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LOYOLA UNIVERSITY CHICAGO

THE PROTECTIVE EFFECT OF KINSHIP SUPPORT ON THE ADJUSTMENT OF
YOUTH IN FOSTER CARE

A THESIS SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

PROGRAM IN CLINICAL PSYCHOLOGY

BY
GRACE JHE BAI

CHICAGO, IL

MAY 2015

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ACKNOWLEDGEMENTS

I would like to express the deepest gratitude to my committee chair, Dr. Scott C. Leon, for the support, encouragement, insight, and assistance necessary to complete this thesis. I would also like to thank my reader, Dr. James Garbarino, for his invaluable insight and assistance during the evaluative stages of the project.

In addition, I would like to recognize my family and friends for their support throughout this process. It would not have been possible to complete this thesis without their encouragement.

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ABSTRACT

The present study examined the contribution of characteristics of the family-of-origin, such as family functioning, to foster youth's psychological adjustment. With particular attention paid to foster youth's broader social contexts after separation from biological parents, this study also examined how kinship support influences the impact of child maltreatment and dysfunction of family-of-origin on foster youth's subsequent adjustment. Unlike previous studies, specific types of relatives (e.g., maternal aunt, paternal uncle, maternal great aunt, paternal grandmother) and their varying involvements were identified. Participants included 171 children and adolescents (mean age = 10.15; 50.3% male). Hierarchical ordinary least squares regressions were conducted to examine the protective effects of kinship support, age, and race/ethnicity. Results indicated that the intensity of dysfunction of family-of-origin and that of maltreatment were both independently associated with internalizing and externalizing behavior problems among youth in foster care. Moreover, consistent with hypotheses, kinship support was found to have a positive influence on foster youth's externalizing behaviors. However, kinship support was found to have a protective-reactive effect on internalizing behavior problems among foster youth, such that it buffered the adverse effects of dysfunction in family-of-origin only when the intensity of dysfunction was low. These results suggest that the intensity of familial stress or dysfunction that youth in foster care are exposed may be too overwhelming for kinship support to remain protective in more stressful situations. The

results of the current study highlight the need to consider environments of family-of-origin when deciding on services youth need upon entering foster care. Future research should examine the predictive effect of kinship support by using larger longitudinal data and continue to examine protective factors in different layers of ecology to promote better outcomes among youth in foster care.

CHAPTER I

INTRODUCTION

Children who enter the child welfare system, under the temporary custody of Department of Children and Family Services (DCFS), are usually victims of child maltreatment (e.g., physical abuse, sexual abuse, neglect). A substantial body of research has firmly established the adjustment problems that arise from the experience of child maltreatment, including depression (e.g., Guibord et al., 2011), substance use problems (e.g., Guibord et al., 2011), anxiety disorders (e.g., Cohen et al., 2001), and aggression (e.g., Jaffee et al., 2004). Even after youth are placed in foster care, they may continue to be exposed to accumulative as well as additional risk factors (e.g., separation from biological parents, placement disruptions, loss of significant attachments) that increase their vulnerability to developing mental health problems (e.g., Holtan et al., 2005; Stanley et al., 2005). In fact, children and adolescents placed in the foster care system are up to eight times more likely to have a diagnosis of mental illness compared to those in the general population (Burns et al., 2004; Landsverk & Garland, 1999). Given the high prevalence rate of mental health problems among youth in foster care, it is crucial to examine risk and protective factors for foster youth's psychological adjustment (Zielinski & Bradshaw, 2006).

In addition to child maltreatment, various aspects of the family context, such as family conflict, cohesion, relationships, social networks, and sources of support for child

rearing, can also influence youth adjustment (Trickett & McBride-Chang, 1995). In fact,

research suggests that functioning of family-of-origin influence the impact of

maltreatment on subsequent psychological adjustments (Higgins & McCabe, 2003).

Research suggests that while specific types of maltreatment may have an immediate

effect on children's well-being, the more chronic aspects of a dysfunctional family

environment are what influence the long-term adjustment problems in adulthood (Higgins

& McCabe, 2003). Therefore, it is important to consider the dysfunction of the family-of-

origin when studying risk and protective factors for adjustment problems among youth

who enter foster care.

When studying foster youth's psychological adjustment problems, it is important

to apply an ecological framework because contextual factors, such as nuclear and

extended family contexts, may influence the effects of child maltreatment on youth and

explain some of the heterogeneity in the outcomes associated with maltreatment (Jaffee et

al., 2007; Zielinski & Bradshaw, 2006). For example, research suggests that extended

family network is a culturally distinctive feature of family life among ethnic minority

communities, which make up a significant portion of youth in the child welfare system,

about 40 to 50% on average (Hunter et al., 1998; Harrison et al., 1990). In particular,

using support from extended family members is a commonly practiced adaptive strategy

that promotes the well-being of ethnic minority children and families (e.g., Harrison et

al., 1990; Johnson, 2000; Pallock & Lamborn, 2006).

Many studies have indicated that extended family network is an important source

of support for ethnic minority families across all socioeconomic levels (e.g., Cazenave &

Straus, 1979), and that it is a significant contributor to the healthy development of ethnic

minority youth (Hunter et al., 1998; Hunter & Taylor, 1998). Research suggests that support from extended family members (kinship support), such as financial, emotional, or instrumental aid (e.g., transportation, household work), can buffer the negative consequences of living with a single mother or economic hardships (SmithBattle 1996; Taylor et al., 2008; Taylor, Casten, & Flickinger, 1993). In addition to providing support to nuclear families, kinship support has been found to influence youth adjustment as well (e.g., Pallock & Lamborn, 2006; Tolson & Wilson, 1990). Among high-risk African-American youth, kinship support has been negatively associated with anxiety, substance use, and antisocial behaviors (e.g., McLoyd et al., 1994; Taylor et al., 1993; Van Hasselt et al., 1993). For example, McCabe et al.'s study (1999) showed that kinship support moderated the association between familial stressors and behavioral problems. Taylor et al. (1993) also found that kinship social and emotional support was associated with positive youth adjustment among African-American youth, especially those in single-parent families.

However, despite the benefits of kinship support demonstrated in the general population, the literature has not examined the effects of kinship support in the child welfare system, beyond the effects of kinship caregivers (i.e., relative placements). Although the findings are mixed, a substantial body of research indicates that youth in kinship placements exhibit fewer mental health problems and lower levels of trauma compared to those placed in traditional foster care (Testa, Nieto, & Fuller, 2007; Holtan et al., 2005). Support from other extended family members, besides kin caregivers, has not been examined within the child welfare system.

Despite the expanding research on foster youth's psychological adjustment, a number of limitations remain within the extant literature. First, little is currently known about the ways in which the ecological contexts of foster youth, such as family contexts, influence their outcomes (e.g., Zielinski & Bradshaw, 2006). Second, despite the disproportionately large involvement of racial and ethnic minority children in foster care (e.g., 52.1% of foster youth are African American whereas they represent 15.9% of the general population in Illinois; US DHHS, 2013b), few studies have actually considered the unique family ecologies of racial and ethnic minority youth. Extended family structure and kinship support (e.g., financial, instrumental, or emotional support) tend to be more prevalent in minority families, so it is important to examine how kinship support influences youth adjustment in foster care. Third, while the positive influences of kinship support on youth adjustment may be well established, current understanding of the impact of the support and involvement of extended family members, other than the kin caregiver, on foster youth's adjustment is limited. Based on research with youth in the general population, there is a crucial need for closer examination of the protective effects of kinship support specifically on foster youth, who experience family dysfunction and child maltreatment prior to coming into foster care.

The present study sought to address the limitations described above by examining the impact of kinship support on youth who enter foster care after experiencing family dysfunction and child maltreatment. First, this study examined the contribution of characteristics of the family-of-origin, such as family functioning, to foster youth's psychological adjustment. Second, with particular attention paid to foster youth's broader social contexts after separation from biological parents, this study examined how kinship

support influence the impact of child maltreatment and dysfunction of family-of-origin on foster youth's subsequent adjustment. Unlike previous studies, specific types of relatives and fictive kin (e.g., maternal aunt, paternal uncle, maternal great aunt, paternal grandmother, godmother) and their varying involvements will be identified. Lastly, the current study examined the moderating effect of race and ethnicity, and gender on the association between foster youth's psychological adjustment problems and family dysfunction.

In the remainder of the introduction, this paper will first review what is currently known about the child welfare system, including its statistics and policies. Next, it will provide an overview of foster youth's mental health problems and the risk factors associated with psychological adjustments in the general population, such as child maltreatment, family dysfunction, as well as potential moderators (e.g., gender and race/ethnicity). Finally, research pertaining to family structure, extended family structure, kinship support, and kinship foster care will be reviewed.

CHAPTER II

THE CHILD WELFARE SYSTEM

Child Welfare Statistics

Child welfare systems are commissioned to remove abused and neglected children from their homes to integrate them into long-term stable caregiving arrangements through reunification, adoption, subsidized guardianship, or emancipation. In recent years, the child welfare system has assumed the additional goals of helping children recover from the physical or psychological effects of abuse and neglect to promote their well-being (Mennen & O’Keefe, 2005; Doyle, 2007). Nationally, there were 397,122 children in foster care, 52% of whom were male and 48% female, in 2012 (US DHHS, 2013). There was a total of 16,663 children in foster care in Illinois in 2012 (Illinois DCFS, 2013; US DHHS, 2013).

