\alpha = .842$). These scales have been used in cross-sectional and longitudinal studies and demonstrated concurrent validity (e.g., Hindt et al., 2019; Jhe Bai et al., 2016; Leon et al., 2016a).

**Analytic Plan**

Descriptive statistics were analyzed on demographic and outcome measures. Correlations between variables in this study were explored prior to multivariate analyses. A two-level, multi-level model via Hierarchical Linear Modeling (HLM; Bryk & Raudenbush, 1992) was employed to examine the possible effect of ecological disruptions (i.e., siblings, friends, school, church, community) on longitudinal internalizing symptoms and externalizing behaviors.

Through applying a two-level, multi-level model to the data, CANS assessments were nested into time (quarter). Of primary interest, level 2 Time 1 (i.e., time invariant) variables (i.e., disruptions in siblings, friends, school, church, community) predicted internalizing symptom and
externalizing behavior slope trajectories. CANS data were positively skewed. Rather than data transformation (i.e., log-transformation), which often leads to unmet assumptions of the test (e.g., assumption of normality of residuals), CANS items were recoded into dichotomous count data (i.e., “0” or “1” to “0” – absence of a problem related to internalizing symptoms and externalizing behaviors; “2” or “3” to “1” – presence of a problem related to internalizing symptoms or externalizing behaviors). This modification of the items relates to the way in which CANS is used in practice, as caseworkers are only required to address a problem in the service plan on CANS items rated “2” or “3.” The items were then summed, allowing for the use of Hierarchical Generalized Linear Model (HGLM) with a Poisson distributed outcome of count data. The mean and standard deviation of internalizing symptoms and externalizing behaviors were equivalent; therefore, the model was run using the over-dispersion feature in HGLM.

Results

Descriptive Statistics

In terms of ecological disruptions, the majority of children (64%) experienced a change in school followed by 46.9% who were removed from siblings, 25.1% who lost friends, 12.8% who left their communities, and 10% who lost their church. Correlations ranged from low (.139 for the relation between age and removal from siblings) to moderate (.389 for disruptions in school and friends). None of the correlations were high enough to suggest that multicollinearity could affect the interpretation of the HGLM analysis (see Table 11).
Table 11. Correlations Among Variables Used in Analyses (N = 211)

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<tbody>
<tr>
<td>1. Age</td>
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<tr>
<td>2. Gender</td>
<td>.034</td>
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<tr>
<td>3. African American</td>
<td>.073</td>
<td>.009</td>
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<tr>
<td>4. Community Disruption</td>
<td>.092</td>
<td>-.024</td>
<td>.158*</td>
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<tr>
<td>5. Church Disruption</td>
<td>.077</td>
<td>-.017</td>
<td>-.161*</td>
<td>.157*</td>
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<tr>
<td>6. School Disruption</td>
<td>.186**</td>
<td>.035</td>
<td>.072</td>
<td>.199**</td>
<td>.151*</td>
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<tr>
<td>7. Friend Disruption</td>
<td>.077</td>
<td>.107</td>
<td>.031</td>
<td>.171*</td>
<td>.245**</td>
<td>.389**</td>
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<tr>
<td>8. Sibling Disruption</td>
<td>.139*</td>
<td>-.046</td>
<td>.216**</td>
<td>.038</td>
<td>.068</td>
<td>-.066</td>
<td>1.107</td>
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<tr>
<td>9. Maltreatment Severity</td>
<td>.060</td>
<td>-.079</td>
<td>-.035</td>
<td>.117</td>
<td>-.088</td>
<td>-.015</td>
<td>-.046</td>
<td>.131</td>
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<td></td>
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<tr>
<td>10. Internalizing Symptoms</td>
<td>.104</td>
<td>.058</td>
<td>.145*</td>
<td>.101</td>
<td>-.061</td>
<td>.081</td>
<td>.018</td>
<td>.046</td>
<td>.437**</td>
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<td></td>
</tr>
<tr>
<td>11. Externalizing Behaviors</td>
<td>.228**</td>
<td>-.126</td>
<td>.116</td>
<td>.165*</td>
<td>.033</td>
<td>.207**</td>
<td>-.010</td>
<td>.057</td>
<td>.201**</td>
<td>.368**</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01.
Hierarchical Generalized Linear Model (HGLM) Analyses

Per unconditional growth curve analyses, the mean trajectories for internalizing symptoms and externalizing behaviors had nonzero intercepts and slopes. The significant variances of the intercepts and slopes suggested that both internalizing symptoms and externalizing behaviors changed over time. Ten variables were used in the conditional models and produced main effects: CANS Time 1 internalizing symptoms or externalizing behaviors; child age, gender, and race (African American); CANS Time 1 maltreatment severity; and ecological disruptions in siblings, friends, school, church, and community (see Tables 12 and 13).

Internalizing Symptoms

Time 1 internalizing symptoms were negatively associated with the slope of internalizing symptoms over time ($\beta_{11} = -.06, p < .001$). Maltreatment severity was associated with increased internalizing symptoms over time ($\beta_{15} = .04, p < .011$). Both changes in school ($\beta_{18} = .12, p < .011$) and community ($\beta_{16} = .18, p < .011$) were related to increased internalizing over time. Child age, gender, and race along with disruptions in church, friends, and siblings were not significantly related to changes in internalizing symptoms over time.

Externalizing Behaviors

Time 1 externalizing behaviors were negatively associated with the slope of externalizing behaviors over time ($\beta_{11} = -.03, p = .002$). Disruptions in friends was related to decreased externalizing over time ($\beta_{19} = -.10, p = .010$). The relation between community disruptions and increased externalizing approached significance ($\beta_{16} = .07, p = .050$). Child age, gender, and race; maltreatment severity; disruptions in school, church, and siblings were not significantly associated with changes in externalizing behaviors over time.
Table 12. Multi-level Poisson Model (Population-Average) for CANS Internalizing Symptoms Trajectories

<table>
<thead>
<tr>
<th>Slope Terms</th>
<th>Coeff.</th>
<th>SE</th>
<th>p</th>
<th>ERR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $\beta_{10}$</td>
<td>-0.163</td>
<td>0.085</td>
<td>0.057</td>
<td>0.85</td>
<td>0.72,1.01</td>
</tr>
<tr>
<td>CANS Time 1 (Ext./Int.) $\beta_{11}$</td>
<td>-0.065</td>
<td>0.012</td>
<td>0.001</td>
<td>0.94</td>
<td>0.92,0.96</td>
</tr>
<tr>
<td>Child Age $\beta_{12}$</td>
<td>0.004</td>
<td>0.006</td>
<td>0.501</td>
<td>1.00</td>
<td>0.99,1.02</td>
</tr>
<tr>
<td>Child Gender $\beta_{13}$</td>
<td>0.027</td>
<td>0.028</td>
<td>0.338</td>
<td>1.03</td>
<td>0.97,1.09</td>
</tr>
<tr>
<td>Child Race (African American) $\beta_{14}$</td>
<td>0.027</td>
<td>0.032</td>
<td>0.392</td>
<td>1.03</td>
<td>0.97,1.09</td>
</tr>
<tr>
<td>Maltreatment $\beta_{15}$</td>
<td>0.022</td>
<td>0.009</td>
<td>0.011</td>
<td>1.02</td>
<td>1.01,1.04</td>
</tr>
<tr>
<td>Community Disruption $\beta_{16}$</td>
<td>0.180</td>
<td>0.039</td>
<td>0.001</td>
<td>1.20</td>
<td>1.11,1.29</td>
</tr>
<tr>
<td>Church Disruption $\beta_{17}$</td>
<td>-0.157</td>
<td>0.080</td>
<td>0.051</td>
<td>0.85</td>
<td>0.73,1.00</td>
</tr>
<tr>
<td>School Disruption $\beta_{18}$</td>
<td>0.123</td>
<td>0.032</td>
<td>&lt;.001</td>
<td>1.13</td>
<td>1.06,1.20</td>
</tr>
<tr>
<td>Friends Disruption $\beta_{19}$</td>
<td>-0.058</td>
<td>0.033</td>
<td>0.074</td>
<td>0.94</td>
<td>0.88,1.01</td>
</tr>
<tr>
<td>Siblings Disruption $\beta_{20}$</td>
<td>-0.015</td>
<td>0.027</td>
<td>0.568</td>
<td>0.98</td>
<td>0.93,1.04</td>
</tr>
</tbody>
</table>