Children and adolescents commonly enter foster care after experiencing any of the four main types of maltreatment, including neglect, physical abuse, sexual abuse, and psychological maltreatment (US DHHS, 2003). Neglect is the failure to provide for the child’s basic needs, and includes three subtypes: physical (i.e., not providing adequate food, supervision, clothing, or medical care), educational (i.e., failure to provide appropriate schooling or educational needs), and psychological neglect (i.e., lack of any emotional support and love, exposure to domestic violence or substance abuse). Physical abuse is defined as any non-accidental physical injury to a child, resulting from such act

as burning, hitting, punching, shaking, kicking, or beating, by a parent or a caregiver.

Sexual abuse refers to the involvement of the child in sexual activity, including molestation, intercourse, rape, exposure to pornography, or other sexually exploitative activities by a person related to or responsible for the care of a child. Psychological maltreatment includes emotional abuse or neglect, verbal abuse, or mental abuse, and is a pattern of caregiver behaviors that conveys to children that they are worthless, flawed, unloved, or unwanted. This can include the use of extreme forms of punishment or threatening of a child. During the fiscal year of 2012, 78.3% of victims of child maltreatment were neglected, 18.3% physically abused, and 9.3% sexually abused nationwide (US DHHS, 2013b). In Illinois, 70.4% of maltreated children were neglected, 25.3% physically abused, and 18.1% sexually abused in 2012 (US DHHS, 2013b). In addition to child maltreatment, youth can also enter child welfare as a dependency case, which occurs when a child has no caregiver responsible for care or supervision, a caregiver is unable to provide care because of the child's extraordinary needs (e.g., severe behavioral problems, illness, disability), or the caregiver is unable to provide care due to his/her own issues (e.g., physical or mental illness, substance abuse, developmental disability, arrest). The context of dependency cases is different from that of maltreatment cases, where a caregiver inflicts or allows someone else to inflict physical injury on a child, or neglects to meet a child's needs. The national number of dependency cases (child abuse and/or neglect court cases) is unknown (National Center on Substance Abuse and Child Welfare, 2014). The Juvenile Court Statistics series does not provide a count of individual juveniles brought before juvenile courts due to dependency. Statistics from North Carolina suggest that the occurrence of dependency cases is much less than that of

other types of maltreatment (Hatcher, Mason, & Rubin, 2011). For example, compared to 8,810 neglect cases and 1,035 abuse cases, there were only 381 dependency cases from 2008 to 2009 in North Carolina (Hatcher et al., 2011).

Within the child welfare system, racial and ethnic minority youth are significantly overrepresented. Although they make up approximately 20% of the national population, they constitute 40-50% of the foster care population on average (Lu et al., 2004; Hines et al., 2004; Garland et al., 2000). For example, in 2012, African-American youth represented 14% of the general child population (US DHHS, 2013a), yet comprised 26% of youth in the child welfare system (US DHHS, 2013b). In the state of Illinois, African-American youth represented 15.9% of the general child population and 52.1% of children in the child welfare system (US DHHS, 2013b). Hispanics represented 24% of the general child population both nationally and in Illinois, and comprised of 5.6% of the child welfare system in Illinois. Even though the percentage of Hispanic youth is low in Illinois foster care, the combined percentage of all racial and ethnic minority youth in foster care is still higher than that of the national population. In fact, White Americans represented approximately 53% of the general population in the United States as well as the state of Illinois, and comprised of only 40.2% of child welfare system in Illinois in 2012. These statistics on the overrepresentation of racial and ethnic minority youth in foster care, however, do not account for socioeconomic differences. Nonetheless, given the relatively high proportion of racial and ethnic minority children in foster care, the high risk of serious mental health and social problems for those children (e.g., Pilowsky, 1995) and the limited resources available to them, the well-being of ethnic minority children in foster care is worthy of close examination (Garland et al., 2000).

Child Welfare Policies and Kinship Foster Care

The child welfare system has undergone several major changes in policy during the past few decades. The Adoption Assistance and Child Welfare Act of 1980 mandated that foster care placement be as close to their communities of origin as possible in the most family-like setting, emphasized reunification with birth parents and/or families, and established adoption as an alternative permanency plan for children who could not return to their birth parents (National Resource Center for Family Centered Practice and Permanency Planning, 2002). In 1989, a statutory revision of Social Services Law 392 added the placement of children with relatives as an acceptable arrangement to promote family stability as an alternative to foster care (see Frankel, 2007; National Resource Center for Family Centered Practice and Permanency Planning, 2008). The Personal Responsibility and Work Opportunity Act of 1996 (Public Law 104-93, Title V, Section 505) required that states give preference to adult relatives when it is necessary to place children outside of their home (see Geen et al. 2001; National Resource Center for Family Centered Practice and Permanency Planning, 2008). In 1997, the federal government passed the Adoption and Safe Family Act (ASFA) with three goals for public child welfare agencies: safety, permanency, and well-being for children and families (Public Law 105-89; Hannett, 2007). The ASFA of 1997 recognized the uniqueness of kinship placements, and required that kinship caregivers meet the same requirements as non-relatives in order to qualify for federal funding (see Hurley, 2008).

As a result of the implementation of the ASFA of 1997, the Illinois Department of Children and Family Services (DCFS) and similar Child Protection Services agencies throughout the United States investigate initial reports of child abuse and/or neglect to

determine whether a report is substantiated (i.e., there is evidence of abuse and/or neglect) or unsubstantiated (i.e., there is no evidence of abuse and/or neglect). If the findings of the investigation indicate that the child is at risk for immediate harm, the state may decide to take temporary protective custody of the child. In Illinois, a temporary custody hearing occurs within two days of removing a child from their parent's home, to determine if it is appropriate for the child to remain in DCFS custody (see Sieracki, 2010).

Traditionally, children who were removed from their families due to abuse or neglect were placed in the homes of foster parents who had no prior relationship with the children (Ehrle & Geen, 2002). However, kinship foster care has become the preferred placement option for foster children because kinship caregivers (e.g., sibling, grandparent, aunt, uncle, cousin, great grandparent, great aunt, or great uncle) can provide family continuity and connectedness for children who cannot remain with their parents (Ehrle & Geen, 2002; Geen, 2004; Cuddeback, 2004; Strozier et al., 2004; see Holtan et al., 2005). Research suggests that children staying with their family members often live in close proximity to other extended family members, maintain contact with their family-of-origin, and receive family support better than those placed in traditional, non-kinship placements (Whitley & Kelley, 2007). For these reasons, the percentage of foster youth placed in kinship foster care has been increasing steadily, and drastically in some states, leading to significant variances across states in the rates of kinship placements. In 2012, 28% of children in foster care were placed in kinship care and 47% in traditional foster care (non-relative) (US DHHS, 2013a). However, Illinois and California kinship care accounted for 47% and 43% of the caseload, respectively, much

higher than the national average rate of kinship care (Needell et al., 2001; US DHHS, 2013a). Although kinship care is unevenly used across different states, it continues to be the placement of choice for states that have the highest caseloads in the country (see Geen, 2004). Kinship care rates vary across states for many interrelated reasons, including the availability of kin caregivers, the need for kin caregivers due to the scarcity of non-kin foster families, and the preference for kin caregivers among some states. Kinship care is also used substantially in large urban centers where placement rates and ethnic diversity are both high.

Ecological Framework for Child Welfare

With the increasing percentage of youth in kinship care, Bronfenbrenner's (1977, 1994) ecological framework is appropriate for understanding the influences of multiple social contexts on the development of children in foster care (Hong et al., 2011). Hong et al.'s (2011) theory applied the five main systems levels of Bronfenbrenner's ecological framework, including micro-, meso-, exo-, macro-, and chrono-system, to conceptualize how kinship foster care influences foster youth's developmental outcomes.

The microsystem level refers to the most immediate level of social ecology that directly impacts the child's development (Bronfenbrenner, 1977, 1994). For youth in kinship foster care, this microsystem level consists of caregiver-child relationships, caregiver-child attachment, and the kinship family environment (Hong et al., 2011). These microsystem-level factors can serve as risk factors for, or protective factors against poor outcomes. Since they are separated from their biological parents and reside with their kinship caregivers, the most direct interaction they experience is with their caregivers and the caregivers' immediate family. Youth's relationships with their kinship

caregivers can buffer against the adverse effects of experiencing child maltreatment and removal from biological parents by providing family support and a sense of continuity and connectedness from their caregivers. Moreover, caregiver-child attachment is another microsystem-level factor to consider because youth in foster care may continue to experience attachment disruption due to placement changes or instability, after having already been separated from their biological parents. However, youth in kinship care tend to experience less placement instability than those in traditional, non-kin foster care, and are less likely to experience attachment problems. Lastly, family environment is also a microsystem-level factor as youth have direct interactions with their kin caregivers' family. There are many factors associated with the kinship family environment, such as poverty, food insecurity, and other related hardships (e.g., Ehrle & Geen, 2002). For youth in kinship foster care, kinship family environment, such as support from extended family, may impact child adjustment and is therefore worthy of empirical study.

Second, the mesosystem level represents the relationships among microsystems, such as caregivers and biological families, as they may influence one another (Bronfenbrenner, 1974; Hong et al., 2011). Research suggests that children in kinship care are likely to experience continuity of family relationships, connectedness to their biological parents, and development of cultural identity (e.g., Schwartz, 2002). Kinship caregivers or other relatives may also provide family support and help children maintain frequent contacts with their biological parents and siblings (e.g., Ehrle & Geen, 2002). Biological parents are also more likely to maintain contacts with their children and become involved in placements when youth are placed in kinship care compared to traditional foster care (e.g., Green & Goodman, 2010; Ehrle & Geen, 2002). Inclusion of

such interactions among microsystems can help examine the mesosystem level of youth's social ecology.

Third, the exosystem level involves links between a social context in which the child does not have an active role, and the child's immediate context (Bronfenbrenner, 1977, 1994). For example, the quality of caregiver-child relationship can be influenced by a larger context, such as social support to kinship caregivers, which youth do not experience directly. Kinship foster caregivers' experiences with social-support network outside their immediate families, such as with their extended family members, fictive kin, or friends, can influence their relationships with their children. It is important that the ecological systems framework includes caregivers' social support as it helps caregivers experience less stress (Hashima & Amato, 1994), improve the quality of caregiving practices (Kelley et al., 2000), and exhibit fewer mental health problems (Cole & Eamon, 2007). For example, a qualitative study showed that support from extended family members, such as receiving emotional comfort, financial assistance, advice, and child care help, was particularly helpful for kinship caregivers and that it promoted positive outcomes among African-American youth in kinship foster care (Johnson-Garner & Meyers, 2003). While it has been shown that these exosystem-level factors have impact on child development, Johnson-Garner and Meyers (2003) noted that future research needs to test this finding in a more diverse sociocultural context.

Fourth, the macrosystem level includes cultural contexts such as ethnicity, socioeconomic status, or public policy, which may influence the immediate system levels of children's social ecology. For example, African-American children are overrepresented in foster care (e.g., Ehrle & Geen, 2002), and it is important to consider

how extended family structure and kin networks have been recognized as a common adaptive response to stress and hardship in the African-American community (e.g., Brown et al., 2002; Strozier & Krisman, 2007) when studying children in foster care. Moreover, youth in kinship care are likely to maintain and continue to develop their cultural identity through observing cultural similarities between them and their caregivers, and staying connected to their family and ethnic community, compared to youth in traditional, non-kin placements (see Hong et al., 2011). Not only does youth's racial or ethnic background affects the well-being of their caregivers and them, their kinship placement can also influence the mesosystem by promoting positive cultural identity development. As such, youth's cultural contexts can influence the other levels of their ecology and vice versa.

Lastly, chronosystem, the final level of Bronfenbrenner's (1977, 1994) ecological framework, includes environmental events, life transitions, and historical events that occur throughout a child's life. For example, the major changes in the child welfare systems occurred with the enforcement of the Adoption and Safe Families Act of 1997 (Public Law 105-89, 1997), which put more emphasis on children's health and safety, and shortened decision-making timelines involving reunification decisions. Such changes in this child welfare policy resulted in increased demands for kinship foster placements (Anderson & Righton, 2001). Therefore, child welfare reform or development of new child welfare policies, such as the Adoption and Safe Families Act of 1997, represents an exosystem attempting in part to positively influence children's chronosystem context.

Overall, youth in foster care are exposed to multiple levels of influences, and consequently, understanding the complex relationships between the child and his or her

social ecology is important for the development of intervention and policy for children and caregivers in foster care, especially for kinship care (Hong et al., 2011). Moreover, researchers suggest that foster care in the state of Illinois is particularly worthy of examination because its child welfare system has undergone substantial reform in the past two decades, and was described as the “gold standard” in child welfare practice by the deputy director of the Pew Commission on Foster Care (see Cross & Bruhn, 2010; Rolock, 2008; Testa, Fuller, & Rolock, 2005). The rate of kinship foster care placements in Illinois is also considerably higher compared to other states (Needell et al., 2001). Thus, when studying youth in foster care in the state of Illinois, applying Hong et al.’s (2011) modified ecological framework for kinship foster care will be relevant and important. Furthermore, understanding the nature of each level of social ecology is important to enhance current child welfare policies and interventions to improve child outcomes

CHAPTER III

MENTAL HEALTH OF YOUTH IN FOSTER CARE

Prevalence of Mental Health Problems

Youth in foster care represent a vulnerable group for developing a range of problems including aggression, delinquency, depression, anxiety, substance use, relational difficulties, and school failure (Cicchetti & Manly, 2001; Horwitz et al., 2001; Lansford et al., 2002; Guibord et al., 2011). Historically, a significantly higher percentage of children and adolescents in foster care have mental health problems compared to those in the general population (Orton et al., 2009; Garland et al., 1996; Fernandez, 2009; Clausen et al., 1998; Thompson & Fuhr, 1992; Pilowsky & Wu, 2006; Burns et al., 2004; Garland et al., 2001), as well as those in socioeconomically comparable samples (Pilowsky, 1995).

In fact, children and adolescents placed in the foster care system are up to eight times more likely to have a diagnosis of mental illness compared to those in the general population (Burns et al., 2004; Landsverk & Garland, 1999). The high prevalence rates of mental health problems for youth in foster care are not surprising, considering the traumatic experiences that led them to enter the child welfare system in the first place, such as child abuse and neglect (Garland et al., 1996; Holtan et al., 2005; Clausen et al., 1998). Child maltreatment has been repeatedly linked to adverse mental health consequences (Mills et al., 2013; Jaffee et al., 2007; Garland et al., 1996; Trickett &

McBride-Chang, 1995), such as depression (Guibord et al., 2011; Orton et al., 2009; Cohen, Brown, & Smailes, 2001), anxiety disorders (Boney-McCoy & Finkelhor, 1996; Cohen et al., 2001), aggression (Caspi et al., 2002; Jaffee et al., 2004), attention-deficit hyperactivity disorder, oppositional disorder, posttraumatic stress disorder (Famularo et al., 1992), antisocial personality disorder (Jaffee et al., 2007; Famularo et al., 1992), and future delinquency and criminal activity (Widom, 2000; Zingraff et al., 1994). The rates of these mental health disorders may vary with age, socioeconomic status, family characteristics, and severity of abuse (Kaplan et al., 1999). Nevertheless, research suggests that the percentages of youth with borderline clinical to clinical mental health problems (i.e., 46.5% to 55.9%) in Illinois foster care are comparable to the national rates (i.e., 45.3% to 56.4%) (Cross & Bruhn, 2010).

As such, the experience of child maltreatment is a risk factor for a wide range of problems in functioning and various forms of psychopathology. However, there are few differences in adjustment problems associated with each of the five types of maltreatment (Higgins & McCabe, 1998; Kamsner & McCabe, 2000; Mills et al., 2013). In general, there is a lack of specificity in the relationships between maltreatment types and particular adjustment problems (Higgins & McCabe, 2003). For example, Wind and Silvern (1994) compared adjustment problems in women with two different types of child abuse (i.e., sexual abuse and physical abuse), and found almost identical outcomes for both. Another study found that physical and sexual abuse both led to post-traumatic psychological problems (Briere & Elliott, 2003). Research suggests that it is the experience of multi-type maltreatment (i.e., multiple types of maltreatment occurring within the same family) that is related to the poor levels of adjustment or mental health

problems, not the specific type of maltreatment (Arata et al., 2007; Trickett et al., 2011; Trickett & McBride-Chang, 1995; Higgins & McCabe, 2003; Mills, et al., 2013).

In addition to the experience of child maltreatment, research suggests that the separation from biological parents, extended family, and familiar community as a result of out-of-home foster care placement may further contribute to the elevated rate of mental health problems in the foster care population (see Pecora et al., 2009; McWey, Acock, & Porter, 2010). Whether their attachment to biological parents is secure or insecure, the separation may cause distress and anxiety to youth (Howe et al., 1999), and this distress may manifest in problematic behaviors, such as aggression, delinquency, and depression (see Kaplan et al., 1999). Such separation may have negative effects on their self-esteem, as well as their cognitive and social development (Davidson-Arad & Wozner, 2001). Furthermore, experiencing multiple foster home placements, disruption of mental health and educational services, and loss of significant attachments and sense of security and belonging may also contribute to the increased vulnerability of this population to mental health problems (Holtan et al., 2005; Stanley, Riordan, & Alaszewski, 2005; McCauley & Trew, 2000; Newton, Litrownik, & Landsverk, 2000; see Oswald, Heil, & Goldbeck, 2010).

Family Dysfunction and Child Maltreatment

Childhood abuse and family dysfunction commonly co-occur (Dong et al., 2003; Dube et al., 2001; Dube et al., 2003; Felitti, & Anda, 2004; Felitti et al., 1998), and family dysfunction can impact the effect of childhood maltreatment on subsequent psychosocial maladjustment (Higgins & McCabe, 1994, 2003; Briere & Elliot, 1993). Thus, for people with histories of child maltreatment, it is important to assess the

contribution of family functioning or family environment to their psychosocial adjustment problems (e.g., Mancini et al., 1995; Hulseley, Sexton, & Nash, 1992; Draucker, 1996).