Table 13. Multi-level Poisson Model (Population-Average) for CANS Externalizing Behavior Trajectories

<table>
<thead>
<tr>
<th>Slope Terms</th>
<th>Coeff.</th>
<th>SE</th>
<th>p</th>
<th>ERR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $\beta_{10}$</td>
<td>0.057</td>
<td>0.081</td>
<td>0.482</td>
<td>1.06</td>
<td>0.90,1.24</td>
</tr>
<tr>
<td>CANS Time 1 (Ext./Int.) $\beta_{11}$</td>
<td>-0.027</td>
<td>0.009</td>
<td>0.002</td>
<td>0.97</td>
<td>0.96,0.99</td>
</tr>
<tr>
<td>Child Age $\beta_{12}$</td>
<td>-0.001</td>
<td>0.007</td>
<td>0.855</td>
<td>1.00</td>
<td>0.99,1.01</td>
</tr>
<tr>
<td>Child Gender $\beta_{13}$</td>
<td>-0.008</td>
<td>0.029</td>
<td>0.784</td>
<td>0.99</td>
<td>0.94,1.05</td>
</tr>
<tr>
<td>Child Race (African American) $\beta_{14}$</td>
<td>0.025</td>
<td>0.030</td>
<td>0.398</td>
<td>1.03</td>
<td>0.97,1.09</td>
</tr>
<tr>
<td>Maltreatment $\beta_{15}$</td>
<td>0.012</td>
<td>0.007</td>
<td>0.114</td>
<td>1.01</td>
<td>1.00,1.03</td>
</tr>
<tr>
<td>Community Disruption $\beta_{16}$</td>
<td>0.066</td>
<td>0.033</td>
<td>0.050</td>
<td>1.07</td>
<td>1.00,1.14</td>
</tr>
<tr>
<td>Church Disruption $\beta_{17}$</td>
<td>0.080</td>
<td>0.063</td>
<td>0.205</td>
<td>1.08</td>
<td>0.96,1.23</td>
</tr>
<tr>
<td>School Disruption $\beta_{18}$</td>
<td>0.032</td>
<td>0.049</td>
<td>0.512</td>
<td>1.03</td>
<td>0.94,1.14</td>
</tr>
<tr>
<td>Friends Disruption $\beta_{19}$</td>
<td>-0.102</td>
<td>0.039</td>
<td>0.010</td>
<td>0.90</td>
<td>0.84,0.98</td>
</tr>
<tr>
<td>Siblings Disruption $\beta_{20}$</td>
<td>-0.031</td>
<td>0.029</td>
<td>0.285</td>
<td>0.97</td>
<td>0.92,1.03</td>
</tr>
</tbody>
</table>
Discussion

Given the importance of an ecological systems approach in child welfare, this longitudinal study examined the impact of five ecological disruptions on children’s long-term internalizing symptoms and externalizing behaviors. The present study included a sample of 6-13-year-olds. Most children entered foster care due to neglect, followed by physical and sexual abuse. Maltreatment severity related to increased internalizing and externalizing over time. Ecological disruptions included: 64% of children changing schools, 46.9% being separated from siblings, 25.1% losing touch with friends, 12.8% being removed from the community, and 10% changing church. Results from this study revealed that disruptions in children’s school setting and community related to increased internalizing and externalizing. In contrast, removal from friends was associated with decreased externalizing.

Siblings

Nearly half of the sample experienced separation from siblings, which is slightly below estimates from other studies suggesting 65.6-80% of children have been separated from at least one sibling upon entry into foster care (Fawley-King et al., 2017; Hegar & Rosenthal, 2011; Wojciak et al., 2013). In the current study, separation from at least one sibling was not associated with internalizing symptoms and externalizing behaviors, which aligns with some previous studies (Fawley-King et al., 2017; Hegar & Rosenthal, 2011). Children in the present study may have lived in different homes, but many still had regular visits with their siblings (an intact microsystem). Thus, they were likely able to rely on one another for support, check on each other to ensure well-being, and maintain their relationship.

Further, findings may have differed had sibling separation been measured as children who were separated from all of their siblings. Such complete separation may be more impactful
on children. Regardless, results from the current study should not be over-interpreted, given a strong base of previous research highlighting the importance of sibling relationships and keeping children together in the same home in child welfare (e.g., Hegar & Rosenthal, 2009; Hegar & Rosenthal, 2011; Herrick & Piccus, 2005; Smith, 1995; Smith, 1998; Tarren-Sweeney & Hazell, 2005; Wojciak et al., 2018). In fact, federal law mandates that siblings be kept together unless there is concern for harm. It is possible that some siblings in the present study were separated for their safety, which may also explain the findings that separation from siblings did not impact well-being.

Future research should examine circumstances under which children are separated from siblings and how various factors relate to outcomes. For example, studies have found that specific factors (e.g., siblings’ adjustment and behavioral issues, relationship quality between siblings) better predict children’s adjustment than separation (Perry & Price, 2018; Wojciak et al., 2018).

Friends

About one quarter of the children in the present sample experienced changes in friendships. This proportion was lower than Fawley-King and colleagues (2017) report that 46.5% of children no longer saw old friends. The present study relied on caseworkers’ interviews with children and stakeholders, which may have related to under-reporting of disruptions in friendships. Further, the ability of children to maintain social connections via technology and social media continues to grow, which may explain why children in the present study have been able to stay more connected to friends (intact microsystems; Stott et al., 2016).

Separation from friends was related to decreased externalizing behaviors over time. This finding aligns with some previous work (Negriff et al., 2015; Perry, 2006). Separation from peers
who engage in negative behaviors can relate to improved outcomes among children in foster care, particularly in terms of externalizing and risk-taking behaviors (Shook et al., 2009; Van Ryzin & Leve, 2012). Future research should explore circumstances in which friends confer benefit versus risk, especially given friends make up an important part of children’s microsystems and social support network regardless of whether their involvement may lead to more or less externalizing behaviors (Mitchell et al., 2010; Sen & Broadhurst, 2011).

School

Over half of the sample (60%) experienced a change in school, which aligns with estimates from some studies (57-93%; Fawley-King et al., 2017). The results revealed that changing schools was associated with increased internalizing symptoms over time, which is also consistent with previous studies (Berrick, 2006; Sullivan et al., 2010). Changing schools involves disruptions in microsystems, mesosystems, and exosystems, which impacts relationships with teachers and peers, along with academic functioning. School disruptions and the new, unpredictable setting may compound distress experienced by children upon entry into foster care (Sullivan et al., 2010). As such, children have reported increased stress and anxiety in their new school setting (Finkelstein et al., 2002; Johnson et al., 1995).