While various definitions of family dysfunction have been applied in research, it is typically defined by the quality of interpersonal relationships among family members in three domains: cohesion (i.e., the degree of commitment, help, and support provided by family members to one another), expressiveness (i.e., the extent to which family members are encouraged to act openly and express feelings directly), and conflict (i.e., the amount of openly expressed anger, aggression, and conflict among family members) (e.g., Greene et al., 2002; Kazdin, 1995). Family dysfunction has also been measured by exposure to domestic violence as well as parental marital discord, substance abuse, mental illness, or criminal history of family members (Dong et al., 2004). Using this wide range of definitions of family functioning, research has shown that a high level of family conflict is predictive of psychosocial adjustment difficulties (Edwards & Alexander, 1992), anxiety (Yama, Tovey, & Fogas, 1993), and depression (Yama, Tovey, & Fogas, 1993) in general. A low level of family cohesion, on the other hand, has been found to predict depression, low self-esteem, social adjustment difficulties (Ray & Jackson, 1997), and general psychological adjustment difficulties (Fromuth, 1986), independent of any sexual abuse history.

For individuals with a history of child maltreatment, research suggests that characteristics of the family-of-origin influence the impact of maltreatment on their subsequent psychological adjustment (Higgins & McCabe, 2003). In fact, research suggests that family dysfunction can be a stronger predictor of later psychosocial

functioning than the occurrence of child maltreatment (Higgins & McCabe, 1994, 2003; Kinzl et al., 1994; Nash et al., 1993). For example, Higgins and McCabe (1994) found that the severity or characteristics of child sexual abuse did not improve prediction of adult adjustment (i.e. trauma symptomatology or self-esteem) in 199 female undergraduate students, after controlling for their family factors (e.g., levels of family violence and parental separation/divorce). Higgins and McCabe's study (2003) of 138 adults found that family dysfunction associated with parental divorce in childhood (e.g., poor family adaptability and relationships) was associated with the occurrence of childhood maltreatment, which was then associated with current psychosocial adjustment problems in adulthood. The specific type of childhood maltreatment was not found to be important for subsequent adjustment. This finding is consistent with previous research, which showed that aspects of family functioning during childhood are directly associated with subsequent adjustment, regardless of the type or degree of child maltreatment (e.g., Briere & Elliott, 1993; Higgins & McCabe, 1994). Poor family functioning, in terms of family relationships, adaptability, insecurity, and fragmentation not only make children vulnerable to maltreatment, but is also independently associated with long-term adjustment.

While most studies of family functioning and child maltreatment have focused on adult populations, there is a limited, but increasing body of literature on adolescents. For example, a study found that child sexual abuse and dysfunctional family environment increase the likelihood that an adolescent will experience depression and other psychiatric disorders (Fergusson, Lynskey, & Horwood, 1996). Moreover, pre-existing or long-standing adverse psychosocial circumstances and family environments have been

found to contribute to continuing problematic behavior and poor school performance among sexually abused children (Paradise et al., 1994).

While family functioning (e.g., conflict, cohesion, adaptability, quality of relationships) and other family environmental characteristics (socioeconomic status, geographic locality, parental education) may be risk factors for adjustment problems after the occurrence of maltreatment, they may also protect against the development of psychopathology (Fergusson et al., 1996; Higgins & McCabe, 1994; Straus & Kantor, 1994). In fact, positive family characteristics, such as high levels of parental physical or verbal affection towards children or children's perceived emotional support of parents, have been found to be associated with resilience for individuals who have experienced child maltreatment (Wind & Silvern, 1994; Higgins, McCabe, & Ricciardelli, 2003). For example, a study by Higgins, McCabe, and Ricciardelli (2003) using a community sample of 175 adults showed that childhood family characteristics, such as quality of childhood relationships with family, parental relationship, family adaptability, and family cohesion, moderated the relationship between child maltreatment and long-term adjustment in adults. Positive physical affection was found to be a protective factor, mitigating the negative effects of maltreatment on self-esteem. Higgins et al. (2003) suggested that the experience of positive parental interactions may lead a child to develop a positive view of the self in adulthood despite the occurrence of child abuse or neglect. Family cohesion may serve as a protective factor against the detrimental effects of child abuse or neglect (e.g., trauma symptomatology, self-deprecation). If a child experiences maltreatment in a family where there is a high level of cohesion (between siblings or with a non-abusing parent), the child may still feel a sense of belonging and support within the

family, and experience fewer negative consequences of maltreatment. This study also suggested that living in a disengaged family, on the other hand, may serve as a risk factor for experiencing high levels of psychological maladjustment in response to child maltreatment, as children are more likely to feel alone and isolated in their experience.

Overall, research suggests that characteristics of family functioning play an important role in explaining the adjustment problems seen in adults with childhood maltreatment (e.g., Higgins & McCabe, 1994; Nash et al., 1998). Since not all individuals who experience child maltreatment and dysfunctional family environments exhibit psychological problems later in life, environmental protective factors need to be further explored to better understand the unique and combined effect of child maltreatment and family environment on psychological adjustment (Higgins & McCabe, 2003). The inclusion of family functioning and other potential familial protective factors (e.g., support from extended family members) is crucial when examining the impact of child maltreatment on youth's future mental health trajectories (Higgins et al., 2003). However, it is important to note that functioning of family-of-origin has not been examined closely among youth in foster care. The child welfare population is a unique group that is different from the samples from the population that studies have commonly used. Thus, risk and protective factors related to family functioning found in the general population may not be generalized to the child welfare population.

Gender Differences

Gender differences have been found in research linking a type of abuse, mental health, and family functioning (Higgins & McCabe, 2003; Meyerson et al., 2002). For example, Meyerson et al. (2002) found differential effects of family environment

characteristics on psychological functioning of adolescent males versus females. While family conflict was associated with general distress and depression in general, it was found to predict depression for female adolescents, but not for male adolescents. Family cohesion, on the other hand, did not predict either depression or distress, above what was accounted for by abuse, for both genders.

More research is needed to examine the differential effects of family dysfunction on psychological adjustment for male and female adolescents (Meyerson et al., 2002; Higgins & McCabe, 2003). Both girls and boys may experience psychological, emotional, social, and behavioral consequences of maltreatment (e.g., Malinosky-Rummell & Hansen 1993; Wall & Barth 2005). However, it is important to examine gender differences in the effects of child maltreatment (Grogan-Kaylor et al., 2008; Maschi et al., 2008), especially since there are gender specific coping responses (Eschenbeck et al., 2007). The literature has generally shown that males and females react to stress differently where adolescent males often cope with stress by externalizing their behaviors and females by internalizing their behaviors (e.g., Eschenbeck et al., 2007; Maschi et al., 2008). Girls may be less likely to engage in aggressive and delinquent behaviors than boys (Grogan-Kaylor et al., 2008; Maschi et al., 2008). Consequently, boys may tend to express anger or act out aggressively whereas girls may be likely to internalize their responses and exhibit maladaptive behaviors when they are confronted with stressful situations, such as abuse or neglect (Eschenbeck et al. 2007; Hoffman and Su 1997; Leadbeater et al. 1995; Maschi et al., 2008). For example, male adolescent victims of sexual abuse may experience more difficulties in school, marijuana use, delinquent behavior, and sexual risk-taking behavior whereas female victims may

report higher levels of disordered eating, suicidal ideation and behavior, and a greater frequency of alcohol consumption (Chandy, Blum, & Resnick, 1996). These findings suggest that males and females should not be considered a homogenous group, and that findings cannot be generalized to the across genders (Meyerson et al., 2002; Grogan-Kaylor et al., 2008). Moreover, far less research has examined differential protective factors for males and females in the child welfare system. The current study will examine how the impact of family dysfunction and child maltreatment influences adjustment problems in males and females.

Racial and Ethnic Differences

Not accounting for socioeconomic differences, there is a disproportionately large presence of children of color in the public child welfare system, and yet there is limited research on children of color in child welfare (Hines et al., 2004). African-American children represent 15% of the general child population, yet comprise of approximately 42% of children in the child welfare system. On the other hand, White children, who are approximately 64% of the general child population, constitute 36% of children in the child welfare system (US DHHS, 2001). In the state of Illinois in 2012, 52.1% of children in foster care were Black American, 40.2% White American, and 5.6% Hispanic (Illinois DCFS, 2013). With this substantial number of ethnic minority children and adolescents in foster care, there is a need for greater attention to race and ethnicity in child maltreatment research (Behl et al., 2001; Miller & Cross, 2006; Lansford et al., 2007). Given the racial diversity of the child welfare population, and the relatively higher prevalence of aggression (e.g., McLaughlin et al., 2007), depression (e.g., Garrison et al. 1990, Schraedly et al. 1999), and other types of psychopathology (McLaughlin et al., 2007)

among ethnic minority youth, it is important to examine the influence of social context variables on psychological functioning of youth who have experienced child maltreatment (Lansford et al., 2007).