In contrast to these results, some studies have documented that children can switch into higher resourced schools and demonstrate improved emotional outcomes (Berrick, 2006; Chapman et al., 2004; Fawley-King et al., 2017). In the study by Fawley-King and colleagues (2017), children from a nationally representative sample who changed schools had fewer mental health concerns (measured by the Child Behavior Checklist; Achenbach, 2009) than children who did not change schools. Fawley-King and colleagues (2017) did not examine internalizing and externalizing as separate outcomes, which may explain this difference. Further, the school
climate in the Chicagoland area differs from other communities, as Cook County consistently represents one of the most financially disadvantaged school districts in the United States (Baker, 2014). Children who enter foster care in Cook County are less likely to move into higher resourced schools. As such, socioeconomic differences may explain the contrasting findings of this study compared to those with national samples. This conclusion highlights the importance of considering macrosystems and the broader ecological systems of children in foster care, and related individual differences in well-being.

**Church**

The present study reported that 10% of children experienced a change in church, which was not significantly related to internalizing symptoms or externalizing behaviors over time. More research on this topic is necessary, especially given religious involvement among children can be related to positive (e.g., Scott, 2006) and/or negative outcomes (e.g., Jacobs & Freundlich, 2006). Further, estimates suggest that the majority of foster parents have a specific religious preference (Tyebjee, 2003). Future research should examine quantitative and qualitative data about children and foster families who do not share the same religious views or attend different churches. This information was not collected in the present study and could relate to different outcomes among children, depending on the circumstances. Of note, the proportion of this sample who experienced a change in church was likely too small to detect positive or negative outcomes given the potential variation among children’s experiences.

**Community**

In this sample, 12.8% of children were removed from their communities. This percentage is lower than estimates in previous studies, which have focused on children specifically moving out of their neighborhoods (72.2-87%; Chapman et al., 2004; Fawley-King et al., 2017). The
variation in operationalizing community likely accounts for this difference. Communities rarely have firm boundaries. In the present study, community disruption was measured more subjectively based on trained research assistants’ and caseworkers’ perspectives on whether the child was removed from their community and/or community supports (e.g., extracurricular activities).

In the present study, community disruption was associated with increased internalizing symptoms and externalizing behaviors over time. Children’s ability to stay in their community is important to remain in a familiar environment, maintain support networks, and preserve cultural connection (e.g., Stukes Chipungu & Bent-Goodley, 2004). Further, remaining connected to community could buffer against the negative impact of entering foster care and the related disruptions. The comfort and familiarity of community and its members could benefit children in stressful situations as they enter foster care. From exosystem and macrosystem perspectives, results from this study support community-based prevention and intervention efforts (e.g., Butterfield et al., 2017; Schoenwald et al., 2000) that involve leveraging community and bolstering resources within communities to support children. Policies that eliminate socioeconomic disparities are essential components of these efforts. Further, these results support mandates that children be placed close to their communities (U.S. Public Law 96-272).

Limitations

While the present study offers many strengths, limitations must also be considered. There are a multitude of ecological disruptions that children in foster care may experience outside of the five considered in this study. Further, ecological disruptions were examined dichotomously. The quality of ecological disruptions (e.g., changing to a new school with similar resources) and
the meaning of these disruptions to children were not examined. Future research should consider these factors, which undoubtedly influence the impact on children.

Data collection relied on caseworker interviews with children and family as part of typical child welfare practice. It is possible that some ecological disruptions were under-reported based on what children or families were willing to share. In addition, trained research assistants coded ecological disruptions based on file reviews of caseworkers’ reports. Data gathered on ecological disruptions could be impacted by research assistants’ subjective views of what constitutes a disruption, particularly in terms of community, which is a broad concept. Information obtained from file reviews was verified by research assistants’ interviews with caseworkers. Some caseworkers (10.9%) were not able to be reached to confirm the data. Still, there were few statistically significant differences between data from children whose caseworkers were and were not reached. Finally, this study took place in an urban Midwestern city with an underresourced school district; findings may not be applicable to other communities and jurisdictions.

Conclusions

The present study highlights the importance of considering ecological systems among children in foster to inform clinical practice, research, and policy. In particular, this study suggests that maintaining children’s connections to their school and community is important for well-being. In the present study, separation from friends under certain circumstances related to decreased externalizing behaviors. Future research should examine the quality of these disruptions and the impact on other indicators of well-being (e.g., posttraumatic stress, social functioning, self-esteem, academic performance). Research should continue to examine interactions among ecological disruptions and related outcomes.
CHAPTER FIVE

DISCUSSION

Integrated Discussion

The present scholarship sought to expand understanding about children in the contexts of foster care and/or parental incarceration through an ecological systems framework (Bronfenbrenner, 1977, 1979, 1994). Child maltreatment and parental incarceration are ACEs, and children in these contexts more likely to experience additional ACEs relative to the general population (Felitti et al., 1998; Turney & Wildeman, 2017; Wade et al., 2017). ACEs are linked with short- and long-term emotional, social, behavioral, and health problems (e.g., Felitti et al., 1998; Norman et al., 2012; Wade et al., 2017). As such, it is important to better understand the contexts of foster care and parental incarceration to inform prevention and intervention efforts (e.g., Child Welfare Information Gateway, 2017).

Summary of Findings

The first study, “Developmental Differences in Children’s Visits with Their Jailed Parents,” examined visits between 3-17-year-old children and their parents in jail through quantitative (measured by the Jail-Prison Observation Checklist; Poehlmann, 2012) and qualitative analyses (themes from narrative observations of children’s visits with jailed parents) with a developmentally-informed ecological systems framework. Logistic regression revealed increasing age was associated with increased likelihood of exhibiting serious/somber affect and
crying, and being required to remove shoes in security. Increasing age was related to decreased likelihood of holding caregivers’ hands, clinging to caregivers, whining, pushing, avoiding the parent in jail, and exhibiting distraction, confusion, and anger. Bronfenbrenner’s ecological systems model was used to situate qualitative findings based on microsystems (i.e., child characteristics, caregiver support and attachment behaviors, attachment behaviors to the parent in jail, family interactions, jail talk, saying goodbye), along with mesosystems and exosystems (i.e., caregiver stress, parent-caregiver interactions, corrections environment). Macrosystem- and chronosystem-level recommendations were provided for correctional systems and families. In sum, this study highlighted the need to consider developmental differences in conceptualizing and attending to the needs of children with parents in jail. It was noteworthy that many interactions between children and parents were normative and demonstrated the ability to continue parenting behind bars.

The second study, “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care” has been published (Hindt et al., 2020) and examined the relation between paternal criminal justice involvement (i.e., biological fathers incarcerated upon children’s entry into foster care) and emotional and behavioral outcomes among children in foster care; gender and racial differences were considered. Further, this study investigated whether in-person visits with fathers with and without criminal justice involvement related to children’s outcomes. About 15.7% of children had fathers who were incarcerated in a jail or prison when they entered foster care. Hierarchical Generalized Linear Modeling showed that paternal incarceration related to higher rates of externalizing behaviors but not internalizing symptoms. A significant interaction revealed the detrimental effects of incarceration were less pronounced among African American children. Finally, a significant interaction indicated that
the association between paternal incarceration and externalizing behaviors was attenuated among children who had at least one visit with their fathers. These results support efforts to promote the psychological adjustment of children of color while also working to eliminate racial disparities in contact with the criminal justice system and promote health equity, along with encourage visits between fathers involved in the criminal justice system and children in foster care.