Ecological Framework for Understanding the Effects of Maltreatment

Although child maltreatment increases the risk for the development of internalizing and externalizing behavior problems, not all children who are maltreated experience these difficulties (Jaffee et al., 2007; Zielinski & Bradshaw, 2006; McGloin & Widom, 2001). There are children who are able to achieve positive developmental outcomes in the midst of significant adversity, such as child abuse or neglect (Luthar et al., 2000; Masten & Coatsworth, 1995). For example, some studies have found that 12-25% of children or adults who were abused during childhood function well and do not develop adjustment problems (e.g., depression, substance use, aggression, criminal behavior) despite their history of maltreatment (e.g., McGloin & Widom, 2001; Cicchetti & Rogosch, 1997; Cicchetti et al., 1993; Kaufman et al., 1994). These resilient children have been commonly defined as those who achieve normative developmental tasks despite their experiences of significant adversity (Luthar et al., 2000). Research suggests that these variations in the effects of child maltreatment can be explained by the child's socioemotional and physical environments (Gephart, 1997; Zielinski & Bradshaw, 2006). In fact, while a considerable number of studies has shown that children's ecological contexts (e.g., low socioeconomic household, living in an impoverished community) may serve as risk factors for the incidence of child abuse and neglect (Cicchetti, Toth, & Rogosch, 2000; Garbarino & Ganzel, 2000), considerably fewer studies have addressed how the child's various contexts may influence the impact of the maltreatment after it has

already occurred (Banyard, 2003; Gracia & Musitu, 2003; Korbin, 2003; Trickett & McBride-Chang, 1995). According to Zielinski and Bradshaw (2006), it is important to move beyond simply establishing the effects of maltreatment to further examine the ways in which the ecological context of maltreated children affect their outcomes resulting from their experiences of abuse and neglect.

Research suggests that an ecological model is the most appropriate framework for understanding the heterogeneity in the effects of maltreatment because it considers the interaction of multiple factors across numerous contexts or layers of human ecology (Zielinski & Bradshaw, 2006; Garbarino & Eckenrode, 1997). By recognizing that humans develop in a number of social contexts, an ecological framework can help explain risk and protective factors for youth who experience child maltreatment. In applying ecological theory to the examination of the effects of maltreatment, the child's environment has been conceptualized to include the immediate family, the peer group, school setting, neighborhood, and broader community (Stockhammer et al., 2001; Zielinski & Bradshaw, 2006).

First, several studies indicate that family context can influence the effects of child maltreatment (see Zielinski & Bradshaw, 2006). For example, parenting practices that have been compromised by psychopathology, substance use, economic hardship, or social isolation may generate risks of maladjustment of children who are maltreated (Zielinski & Bradshaw, 2006). Social support within and outside the immediate family (e.g., primary caregivers, siblings, other family members, adults outside the family), on the other hand, have been found to promote their resilience to the negative effects of maltreatment (Cicchetti & Rogosch, 1997; Runtz & Schallow, 1997). Despite the

growing body of research on the relationship between family factors and the outcomes of youth who are maltreated, Zielinski and Bradshaw (2006) emphasize that more research is needed to better understand the complex associations between children's social support networks within the family and the impact of child maltreatment. Moreover, there is little known about the extent to which the race or ethnicity of a family may affect the outcomes of maltreatment even though demographics are related to family size, structure, and parenting practices (Zielinski & Bradshaw, 2006).

Second, since the school setting is the most consistent institution in children's lives outside the immediate family (Cicchetti & Toth, 1997; Zielinski & Bradshaw, 2006), the school and peer contexts also influence youth who are maltreated (Zielinski & Bradshaw, 2006). Children and adolescents who are maltreated are more likely to receive lower grades, perform poorly on standardized tests, repeat a grade, lack interpersonal skills, and are less well-liked compared to those who are not maltreated (Eckenrode, Laird, & Doris, 1993; Dodge-Reyome, 1994; Cicchetti & Toth, 1995; Bolger & Patterson, 2001). However, children who receive community support from teachers, coaches, and counselors are more resilient to the effects of their maltreatment experience (Zielinski & Bradshaw, 2006). Research suggests that the school context (e.g., positive experiences in classroom, supportive relationships with adults at school, prosocial peer relationships, participation in extracurricular activities) is another potential buffer of the adverse effects of maltreatment because of its structured environment and the availability of adults and peers who can be sources of support (Jaffee et al., 2007; Heller et al., 1999; Herrenkohl, Herrenkohl, & Egolf, 1994; Cicchetti, Toth, & Maughan, 2000; Thompson, 1994; Valentine & Feinauer, 1993). Zielinski and Bradshaw (2006), however, state that

future studies are needed to better examine the influence of the school context and different types of peer groups (e.g., prosocial, deviant) on outcomes of children who are maltreated.

Lastly, communities (i.e., social connections between people within a particular geographic area) and neighborhoods (i.e., physical location with specific boundaries within which a child resides) are important, yet understudied contextual factors of the impact of child maltreatment (Zielinski & Bradshaw, 2006). For example, neighborhood impoverishment (e.g., poverty, unemployment rates, and proportion of single-parent households), neighborhood child care burden (e.g., ratio of children to adults in the community), and social isolation of the family have been found to be community-level risk factors associated with the rates of child maltreatment (Coulton et al., 1999; Gracia & Musitu, 2003). Stable and safe communities, on the other hand, have been found to promote resilience in youth and overcome their abuse and/or neglect experience (see Zielinski & Bradshaw, 2006).

Overall, the literature highlights the importance of applying an ecological framework when studying youth's risk and resilience because contextual factors appear to moderate the effects of child maltreatment on youth and explain some of the heterogeneity in the outcomes associated with maltreatment (Jaffee et al., 2007; Zielinski & Bradshaw, 2006). The literature has found family-level, school-level, and community-level factors that may contribute to the adjustment of youth in foster care. However, the family context, particularly extended family network, has not been studied extensively. These limitations will be discussed further in the next chapter.

CHAPTER IV

FAMILY CONTEXT: THE EXTENDED FAMILY

Structures, Transitions, and Resilience

The way a child's family life is structured can have profound effects on his or her experiences, life trajectory, and overall well-being (Amato, 2005; Bramlett & Blumberg, 2007; Carlson & Corcoran, 2001; Bjorklund et al., 2007). Family structure has traditionally been defined by the presence and types of adults that make up the child's primary caregivers such as living with two biological parents, single parent, step parents, or other alternative caregivers (e.g., Hetherington, 1992). For example, research has shown that youth in stable two-biological parent families are generally advantaged in several domains of well-being (e.g., educational attainment, emotional or behavioral problems) compared to those raised in other family structures (e.g., single mothers, divorced parents) (Carlson & Corcoran, 2001; Amato, 2005). Research has also indicated that parental divorce, single-parenthood, and stepfamilies, on the other hand, can have negative effects on multiple areas of child development, such as depression, stress, anxiety, aggression, and other emotional and behavioral problems (see Amato, 2001 for review). More specifically, children from divorced parents often have more emotional problems (e.g., depression) (VanderValk et al., 2005), more negative self-image (Dunlop et al., 2001), poorer academic performance (Dronkers, 1999), more delinquent behaviors (e.g., substance use, early sexual activity) (Emery et al., 1999), and greater difficulty with

social relationships (Hetherington & Stanley-Hagan, 1999; see Amato, 2001 for review) compared to those from intact families.

However, growing evidence suggests that the process of transition between family structures (e.g., moving into a cohabiting stepfamily from a single-mother family) is more important than family structure itself (Wu & Thomson 2001; Brown, 2006; Magnuson & Berger, 2009). Family structure is a dynamic, evolving, and unstable process (Cavanagh, 2008; Hetherington, 1992), and factors that often accompany a change such as marital disruption, including dysfunctional family dynamics, conflict, and fragmentation, are what may contribute to youth maladjustment (Amato & Keith, 1991; Hetherington, 1992). Transitions in family structure may also disrupt family routines, resulting in inconsistent parenting, decreased levels of family connectedness, increased emotional insecurity in children, and poorer quality of parent-child relationships (Brown, 2006; Cavanagh, 2008).

Youth in foster care experience a unique set of family structural changes (e.g., removal from biological parents) and family processes that often involve complex dynamics across the extended family. However, little attention has been paid to these variables and their potential moderating effects on youth adjustment for those who enter foster care. Instead, the majority of the existing literature has focused on the role of experiences that bring youth into the child welfare system (e.g., poverty, maltreatment), and on the experiences that occur due to child welfare involvement (e.g., placement disruption) as predictors of adjustment. The attention that has been paid to the impact of extended family networks among children in out-of-home foster care has primarily focused on kin involvement in placement decisions (e.g., kinship foster placement).

However, based on research with youth in general populations, extended family networks may have a number of supportive functions in a foster youth's life, beyond simply providing kinship foster care placement. As Trickett and McBride-Chang (1995) suggest, various aspects of the family context beyond the specific act of maltreatment, such as family conflict, cohesion, relationships, social networks, or sources of support for child rearing, should be considered as potential influencers on child development.

As mentioned above, the family literature is mostly centered on the nuclear family, despite growing evidence that the isolated nuclear family structure is most applicable to White, urban, and middle class families (Mollborn, Fomby, & Dennis, 2011; Vereen, 2007; Hunter, Pearson, Ialongo, & Kellam, 1998). In fact, given the disproportionately large involvement of racial and ethnic minority children in foster care, especially in the state of Illinois (55.4% African American, 37.2% White, and 5.7% Hispanic) (Illinois DCFS, 2011), it is important to consider the diversity of family structures that exists across cultures when studying the impact of family on youth in foster care (e.g., Harrison et al., 1990; Wilson, 1986). Based on Bronfenbrenner's (1979) ecological framework, Harrison et al.'s (1990) family ecology theory states that it is crucial to consider family ecologies of ethnic minority youth, as they may have different family functioning that results from interactions between the family as a social system and other societal systems compared to White families. Specifically, families of ethnic minority youth are more likely to live in extended family households and use support from extended family members (kinship support) as adaptive strategies compared to those of majority (White) youth. Given these cultural or ethnic differences in family ecology, it is important to consider the impact of extended family members' involvement

and support when studying the impact of family on a body of culturally diverse youth in foster care.

Extended Family Structure

Extended family structure refers to multigenerational and interdependent family composition, structure, and interaction that go beyond the nuclear family unit to include affinal, consanguineous, and fictive relationships that provide social, emotional, and instrumental support (Pallock & Lamborn, 2006; Taylor, Chatters, & Celious, 2003; Brown, Cohon, & Wheller, 2002; Harrison et al., 1990; Wilson, 1986; Dressler, 1985). It has been discussed as a culturally distinctive feature of family life among ethnic minority communities (Hunter, Pearson, Ialongo, & Kellam, 1998; Harrison et al., 1990). For instance, African Americans, Hispanics, and Asians are more likely to have extended family networks compared to non-Hispanic whites (Wilson, 1986; Kamo and Zhou 1994; Sarkisian, Gerena, & Gerstel, 2007; Angel & Tienda, 1982). Black Americans are also more likely to view intergenerational residence (i.e., parents sharing homes with adult children) more positively compared to Whites (Singh et al., 1998). Black children are also more likely to live in extended family households and stay with them longer than White children do (Hunter et al., 1998). However, this conceptualization of family among racial and ethnic minority children has not led to significant research on the potentially moderating effect that extended family may have on children's psychosocial adjustment in the predominantly African-American child welfare system.

Kinship Support

In addition to the high prevalence of extended family structures among ethnic minority families, the use of support from extended family members (kinship support) as

adaptive strategies is also a commonly experienced cultural pattern that promotes the well-being of ethnic minority children, families, and communities (Harrison et al., 1990; Rodriguez, 2002; Johnson, 2000; Pallock & Lamborn, 2006). Kinship support is a problem-solving and stress-coping system that helps nuclear families to adapt to poverty or limited resources (Harrison et al., 1990). For example, the African-American extended family system has been perceived as an important support system that buffers against a racially hostile environment (Hays & Mindel, 1973), and the adverse socioeconomic effects that may cause a variety of pathological disorders in more isolated nuclear families (Cazenave & Straus, 1979). One of the unique functions of a large extended family system is its effect on the prevention of child abuse and neglect among low-income Black families (see Cazenave & Straus, 1979). In general, many studies have found that the extended family network is an important source of support for African-American families across all socioeconomic levels (see Cazenave & Straus, 1979), and that it can play a vital role in the healthy development of ethnic minority youth (Hunter et al., 1998; Hunter & Taylor, 1998; Chatters, Taylor, & Jayakody, 1994).

More specifically, extended family networks can provide financial, emotional, or instrumental (e.g., transportation or household) support to parents and children, especially to single-parent families or during periods of economic hardship (Dressler, 1985; McLoyd, 1990; Sussman & Burchinal, 1962). For example, single-parent families often have limited family resources, as well as parental time and supervision for their children, and these factors may worsen academic and behavioral outcomes in children (Demo and Cox 2000; McLanahan & Sandefur 1994). However, the financial, instrumental, or emotional support provided by extended family members may buffer the negative

consequences of living with a single mother (SmithBattle 1996). Emotional support from kin, for example, can improve parents' well-being and facilitate parents' child-rearing practices, which are strongly associated with positive child development (Taylor et al., 2008; Taylor, Casten, & Flickinger, 1993).

Extended family households or kinship networks in racial and ethnic minority families are often organized around a dominant figure, such as a grandmother, and extended family members can provide childcare support, in addition to financial, emotional, or instrumental support (Pallock & Lamborn, 2006; SmithBattle, 1996). For example, extended family members and even non-relatives (fictive kin) may help with childcare responsibilities in Black families (Hunter et al., 1998). Black caregivers who live in extended family households are more likely to share child management, rule setting, and discipline, compared to White caregivers, who are less likely to share childcare and parenting activities even when they live with extended family members. In addition to helping with childcare, extended family members, typically grandmothers, may also provide multigenerational caregiving by residing together (Black & Nitz, 1996). The racial or ethnic differences in the prevalence of extended family co-residence are especially more prominent among single-mother families, which are more prevalent among African Americans and Latinos compared to Whites (Mollborn et al., 2011). Grandparents in African-American families are more likely to help raise grandchildren compared to Latino or White grandparents (Goodman & Silverstein, 2002). White Americans, on the other hand, are less likely to live in extended family households even though relatives of White families may still provide emotional or instrumental support (Hunter et al., 1998). In addition, White grandparents tend to be less involved in

parenting activities compared to Black grandparents even with recent trends demonstrating that White grandparents are increasingly acting as main caregivers or co-parents.

Moreover, grandmothers in particular may assume custodial care of their grandchildren under disruptive circumstances, such as parents' substance abuse or mental health problems (Hunter et al., 1998). There are also cultural differences in extended family members' undertaking a caregiver role. For example, Grandparents in African-American families are also more likely to raise grandchildren compared to Latino or White grandparents (Goodman & Silverstein, 2002; Hunter et al., 1998). African-American grandmothers have traditionally served as parental replacement, supplement, and support (Goodman & Silverstein, 2002). Latino grandmothers, on the other hand, are more likely to be involved with parents and provide day care (Goodman & Silverstein, 2002). Latino grandparents are more likely to play support roles to the parent, to co-parent in intergenerational households, and to rely on adult children even in custodial situations, consistent with the values of familism (Goodman & Silverstein, 2002). Lastly, White grandmothers are less apt to discipline or correct their grandchildren than African-American grandparents (Goodman & Silverstein, 2002). As the presence of an additional adult increases the availability and reception of emotional and instrumental support to both children and parents (Taylor, 1996), research suggests that living in extended family households may be more beneficial for children's cognitive and behavioral developmental outcomes in comparison to those raised in single-parent households (Mollborn et al., 2011).

Overall, the availability of extended family members is an important source of financial, emotional, and instrumental support, as well as childcare and parenting support for parents and children. Thus, an exclusive focus on nuclear family organization may produce an incomplete account of how family influences child development even though nuclear family households have been considered the normative and standard household type (Kamo, 2000). The definition of “family” must be expanded beyond the presence of just parents and their partners, but also include extended family members (Mollborn et al., 2011). Moreover, given the clear cultural patterns of extended family members providing childcare, parenting arrangements, caregiving roles, or cross-household parenting (e.g., Hunter et al., 1998), it is important to examine the broader ecological influences beyond the immediate nuclear family, such as kinship networks, on youth experiences (Hunter et al., 1998; Harrison et al., 1990; Mollborn et al., 2011). First, future research should consider how the impact of kinship support (e.g., childcare, parenting, co-residence) may vary across different races and ethnicities (Mollborn et al., 2011; Dunifon & Kowaleski-Jones 2007). For example, Dunifon and Kowaleski-Jones (2007) found that for Black children, the amount of time spent living with a single mother and a grandparent was associated with lower cognitive stimulation scores and math scores compared to those who lived with both parents. White children who lived with a single mother and a grandparent, on the other hand, had higher cognitive stimulation and reading recognition scores compared to those who lived only with a single mother. In contrast, another study found that living with a grandmother until middle childhood was associated with more negative outcomes for White children of teenage mothers than for Black children (Unger & Cooley, 1992). These inconsistent findings further emphasize

the need to understand how extended family members influence children's outcomes, and how this effect may differ by race or ethnicity (Mollborn et al., 2011; Dunifon & Kowaleski-Jones, 2007).

Second, future research also should study how specific types of extended family members are involved and provide support to racial and ethnic minority families (Harrison et al., 1990 Mollborn et al., 2011; Hunter et al., 1998). For example, grandparents are most frequently chosen as a source of childcare or parenting support, but aunts and uncles, especially from the maternal side of the family, may also be recruited to help in domains of parenting (Hunter et al., 1998). As such, the role of extended family members such as aunts, uncles, and cousins, is very much a part of that larger picture for many families, yet the body of research around specific extended family support and involvement is considerably weaker (Taylor et al., 1993; Hunter et al., 1998). Examining the impact of kinship support and involvement on youth psychosocial adjustment is especially important for youth in foster care as they often come from single-parent families (Dufour et al., 2007), and kinship support has been found to be an important protective factor for single-parent families (SmithBattle, 1996). Extended family members also can become kinship placement for youth in foster care, so a proper examination of family structure and processes outside of the nuclear family is very valuable for understanding the needs of children in welfare. In general, more systematic studies are needed to better understand how different types of kinship support and involvement influence youth adjustment, especially in racially and ethnically diverse child welfare populations. Overall, future research should be aware of variations in the composition of families and their meanings for youth development.

Kinship Support and Youth Psychosocial Adjustment

In addition to providing social support to nuclear families, kinship support has been found to affect youth adjustment both directly and indirectly by supporting youth as well as caregivers (Pallock & Lamborn, 2006; Tolson & Wilson, 1990; Wilson & Tolson, 1990). In fact, there is a growing body of research that shows the positive effects of extended family networks or kinship support on both the children and the caregivers (Dressler, 1985; Taylor et al., 1993). Single-parent families, economically disadvantaged families, and adolescent mothers, in particular, have been found to benefit from extended family support and involvement as they may have greater needs for support compared to two-parent families (Dressler, 1985; Taylor et al., 1993).