Finally, the third study is titled “Ecological Disruptions and Well-being among Children in Foster Care” and examined the impact of multiple ecological disruptions (i.e., changes in or separation from siblings, friends, school, church, community) on children’s internalizing symptoms and externalizing behaviors over time. Most of the sample experienced a change in school (64.0%), 46.9% were separated from siblings, 25.1% lost friends, 12.8% experienced disruptions in community, and 10.0% left their church. Hierarchical Linear Modeling was employed to examine the association between ecological disruptions and longitudinal internalizing symptoms and externalizing behaviors. Maltreatment severity, along with school and community disruption related to increased internalizing symptoms. Loss of friends was associated with decreased externalizing behaviors, while community disruption was associated with increased externalizing behaviors. This study suggests that maintaining children’s connections to their school and community is important for well-being. Under certain circumstances, separation from friends may be associated with improved behavioral functioning.

**Comparisons Between the Present Samples and National Samples**

Given the lack of systematic data about children in both of the contexts of foster care and parental incarceration, it is helpful to compare the prevalence rates and demographics of the present studies’ samples to previous research. The second study, “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care,” revealed
that 15.7% of the children in foster care had fathers who were incarcerated. This finding aligns with estimates that approximately 15-20% of children in foster care have a parent who is incarcerated (Johnson-Peterkin, 2003). Of note, the present study did not include mothers who were incarcerated; thus, we expect the number of children who experience foster care and parental incarceration to be higher than 15.7%. Further, 15.7% of children in foster care with fathers who were incarcerated is higher than the national estimate of children in the general population who have experienced parental incarceration (8.2%), aligning with research that suggests children in foster care have a higher likelihood of experiencing parental incarceration than the general population (Bethell et al., 2017; Turney & Wildeman, 2017). Future research should explore the prevalence of foster care and parental incarceration (including mothers) among children in different regions with varying policies. Systematic tracking of children in both of these contexts is sorely needed to guide intervention and prevention efforts.

**Disproportionate Representation of People of Color.** Data across these studies aligned with national trends showing that people of color are disproportionately represented in the criminal justice and foster care systems due to racism and systematic oppression, including biases in decision-making within these systems and structural, social disadvantages within communities of color (i.e., poverty, less educational resources, unemployment, community violence; Anderson, 2019; Blumstein, 1993; Garland, Spohn, & Wodahl, 2008; Kaufman & Zigler, 1989; Lee, McCormick, Hicken, & Wildeman, 2015; McWey, Pazdera, Vennum, & Wojciak, 2013; Nellis, 2016; Pettit & Western, 2004; Wildeman & Wang, 2017). In the first study, “Developmental Differences in Children’s Visits with Their Parents in Jail,” participating jails were located in Dakota and Washington Counties, Minnesota and Dane and Racine Counties, Wisconsin. Demographic data from this study aligned with previous work highlighting
the disproportionate representation of families of color in the criminal justice system. Although the majority of the sample was Caucasian, individuals who were African American, Latinx/Hispanic, Multiracial, and Asian or Native American were overrepresented in the present sample relative county statistics (Table 14; Census Bureau, 2019).

Table 14. Comparisons between study sample; Dakota and Washington County, Minnesota; and Dane and Racine County, Wisconsin Census Statistics

<table>
<thead>
<tr>
<th>Race</th>
<th>Study 1 Sample (N = 101)</th>
<th>Dakota County (N = 398,552)*</th>
<th>Washington County (N = 238,136)*</th>
<th>Dane County (N = 488,073)*</th>
<th>Racine County (N = 195,408)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White 42.2</td>
<td>77.1</td>
<td>81.6</td>
<td>79.2</td>
<td>71.4</td>
</tr>
<tr>
<td></td>
<td>African American 21.6</td>
<td>7.5</td>
<td>5.0</td>
<td>5.5</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>Latinx or Hispanic 19.6</td>
<td>7.6</td>
<td>4.5</td>
<td>6.5</td>
<td>13.6</td>
</tr>
<tr>
<td></td>
<td>Multiracial 14.7</td>
<td>3.0</td>
<td>2.5</td>
<td>2.7</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>Asian and Native American 2.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Native American -</td>
<td>0.6</td>
<td>0.6</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Asian -</td>
<td>5.2</td>
<td>6.4</td>
<td>6.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*Note. Study 1 is “Developmental Differences in Children’s Visits with Their Jailed Parents.” *Census Bureau, 2019.

Similar disparities were observed in the second study, “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care,” and third study, “Ecological Losses and Well-being among Children in Foster Care.” These studies included samples drawn from the same larger project that took place in Cook and Will Counties in Illinois. In both studies, the majority of the sample was African American, followed by Latinx, Multiracial, white, and Asian (see Table 15). Per the Census Bureau (2019), the majority of people in Cook and Will Counties were white, followed by African American, Asian, Multiracial, Latinx or Hispanic, and Native American (see Table 15). Comparisons between the studies’ samples and Census statistics highlight the striking disproportionate representation of people of color, particularly African American and Multiracial individuals, in correctional and foster care contexts relative to the general population in Cook and Will Counties, Illinois.
Table 15. Comparisons Between Study Sample and Cook and Will County Census Statistics

<table>
<thead>
<tr>
<th>Race</th>
<th>Study 2 Sample (N = 274) %</th>
<th>Study 3 Sample (N = 211) %</th>
<th>Cook County (N = 5,194,675)* %</th>
<th>Will County (N = 677,560)* %</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>66.1</td>
<td>57.3</td>
<td>23.8</td>
<td>12.2</td>
</tr>
<tr>
<td>Latinx and Hispanic</td>
<td>12.8</td>
<td>12.8</td>
<td>25.6</td>
<td>18.2</td>
</tr>
<tr>
<td>Multiracial</td>
<td>14.2</td>
<td>-</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Multiracial and Asian</td>
<td>-</td>
<td>19.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>White</td>
<td>6.6</td>
<td>10.9</td>
<td>42.0</td>
<td>62.5</td>
</tr>
<tr>
<td>Asian</td>
<td>0.4</td>
<td>-</td>
<td>7.9</td>
<td>6.0</td>
</tr>
<tr>
<td>Native American</td>
<td>0.0</td>
<td>0.0</td>
<td>0.7</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Note. Study 2 is “Visits with Fathers Involved in the Criminal Justice System and Behavioral Outcomes among Children in Foster Care.” Study 3 is “Ecological Losses and Well-being among Children in Foster Care.” *Census 2019.

These findings highlight the importance of efforts to not only promote psychological adjustment among communities of color, but also actively take steps to eliminate disparities and promote health equity (Anderson, 2019; Miller, 2007). Miller and Esenstad (2015) detailed efforts to reduce disparities: advocating for policy changes, improving data development and analysis, training individuals in various organizations about racism, creating partnerships, engaging with tribal governments, and strengthening community engagement. Shlafer, Hindt, and Saunders (2020) detail the importance of tracking prevalence of parental incarceration in particular, and how their team has partnered with correctional facility and community-based organizations to support families in the context of parental incarceration.

**Discussion of Findings**

These three studies offered information about children in the contexts of foster care and parental incarceration through an ecological systems framework. Cross-cutting themes of these studies include the salience of family in the lives of children in the contexts of foster care and parental incarceration. When children visit parents in jail, they rely on caregivers to facilitate
these interactions. While interactions with children and parents in jail are fundamentally unique, these dyads had normative parent-child interactions and exemplified parent’s resilience and ability to continue parenting behind bars. Consistent with the many benefits that were observed in children’s visits with their parents in jail, the second manuscript provided evidence that such visits relate to positive child behavioral outcomes over time. The final study also highlighted the importance of social support networks and connection to school and community among children in foster care.