Youth exposed to stressful life conditions, such as poverty and violence, are at increased risk for a variety of psychosocial problems, including depression and delinquency (McLoyd, 1990; McCabe, Clark, & Barnett, 1999). African-American children, in particular, are disproportionately exposed to environmental risk factors, such as poverty, violence, racism, and family constellation (e.g., single-mother-headed households, large family size) (Coll et al., 1996; see McCabe et al., 1999). Among high-risk African-American adolescents, family support has been associated with high scholastic self-concept, low levels of antisocial behavior, and low alcohol and drug use (Cauce, Felner, & Primavera, 1982; Van Hasselt et al., 1993; McCabe et al., 1999). Research has demonstrated a positive association between kinship social support and adolescent adjustment, and a negative association with anxiety (McLoyd et al., 1994; Taylor et al., 1993; Taylor & Roberts, 1995).

McCabe et al. (1999) examined the relations among familial protective factors, stressful events, and behavioral adjustment of 64 urban African-American 6th graders. The study found that youth's perceived satisfaction with kinship support moderated the relation between familial stressors and behavioral problems. When children reported having available support from extended family members, family stress was not associated with adjustment problems. Research has consistently found that support from extended family members is an important family protective or buffering factor for children raised in stressful home environments (e.g., single parent or familial conflicts) (e.g., McCabe et al., 1999; Wilson & Tolson, 1990). Similar to McCabe et al.'s (1999) findings, Taylor, Casten, and Flickinger's (1993) study found association between kinship social support and positive youth adjustment among African-American adolescents in single-parent families. In this study, kinship support was measured based on the adolescents' report of their satisfaction with their kin's social and emotional support, and their knowledge of assistance received from their kin in the areas of socialization and entertainment, advice and counseling, and problem solving. Three areas of youth psychosocial adjustment assessed were self-reliance (i.e., adolescents' sense of initiative, control, and independence), problematic behavior (i.e., involvement in delinquent activities), and psychological distress (i.e., frequency of mental or physical states, such as feelings of depression and difficulties with sleeping). Kinship social and emotional support was positively related with self-reliance, and negatively associated with externalizing, but it was not associated with internalizing behaviors (e.g., depression). The positive effects of kinship social support on adolescent adjustment were found in single-parent families, but

not two-parent households, possibly because the former is in greater need of resources and help for the functioning and well-being of the family compared to the latter.

However, the findings from these studies are limited in a number of ways (e.g., McCabe et al., 1999; Taylor et al., 1993). First, McCabe et al. (1999) pointed out that major limitations of their study include the small sample size and the lack of comparison groups from different racial or ethnic backgrounds. In order to understand whether their findings are unique to African-American youth or relevant to youth from other backgrounds, they suggested that future studies should be conducted with larger and more diverse samples. Similarly, Taylor et al.'s (1993) study focused on working-class African-American adolescents, and the findings may not be generalized to other ethnic or racial and age groups across different socioeconomic backgrounds. Thus, there is a crucial need for the assessment of the effects of kinship support on youth adjustment among younger, and socioeconomically and racially diverse groups of youth. Second, there still is a need for research on whether other types of kinship support (e.g., financial help or childcare) have any impact on youth psychosocial adjustment (Taylor et al., 1993). More research is needed to understand how specific types of kinship support (e.g., childcare, instrumental, financial, social, or emotional) may affect parental functioning and childrearing practices differently. Third, future studies should examine how extended family members (e.g., grandparents, aunts, uncles, cousins) may provide different types of support to youth. For example, relatives who provide advice, counseling, or problem solving may play different roles in meeting a child's needs compared to other relatives, who provide support in the form of recreation and entertainment. It is important to consider how youth may seek support from different relatives depending on their needs.

Lastly, future research should examine the context of family environment (e.g., harmonious, conflicted) in order to better understand the effects of kinship support on youth adjustment. Furthermore, the effects of different types of kinship support have not been tested among youth in foster care, who face a unique array of challenges.

Kinship Involvement and Child Welfare

With a growing number of children living in kinship foster care, there is great value in studying how youth in kinship care fare in comparison to those in traditional (non-kinship) foster care (Holtan et al., 2005). A review of the literature revealed some conflict in terms of the benefits for children in kinship care compared with those in traditional foster care (Rubin, et al., 2008). For example, some studies have revealed very few differences between kinship and traditional foster care in terms of children's problems (Cuddeback & Orme, 2002), and long-term outcomes of children (Benedict, Zuravin, & Stallings, 1996; Iglehart, 1995). Some studies showed a number of disadvantages associated with kinship care, including lower incomes, higher stress, and slower rates of reunification and adoption (Chipman et al., 2002; Cuddeback, 2004; Flynn, 2002; Geen & Berrick, 2002). Specifically, given the negative influences of poverty, children in kinship care may experience additional hardships because their caregivers tend to be single, older, of poorer health and lower economic status, and receive less assistance and services from child welfare agencies compared to traditional foster parents (Burns, Phillips, Wagner, et al., 2004; Ehrle & Geen, 2002).

However, a significant portion of the literature presents findings that show favorable outcomes of kinship care in comparison to traditional (non-kinship) foster care (Goertzen, Chan, Wolfson, 2007; Sakai, Lin, & Flores, 2011). Youth who enter care

without any family continuity or permanency experience negative outcomes, including a high school dropout rate (Pecora et al., 2005; Trout et al., 2008) as well as emotional and behavioral difficulties (Pecora et al., 2005). Children in kinship foster care, on the other hand, have more stable placements and experience fewer mental health problems, lower levels of trauma and stigma, and more frequent contact with their biological parents compared to those placed in traditional foster care (Testa et al., 2007; Holtan et al., 2005; Cuddeback, 2004; Iglehart, 1994). Even though kin foster parents are more likely to be single, poorer, older, and have less formal education than traditional foster parents, research indicates that children in kinship foster care experience significantly fewer problematic behaviors among children in kinship foster care compared to those in traditional foster care (Sakai et al., 2011; Berrick, Barth, & Needell, 1994; Dubowitz et al., 1994; Keller et al., 2001). Using the National Survey of Child and Adolescent Well-Being (NSCAW) data, a longitudinal study also found that children placed in kinship foster care exhibited fewer behavioral problems even three years after the initial placement compared to those who were placed in traditional foster care (Rubin et al., 2008). This study confirmed a protective effect of kinship care on the behavioral outcomes of a nationally representative group of children entering foster care. The study also showed that even children who moved to kinship care after being originally placed in traditional foster care experienced some benefit of kinship care. Non-kinship placement, on the other hand, is generally associated with higher levels of problems compared to kinship placement (Clausen et al., 1998; Keller et al., 2001; Dubowitz et al., 1994).

The literature on the psychosocial adjustment of youth in foster care, however, is not without limitations. First, the extant literature has not examined the specific

involvement of various extended family members beyond kin foster parents, among youth in child welfare even though youth placed in kinship care often live in multigenerational households with great aunts, great grandmothers, grandfathers, aunts, uncles, and/or cousins (Johnson-Garner & Meyers, 2003; Brown et al., 2002). For example, a qualitative study found that kinship caregivers of resilient African-American youth in foster care received more support from extended family members (e.g., emotional comfort, financial assistance, advice, childcare responsibilities), which promoted positive child outcomes, compared to those of non-resilient youth (Johnson-Garner & Meyer, 2003). This finding was generally consistent with ecological theory (Bronfenbrenner, 1979) that characteristics of the broader family and social context influence child outcomes. However, the study did not examine the impact of specific types of kinship support and involvement on youth psychosocial adjustment. These extended family members may provide support to children and their kin foster parents, but the literature also has not assessed the influence of different types of kinship support (e.g., childcare, financial, emotional support) on youth psychosocial adjustment. Moreover, the literature has not considered the potential moderating effect of race or ethnicity on the association between kinship support and involvement, and youth adjustment. As noted earlier, racial and ethnic minority children may respond to extended family members' support differently, and that a study on urban African-American foster families, for example, should not be generalized to other racial and ethnic groups (e.g., Mollborn et al., 2011; Johnson-Garner & Meyers, 2003).

Overall, kinship support may be protective for youth whose foster families struggle with economic and/or social adversity, by providing mutual aids to ongoing

needs and providing children with attachment and stability (Brown et al., 2002).

Especially for youth who are removed from home, the support and involvement of extended family members may be crucial to bolster a sense of family continuity. Based on the literature on the positive effects of kinship support on youth adjustment in general, future research should examine how support from extended family members can protect children from adverse consequences of experiencing child abuse and neglect, among many other that they face (Brown et al., 2002). A use of more advanced methodologies and longitudinal research designs is needed to better understand how specific type of support provided by different extended family members (e.g., grandparents, aunts, uncles, or cousins) may affect youth's socioemotional development and outcomes of children in various types of foster care over time (e.g., Cuddeback, 2004).

Limitations of Previous Research and Future Directions

As the preceding review suggests, the literature pertaining to psychological adjustment among youth in foster care has a number of noteworthy limitations. First, while previous studies have primarily focused on the impact of experiences that bring youth into child welfare (e.g., maltreatment, poverty), and the experiences that occur due to child welfare involvement (e.g., placement disruption) on foster youth's adjustment, little is currently known about the ways in which the ecological contexts of foster youth, particularly family contexts, influence their outcomes (e.g., Zielinski & Bradshaw, 2006). Research on within and outside the immediate nuclear family of foster youth is limited. Moreover, an understanding of the complex relationship among child maltreatment, characteristics of family functioning, subsequent youth's psychological adjustment, and other potential familial protective factors is also limited (Higgins et al., 2003). Second,

despite the disproportionately large involvement of racial and ethnic minority children in foster care, few studies have actually examined the family ecologies of racial and ethnic minority youth. Extended family structure and kinship support (e.g., financial, instrumental, or emotional support) tend to be more prevalent in minority families, so it is important to examine how kinship support influences youth adjustment in foster care.