Limitations

While these studies address gaps in the literature and expand our understanding of children in these contexts, limitations must also be considered. Please see each manuscript in which specific limitations are detailed. Across the studies, samples were drawn from Midwestern locations. Correctional and foster care policies differ across states and even counties. Thus, the generalizability of these studies may be limited. Future research should consider children in the contexts of foster care and parental incarceration in various locations.

Recommendations

These studies revealed numerous recommendations for corrections and foster care systems, key stakeholders (e.g., teachers, providers), and families. These recommendations are detailed below through an ecological systems framework. Many of these recommendations cross-cut these systems, which is reflective of the interactive and dynamic nature of ecological systems.

Microsystem Recommendations. The microsystem includes relationships between children and caregivers, corrections and foster care staff, and other important figures (e.g., providers; Hong et al., 2011; Poehlmann, Dallaire, Loper, & Shear, 2010).
**Screening for ACEs and intervention.** Key stakeholders (e.g., caseworkers, physicians, school representatives) should screen children in the contexts of parental incarceration and foster care for ACEs. Further, children should be referred to appropriate and targeted interventions. For example, it is recommended that children engage in regular follow-up with medical teams and engage psychotherapy to address adjustment, trauma, and other mental health concerns.

**Correctional staff interactions.** Staff who enjoy working with families and children are encouraged to work when families are more likely to visit. Warmth and clear communication are important when working with children and families. In particular, it would be useful if staff could explain in developmentally appropriate ways what children can expect when they visit. It would also be useful for long wait times to be relayed to children and families.

**Families and visits.** Of note, all of the following family recommendations may be difficult to enact in reality, given the jail setting and caregiving can be unpredictable and stressful.

These studies highlight the importance of preparation for visits in both the foster care and incarceration contexts. Caregivers could prepare for potentially long wait times with toys and other materials for children. Children could also be prepped prior to visiting. Caregivers may explain jail procedures and the setting. Perhaps families can view the website for the correctional facility to show children what the setting looks like. Of course, this can be challenging when many jail websites lack information (Shlafer, Loper, & Schillmoeller, 2015). Once at the facility, caregivers may encourage children to use the restroom prior to the visit to avoid ending visits early. In general, families should be prepared for the unexpected (i.e., miscommunication, technological issues, lockdown).
Caregivers may also consider how they can support children’s emotional and behavioral regulation during the visit. Perhaps a reinforcement system could be beneficial (e.g., “If you remain seated for X amount of time, you earn a sticker”; “After X stickers, we will get ice cream on the way home”). Caregivers and parents may identify and respond to their children’s and their own emotions (e.g., “It sounds like you are feeling sad because you miss dad,” “I’m feeling angry that dad’s court date was pushed back”). Caregivers may facilitate parent-child interactions, but it is recommended that forced interactions be avoided. Caregivers and parents who are incarcerated may refrain from using jail as a punishment and other age-inappropriate conversations (e.g., concerns about substance abuse); we recognize this can be difficult when families have limited contact with loved ones who are incarcerated. Children can benefit from being warned before the visit ends, although technological and other unanticipated issues can make this difficult. Caregivers and parents could try to carve out time to say goodbye. It may be helpful to process the visit and related emotions after the family leaves.

**Mesosystem Recommendations.** The mesosystem includes connections across microsystems, such as parent-caregiver relationships, parent-correctional staff interactions, and foster caseworker-parents relations (Bronfenbrenner, 1979; Poehlmann et al., 2010; Hong et al., 2011).

**Kin support.** We support efforts to bolster the social support networks among families in the context of foster care and incarceration. Results from these studies and others (e.g., Leon & Dickson, 2019; Blakely et al., 2017) highlight the benefit of kin involvement. An example of one such program is the Recruitment and Kin Connections Project (RKCP), from which data from the second and third studies were drawn. Through this project, kin specialists connect kin and fictive kin (e.g., coaches, mentors) to families in foster care.
**Foster care system and parental incarceration.** Child welfare workers should receive training about the particular needs of children in foster care with parents involved in the criminal justice system. We encourage caseworkers to reflect on their interactions with parents and potential biases and negative beliefs about parents who are incarcerated (Child Welfare Information Gateway, 2015; Hairston, 2009). Engaging parents involved in the correctional system is beneficial for children in foster care (Child Welfare Information Gateway, 2015; U.S. Government Accountability Office, 2011). Ultimately, federal law requires caseworkers to make all reasonable efforts to reunify children with parents who are incarcerated (Child Welfare Information Gateway, 2015; Hairston, 2009).

In particular, child welfare workers could facilitate visits between children and their parents who are incarcerated by helping families find transportation to correctional facilities. Many children live far away from correctional facilities and have few resources to travel to visit their parents (Kaplan & Sasser, 1996; Seymour, 1998). However, some jurisdictions require that child welfare visits be supervised by caseworkers. As such, caseworkers might find it challenging to coordinate and supervise visits when correctional facilities are located far away, which is commonly an issue with prisons.

**Corrections visit considerations.** Correctional facilities would benefit from providing education and training to staff about child development. Staff should be encouraged to not only use clear communication with visitors, but also with one another. Staff should be reminded of policies and encouraged to consistently implement policies to avoid confusion.

Facilities could also consider advertising family visitation times during which staff who enjoy working with children can be scheduled. Such visitation times would also encourage other visitors who may not have children to maintain appropriate conversations. Still families, should
be allowed to visit on other days/times as well. In general, reminders to all visitors that children may be present could be helpful.

**Exosystem Recommendations.** Exosystem factors include the correctional facility setting, racism, poverty, familial stress, and access to resources (Hong et al., 2011; Poehlmann et al., 2010). Caregiver and/or parent stress is also relevant (Poehlmann et al., 2010).

**Biases.** It is essential that stakeholders (e.g., caseworkers, teachers, physicians) reflect on their biases towards families in the contexts of parental incarceration and/or foster care. Further, stakeholders must consider implicit and explicit biases in terms of race, ethnicity, socioeconomic status, geographic location, and other intersectional identities in order to best serve families.

**Corrections environment.** Correctional facilities should put forth efforts to create an environment suitable for families, such as those outlined by Peterson and colleagues (2019) in the *Model Practices Guide for Parents in Prison and Jail: Reducing Barriers to Family Connections*. A simple change involves supplying child-friendly materials (e.g., books, coloring). Such materials were present at some of the sites in the second study of this dissertation. The materials bolstered parent-child interactions and were an alternative to misbehavior. Children struggled with behavioral dysregulation at sites where such materials were not present.

Correctional settings should also seek to improve technology, given the pervasive technological issues in the second study. Phones in barrier visitation often malfunctioned or families were unsure of codes to access these phones. The video visitation had at least one technological issue (shut off early, never turned on) in every observation in this study. One family noted that the headsets for video visitation were often dirty. Perhaps wipes could be
provided for both phones at sites with barrier visitation and headsets at sites with video visitation.

**Caregivers and visits.** It is important to validate that caregivers also experience stress and various emotions. Both children and their caregivers may require preparation prior to visits with parents in the contexts of foster care and/or parental incarceration. It is reasonable and expected that caregivers may experience negative emotions during the visits. It is encouraged that parents explain their feelings in a developmentally appropriate manner to reduce their children’s concern and the ambiguity around such situations. Caregivers may even consider having separate visits for caregivers and siblings, if possible. If that is not possible, the family could plan ahead how they will share the visit time.

**Macrosystem Recommendations.** The macrosystem involves systemic factors, such as policies; societal and judicial attitudes towards incarceration and foster care; and racial disparities (Poehlmann et al., 2010).

**Corrections policies on visits.** From a policy perspective, stakeholders should consider how policies create barriers to visitation for families. For example, jails in the second study had different rules about who could bring children for visitation (i.e., biological parents, legal guardians), which children could visit parents (i.e., age requirements, biological children, adopted children) and what materials were required (i.e., birth certificate). Further, staff inconsistently implemented these policies, leading to confusion and frustration among families. Correctional facilities are encouraged to reduce limitations placed on families regarding who can bring children for visits and which children can visit. This is particularly important given families of color are disproportionately represented in correctional settings (e.g., Lee et al., 2015) and often engage social support networks to nurture children (e.g., Chatters, Taylor, Lincoln, &
Schroepfer, 2002; Ebaugh & Curry, 2000; Gaylord-Harden et al., 2007; Stukes, Chipungu, & Bent-Goodley, 2004). Placing limitations on who can bring children for visitation and what children can visit could negatively impact children’s relationships with parent figures who are incarcerated.

Facilities should also reflect on rules about families leaving the visit to use the restroom. Perhaps facilities could make exceptions for children. This may require families going through security a second time but would at least reduce the distress of children choosing between using the restroom and remaining with their parent.

Lastly, facilities could consider policies regarding visitation type. If their facilities allow, perhaps contact visits could be an option. Inmates have reported preferring face-to-face visits (Celinska & Siegel, 2010; Foster, 2012; Mignon & Ransford, 2012). Studies also suggest that face-to-face visits may normalize the visitation experience and make children feel more comfortable (Nesmith & Ruhland, 2008; Poehlmann et al., 2010).

**Foster care policies.** At the systemic level, policymakers should consider how corrections and child welfare policies affect the well-being of children in foster care and their families. The Adoption and Safe Families Act of 1997 (PL 105-89) requires that states terminate parental rights for children who have been in foster care for 15 of the past 22 months (Miller, 2006; Swann & Sylvester, 2006). Although this legislation is meant to reduce children’s time in foster care, it prevents parents who were incarcerated from taking custody of their children or remaining in their lives, as the average time served is 150 months in state prisons and 121 months in federal prisons (Halperin & Harris, 2004; Mumola, 2000). Perhaps such legislation can be revised to promote reunification with fathers with a history of incarceration who may be the best placement option for some children.
Chronosystem Recommendations. The chronosystem includes changes in policies and attitudes over time (Poehlmann et al., 2010). As mentioned previously, the disproportionate representation of families of color in the contexts of foster care and parental incarceration has persisted over time. Stakeholders must continue anti-racism efforts (described further above) to eliminate such disparities (Anderson, 2019; Miller, 2007; Miller & Esenstad, 2015; Shlafer et al., 2020).

Conclusions and Future Directions

The combination of these three studies increase understanding about the complex, interactive factors that impact the well-being of children in the contexts of child welfare and/or parental incarceration. Future projects should incorporate measures of ACEs and related outcomes to continually flesh out the ecological contexts of children in these contexts. Research and practice focused on creating alternatives to incarceration and ameliorating risk associated with foster care involvement are important. Finally, targeted efforts to eliminate disparities and promote health equity are essential.
APPENDIX A

MEASURES
Selection from The RKCP Kin Identification and Level of Engagement Form

PHASE I REVIEW

1. Initial Case History

Evaluator Initials:______ Youth Name:____________________
DCFS ID:____________________
Youth DOB:_______ Gender: M  F
Ethnic/racial background:  □African/American  □Latino or ______
□Caucasian  □Asian-American □Multi-ethnic □Other:__________________

Date of DCP disposition and removal: __________________
Number of siblings:_______ Birth Order (e.g., 3/6)_______ Youth removed:________
Date of Temporary Custody (TC) hearing:_______________ Agency: _________________
Re_TC? Yes  No: Dates of Re-TC hearing:_________ Date case assignment:___________

Reason for removal: □ Physical Abuse  □Sexual Abuse  □Neglect
Narrative (reason for removal):

__________________________________________________________

__________________________________________________________

SCRIPT AND PROTOCOL FOR SETTING UP THE DISCUSSION OF KIN:

"I am now going to discuss with you the kin, fictive kin, and any community supports (e.g., involved and concerned teacher, coach) that we found during our SACWIS file review of this case. I am going to list the names of the people and ask you to briefly describe their relationship with the child. What I am looking for is a description in your own words of the type of relationship the child has with this person. The basic categories include the following: Child’s placement, visitations, phone calls or cards to the child, whether they help out the child with homework, do babysitting or provide respite for the foster parent, whether or not they help the child learn important life skills (ex: teach the child to cook, practice sports with the child, etc.), assistance with transportation (ex: drive the child to appointments or activities), or this person might be someone attends important events such as sporting events, or has been at court dates at Juvenile Court. Also, the person we’ve identified might be primarily a support to the biological parent (ex: help the parent get to AA meetings or doctor’s appointments, mentor them on parent skills, emotional support). For community supports, the person might be a coach who has taken a special interest in supporting the child through this difficult time in his/her life, or a teacher who
has made visits to the child at home or the shelter. So please be thinking of these types of involvement they may be having with the child. For some of the relatives, I will also ask if you think the individual might have more involvement with the child at a future time. After I finish discussing these people with you, I will ask if you know of any other key people in the child’s life who may not have been listed in SACWIS but who you have identified in working with this child.

There will probably be a wide range of involvement among the people I list to you. Some might be very involved, such as a placement, or regularly visit the child. Others might have no involvement with the child, such as a parent in prison or a relative who lives out of state and does not call or make any other contact. It’s important that we know about these people as well. I would also like to know about any barriers that may exist in terms of getting the relative more involved in the child's life, such as a relative who has a known substance abuse problem, is in jail, or who wants to be a placement but has a criminal history. So let’s start. If you don’t remember all the things I just said, that’s OK, I will prompt you along the way if necessary. Do you have any questions?”

Then, list the first name and ask, “So how would you describe the relationship?”. You can add more detail if it's obvious such as if the person is the placement. If the worker does not describe any of the involvement categories you mentioned above, you can then prompt them by asking if they are doing anything with the child such as visits, respite, attendance at important events, life skills support/teaching etc. However, at this point do not ask them if the kin is a positive attachment figure. Instead, wait until after you have gone through the list and ask: “Thinking about all the people we discussed, who are the people you would say are truly positive attachment figures for this child? By positive attachment figure, we mean someone the child has a bond with, someone the child might go to if he/she is having a problem, or has a special and meaningful sort of tradition they do with the child, such as cut their hair.”

<table>
<thead>
<tr>
<th>First Relative Name: _______________________</th>
<th>Age: _____</th>
<th>Relationship to youth: __________</th>
</tr>
</thead>
<tbody>
<tr>
<td>□Respite</td>
<td>□Visitations</td>
<td>□Home of Relative Foster Care Option</td>
</tr>
<tr>
<td>□Tutoring/HW help</td>
<td>□Mentoring</td>
<td>□Childcare</td>
</tr>
<tr>
<td>□Coaching</td>
<td>□Birthday cards</td>
<td>□Invitation to family or other events (e.g., picnics)</td>
</tr>
<tr>
<td>□Biological parent support</td>
<td>□Foster parent support</td>
<td>Positive attachment figure?</td>
</tr>
<tr>
<td>□No involvement</td>
<td>□Other Involvement. List:</td>
<td></td>
</tr>
<tr>
<td>□Barriers to involvement (e.g., substance use, perpetrator). List:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Current Level of Engagement (circle one): Formal Natural Community Informal
Potential Level of Engagement (circle one): Formal Natural Community Informal

(# ____) Relative Name:______________________ Age:_____ Relationship to youth:______________________ (e.g., “Maternal Aunt”)

□ Respite □ Visitations □ Home of Relative Foster Care Option □ Phone calls
□ Tutoring/HW help □ Mentoring □ Childcare □ Transportation assistance
□ Coaching □ Birthday cards □ Invitation to family or other events (e.g., picnics) □ Attendance at important events (e.g., sports)

□ Biological parent support □ Foster parent support Positive attachment figure? □ Yes □ No

□ No involvement □ Other Involvement. List:
□ Barriers to involvement (e.g., substance use, perpetrator). List:

Notes:
Current Level of Engagement (circle one): Formal Natural Community Informal
Potential Level of Engagement (circle one): Formal Natural Community Informal

Would you consider any of these kin or fictive kin alternative placements for the child if the current placement were to not work out for some reason? (Name of person)_________________________
Have discussed this possibility with this person? YES NO
Selection from the Child and Adolescent Needs and Strengths

Maltreatment:

NEGLECT: This rating describes the severity of neglect an individual has experienced. Neglect can refer to a lack of food, shelter or supervision (physical neglect) or a lack of access to needed medical care (medical neglect) or failure to receive academic instruction (educational neglect).

0. There is no evidence that child has experienced neglect.
1. Child has experienced minor or occasional neglect. Child may have been left at home alone for a short period of time with no adult supervision or there may be occasional failure to provide adequate supervision of child.
2. Child has experienced a moderate level of neglect. Child may have been left home alone overnight or there may be occasional failure to provide adequate food, shelter, or clothing with corrective action.
3. Child has experienced a severe level of neglect including multiple and/or prolonged absences by adults, without minimal supervision, and failure to provide basic necessities of life on a regular basis.

PHYSICAL ABUSE: This rating describes the child’s experience of physical abuse.

0. There is no evidence that child has experienced physical abuse.
1. There is a suspicion that child has experienced physical abuse but no confirming evidence. Spanking without physical harm or threat of harm also qualifies.
2. Child has experienced a moderate level of physical abuse and/or repeated forms of physical punishment (e.g. hitting, punching).
3. Child has experienced severe and repeated physical abuse with intent to do harm and that causes sufficient physical harm requiring hospital treatment.

EMOTIONAL ABUSE: This rating describes the degree of severity of emotional abuse, including verbal and nonverbal forms. This item includes both “emotional abuse,” which would include psychological maltreatment such as insults or humiliation towards a child and “emotional neglect” defined as the denial of emotional attention and/or support from caregivers.

0. There is no evidence that child has experienced emotional abuse.
1. Child has experienced mild emotional abuse. For instance, child may experience some insults or is occasionally referred to in a derogatory manner by caregivers.
2. Child has experienced moderate degree of emotional abuse. For instance, child may be consistently denied emotional attention from caregivers, insulted or humiliated on an ongoing basis, or intentionally isolated from others.
3. Child has experienced significant or severe emotional abuse over an extended period of time (at least one year). For instance, child is completely ignored by caregivers, or threatened/terrorized by others.
SEXUAL ABUSE: This rating describes the child's experience of sexual abuse.

0. There is no evidence that child has experienced sexual abuse.
1. There is a suspicion that the child has experienced sexual abuse with some degree of evidence or the child has experienced “mild” sexual abuse including but not limited to direct exposure to sexually explicit materials. Evidence for suspicion of sexual abuse could include evidence of sexually reactive behavior as well as exposure to a sexualized environment or Internet predation. Children who have experienced secondary sexual abuse (e.g. witnessing sexual abuse, having a sibling sexually abused) also would be rated here.
2. Child has experienced one or a couple of incidents of sexual abuse that were not chronic or severe. This might include a child who has experienced molestation without penetration on a single occasion.
3. Child has experienced severe or chronic sexual abuse with multiple episodes or lasting over an extended period of time. This abuse may have involved penetration, multiple perpetrators, and/or associated physical injury.

Internalizing Symptoms:

DEPRESSION: This item rates displayed symptoms of a change in emotional state and can include sadness, irritability and diminished interest in previously enjoyed activities.

0. No evidence of problems with depression.
1. History, suspicion, or mild depression associated with a recent negative life event with minimal impact on life domain functioning.
2. Clear evidence of depression associated with either depressed mood or significant irritability. Depression has interfered with the child’s ability to function in at least one life domain.
3. Clear evidence of depression that is disabling for the child in multiple life domains.

ANXIETY: This item describes the child’s level of fearfulness, worrying or other characteristics of anxiety.

0. No evidence of any anxiety or fearfulness.
1. History or suspicion of anxiety problems or mild to moderate anxiety associated with a recent negative life event. This level is used to rate either a mild phobia or anxiety problem or a sub-threshold level of symptoms for the other listed disorders.
2. Clear evidence of anxiety associated with either anxious mood or significant fearfulness. Anxiety has interfered significantly in child’s ability to function in at least one life domain.
3. Clear evidence of debilitating level of anxiety that makes it virtually impossible for the child to function in any life domain.
SOMATIZATION: These symptoms include the presence of recurrent physical complaints without apparent physical cause or conversion-like phenomena (e.g., pseudoseizures).

0. This rating is for a child with no evidence of somatic symptoms.
1. This rating indicates a child with a mild level of somatic problems. This could include occasional headaches, stomach problems (nausea, vomiting), joint, limb or chest pain without medical cause.
2. This rating indicates a child with a moderate level of somatic problems or the presence of conversion symptoms. This could include more persistent physical symptoms without a medical cause or the presence of several different physical symptoms (e.g., stomach problems, headaches, backaches). This child may meet criteria for a somatoform disorder. Additionally, the child could manifest any conversion symptoms here (e.g., pseudoseizures, paralysis).
3. This rating indicates a child with severe somatic symptoms causing significant disturbance in school or social functioning. This could include significant and varied symptomatic disturbance without medical cause.

TRAUMATIC GRIEF: This rating describes the level of traumatic grief the youth is experiencing due to death or loss/separation from significant caregivers, siblings, or other significant figures.

0. There is no evidence that the child is experiencing traumatic grief or separation from the loss of significant caregivers. Either the child has not experienced a traumatic loss (e.g., death of a loved one) or the child has adjusted well to separation.
1. Child is experiencing a mild level of traumatic grief due to death or loss/separation from a significant person in a manner that is expected and/or appropriate given the recent nature of loss or separation.
2. Child is experiencing a moderate level of traumatic grief or difficulties with separation in a manner that impairs functioning in some but not all areas. This could include withdrawal or isolation from others or other problems with day-to-day functioning.
3. Child is experiencing significant traumatic grief reactions. Child exhibits impaired functioning across several areas (e.g. interpersonal relationships, school) for a significant period of time following the loss or separation. Symptoms require immediate or intensive intervention.
**ADJUSTMENT TO TRAUMA:** This item covers the youth's reaction to any traumatic or adverse childhood experience. This item covers adjustment disorders, posttraumatic stress disorder and other diagnoses from DSM-IV that the child may have as a result of their exposure to traumatic/adverse childhood experiences. (Please see the CANS glossary for more information on this item and/or other CANS items.)

0. Child has not experienced any significant trauma or has adjusted well to traumatic/adverse child experiences.
1. Child has some mild problems with adjustment due to trauma that might ease with the passage of time. Child may be in the process of recovering from a more extreme reaction to a traumatic experience.
2. Child presents with a moderate level of symptoms. Symptoms can vary widely and may include sleeping or eating disturbances, regressive behavior, behavior problems or problems with attachment. Child may have features of one or more diagnoses and may meet full criteria for a specific DSM diagnosis including but not limited to diagnoses of Post-Traumatic Stress Disorder (PTSD) and adjustment.
3. Child has severe symptoms as a result of traumatic or adverse childhood experiences that require intensive or immediate attention. Child likely meets criteria for more than one diagnosis or would meet criteria for a developmental trauma disorder or a complex trauma disorder.

**Externalizing Behaviors**

**OPPOSITIONAL BEHAVIOR:** This item is intended to capture how the child relates to authority. Oppositional behavior is different from conduct disorder in that the emphasis of the behavior is on non-compliance with authority rather than inflicting damage and hurting others.

0. This rating indicates that the child/adolescent is generally compliant.
1. This rating indicates that the child/adolescent has mild problems with compliance with some rules or adult instructions. Child may occasionally talk back to teacher, parent/caregiver; there may be letters or calls from school.
2. This rating indicates that the child/adolescent has moderate problems with compliance with rules or adult instructions. A child who meets the criteria for Oppositional Defiant Disorder in DSM-IV would be rated here.
3. This rating indicates that the child/adolescent has severe problems with compliance with rules or adult instructions. A child rated at this level would be a severe case of Oppositional Defiant Disorder. They would be virtually always noncompliant. Child repeatedly ignores authority.
**CONDUCT:** These symptoms include antisocial behaviors like shoplifting, lying, vandalism, cruelty to animals, and assault. This dimension would include the symptoms of Conduct Disorder as specified in DSM-IV.

0. This rating indicates a child with no evidence of behavior disorder.
1. This rating indicates a child with a mild level of conduct problems. The child may have some difficulties in school and home behavior. Problems are recognizable but not notably deviant for age, sex, and community. This might include occasional truancy, repeated severe lying, or petty theft from family.
2. This rating indicates a child with a moderate level of conduct disorder. This could include episodes of planned aggressive or other anti-social behavior. A child rated at this level should meet the criteria for a diagnosis of Conduct Disorder.
3. This rating indicates a child with a severe Conduct Disorder. This could include frequent episodes of unprovoked, planned aggressive or other anti-social behavior.

**ATTENTION DEFICIT/IMPULSE CONTROL:** Problems with impulse control, impulsive behaviors, including motoric disruptions would be rated here.

0. This rating is used to indicate a child with no evidence of age-inappropriate impulsivity in action or thought.
1. This rating is used to indicate a child with evidence of mild levels of impulsivity evident in either action or thought. The child may behave in a fashion that suggests limited impulse control. For instance, child may yell out answers to questions or may have difficulty waiting his/her turn. Child may exhibit some motoric difficulties as well, for instance, pushing or shoving others without waiting turn.
2. This rating is used to indicate a child with moderate levels of impulsivity evident in behavior. The child is frequently impulsive and may represent a significant management problem. A child who often intrudes on others and often exhibits aggressive impulses would be rated here.
3. This rating is used to indicate a child with significant levels of impulsivity evident in behavior. Frequent impulsive behavior is observed or noted that carries considerable safety risk (e.g., running into the street, dangerous driving, or bike riding). The child may be impulsive on a nearly continuous basis. He or she endangers self or others without thinking.
ANGER CONTROL: This item captures the youth’s ability to identify and manage their anger when frustrated.

0. **This rating indicates a child with no evidence of any significant anger control problems.**
1. **This rating indicates a child with some problems with controlling anger. He/she may sometimes become verbally aggressive when frustrated. Peers and family members are aware of and may attempt to avoid stimulating angry outbursts. Child may have a history of physical aggression arising from inability to control anger, but none within the last 3 months.**
2. **This rating indicates a child with moderate anger control problems. His/her temper has gotten him/her in significant trouble with peers, family, and/or school. This level may be associated with some physical violence, or increasing verbal outbursts. Others are likely quite aware of anger potential.**
3. **This rating indicates a child with severe anger control problems. His/her temper is likely associated with frequent fighting that is often physical. Others likely fear him/her.**

DANGER TO OTHERS: This rating includes actual and threatened violence. Imagined violence, when extreme, may be rated here. A rating of 2 or 3 would indicate the need for a safety plan.

0. **Child has no evidence or history of aggressive behaviors or significant verbal aggression towards others (including people and animals).**
1. **History of aggressive behavior or verbal aggression towards others but no aggression during the past 30 days. History of fire setting (not in past year) would be rated here.**
2. **Occasional or moderate level of aggression towards others including aggression during the past 30 days or more recent verbal aggression.**
3. **Frequent or dangerous (significant harm) level of aggression to others. Child or youth is an immediate risk to others.**

SEXUAL AGGRESSION: Sexually abusive behavior includes both aggressive sexual behavior and sexual behavior in which the child or adolescent takes advantage of a younger or less powerful child through seduction, coercion, or force.

0. **No evidence of problems with sexual behavior in the past year.**
1. **Mild problems of sexually abusive behavior. For example, occasional inappropriate sexually aggressive/harassing language or behavior.**
2. **Moderate problems with sexually abusive behavior. For example, frequent inappropriate sexual behavior. Frequent disrobing would be rated here only if it was sexually provocative. Frequent inappropriate touching would be rated here.**
3. **Severe problems with sexually abusive behavior. This would include the rape or sexual abuse of another person involving sexual penetration.**
**DELINQUENCY:** This rating includes both criminal behavior and status offenses that may result from child or youth failing to follow required behavioral standards (e.g. truancy). Sexual offenses should be included as criminal behavior.

0. Child shows no evidence or has no history of criminal or delinquent behavior.
1. History of criminal or delinquent behavior but none in the past 30 days. Status offenses in the past 30 days would be rated here.
2. Moderate level of criminal activity including a high likelihood of crimes committed in the past 30 days. Examples would include vandalism, shoplifting, etc.
3. Serious level of criminal or delinquent activity in the past 30 days. Examples would include car theft, residential burglary, gang involvement, etc.
REFERENCE LIST

Chapter One


Chapter Two


Chapter Three


Littner, N. (1973). The effects on a child of family disruption and separation from one or both parents. *Family Court Review, 11*(1), 9–18.


[https://www.magellanprovider.com/media/11838/cans-mhmanual.pdf](https://www.magellanprovider.com/media/11838/cans-mhmanual.pdf)


Chapter Four


https://www.childwelfare.gov/pubPDFs/foster.pdf


Fostering Connections to Success and Increasing Adoptions Act of 2008, Public Law 110-351.


[https://www.magellanprovider.com/media/11838/cans-mhmanual.pdf](https://www.magellanprovider.com/media/11838/cans-mhmanual.pdf)


Chapter Five


VITA

Dr. Hindt was raised in Plymouth, Wisconsin and Lakeville, Minnesota. Before attending Loyola University Chicago, she attended the University of Minnesota Twin Cities where she earned a Bachelor of Arts in Child Psychology, summa cum laude with distinction, and minors in Neuroscience and Public Health in 2014.

While at Loyola, Dr. Hindt has worked as a research assistant in the Promoting Adjustment in Children through Evaluation (PACE) Lab with Dr. Scott Leon. She also served as a Neuropsychology and Pediatric Psychology extern at the University of Chicago. Dr. Hindt worked as a teaching assistant and graduate instructor at Loyola. She was awarded Loyola’s 2020 Graduate Student Teaching Award and President’s Medallion for the Graduate School for 2020-2021. Dr. Hindt is a member of the Alpha Sigma Nu Honor and Phi Beta Kappa Honor Societies. She is currently a predoctoral intern in the University of Minnesota Twin Cities Medical School Pediatric Psychology Internship. Dr. Hindt will remain at the University of Minnesota Twin Cities Medical School as a postdoctoral fellow with the Pediatric Neuropsychology Fellowship Program.