Third, while the positive influences of kinship support on youth adjustment may be well established, previous research has not been examined them among youth in foster care. The extent to which previous research has examined the impact of extended family members' involvement or support is kinship foster care. While research suggests that it is better for youth to be placed with their relatives, especially when their baseline adjustment problems are not severe, previous studies have not examined whether the support and involvement of other extended family members besides the kin caregiver is beneficial for youth adjustment. Additionally, the literature has not examined the specific involvement of various extended family members beyond kin caregivers, even though youth placed in kinship care often live in multigenerational households. Also lacking is the assessment of the influence of different types of extended family members (e.g., aunts, uncles, cousins) and kinship support (e.g., childcare, financial emotional support) on foster youth's psychological adjustment. Previous research has also suggested that the context of family environment (harmonious or conflictual) needs to be examined in order to better understand the effects of kinship support on youth adjustment.

Moreover, despite the disproportionately large involvement of children of color in the public child welfare system, there is generally limited research on children of color in child welfare (Hines et al., 2004). Previous studies have not considered the potential

moderating effect of race, ethnicity, or gender on the association between kinship involvement and support, and youth adjustment. As noted earlier, racial and ethnic minority youth may respond to extended family member support differently, and one particular sample of urban youth should not be generalized to other racial and ethnic groups (e.g., Johnson-Garner & Meyers, 2003; Mollborn et al., 2011).

Based on research with youth in general populations, extended family networks may have a number of supportive functions in foster youth's life, beyond simply providing foster care placement. Thus, there is a crucial need for closer examination of the protective effects of kinship support on foster youth, who experience family dysfunction and child maltreatment prior to coming into foster care. This line of research will contribute to better understanding of the effects of factors at the level of the child, the family, and the child's broader social network on the psychological adjustment of youth in foster care.

The Present Study

The present study used both cross-sectional and longitudinal approaches to examine the protective effects of kinship support for youth who enter foster care after experiencing family dysfunction and child maltreatment. This study also addressed several of the limitations identified above. First, this study examined the contribution of characteristics of the family-of-origin, such as family functioning, to foster youth's psychological adjustment. Second, with particular attention paid to foster youth's broader family context, this study examined how support of extended family members may moderate the impact of child maltreatment and family dysfunction on foster youth's subsequent adjustment. Unlike previous studies, specific types of relatives and fictive kin

(e.g., maternal aunt, paternal uncle, maternal great aunt, paternal grandmother, godmother) and their varying involvements were identified. Third, unlike in previous studies, this study explored the potential moderating effect of race and ethnicity, and gender on the association between family dysfunction and foster youth's psychological adjustment problems. The overall purpose of this study was to expand the current literature on kinship support within the child welfare system by examining the protective effect of kinship support on foster youth's psychological adjustment.

Hypotheses

The hypotheses and research questions of the current study that extend the previous literature are as follows:

1. Family Dysfunction

- a. Hypothesis One: Greater dysfunction in youth's family-of-origin will be associated with more internalizing behavior problems among youth in foster care, after controlling for child maltreatment, kinship support, race and ethnicity, and gender.
- b. Hypothesis Two: Greater dysfunction in youth's family-of-origin will be associated with more externalizing behavior problems among youth in foster care, after controlling for child maltreatment, kinship support, race and ethnicity, and gender.

2. Child Maltreatment

- a. Hypothesis Three: Greater severity of child maltreatment will be associated with more internalizing behavior problems among youth in foster care, after

controlling for family dysfunction, kinship support, race and ethnicity, and gender.

- b. Hypothesis Four: Greater severity of child maltreatment will be associated with more externalizing behavior problems among youth in foster care, after controlling for family dysfunction, kinship support, race and ethnicity, and gender.

3. Kinship Support

- a. Hypothesis Five: Greater kinship support will be associated with less internalizing behavior problems among youth in foster care, after controlling for family dysfunction, child maltreatment, race and ethnicity, and gender.
- b. Hypothesis Six: Greater kinship support will be associated with less externalizing behavior problems among youth in foster care, after controlling for family dysfunction, child maltreatment, race and ethnicity, and gender.

4. Race and ethnicity

- a. Hypothesis Seven: Kinship support clusters will differ by race and ethnicity.

5. Gender

- a. Hypothesis Eight: Female gender will be associated with higher internalizing behaviors compared to male gender, after controlling for family dysfunction, child maltreatment, kinship support, and race and ethnicity.
- b. Hypothesis Nine: Male gender will be associated with higher externalizing behaviors compared to female gender, after controlling for family dysfunction, child maltreatment, kinship support, and race and ethnicity

Figure 1. Hypothesized Main Effect Models 1, 3, 5, and 8

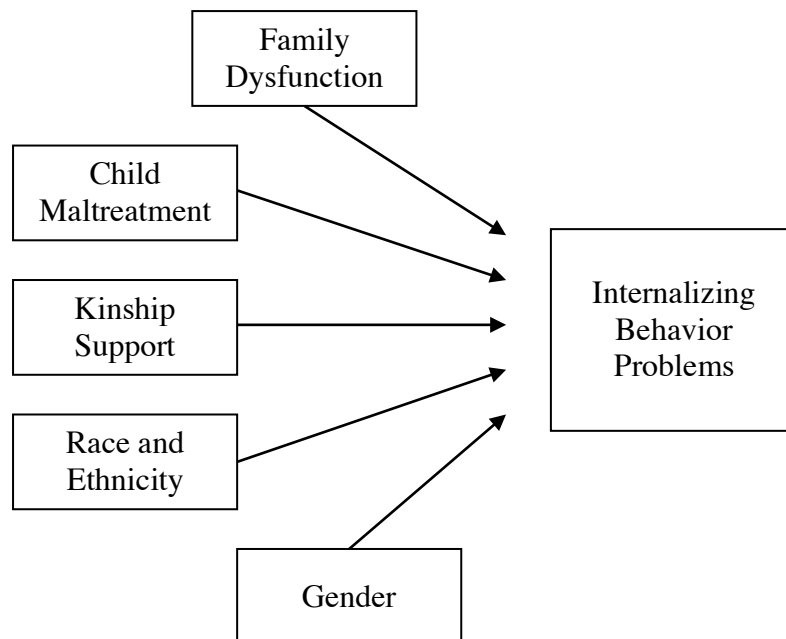
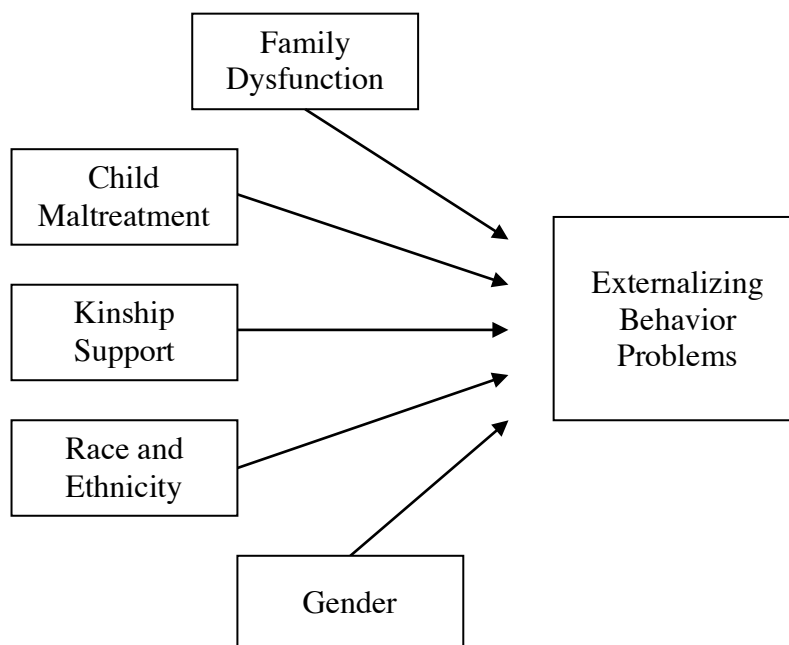
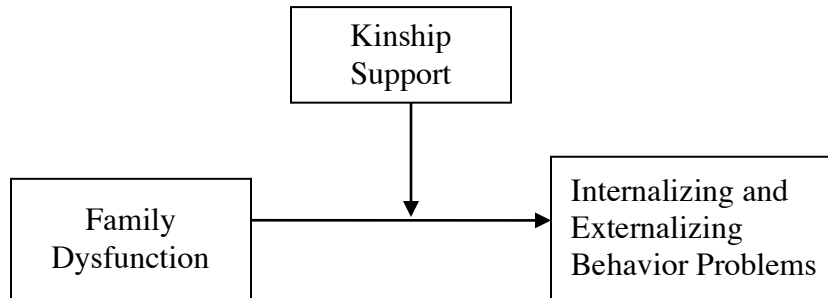


Figure 2. Hypothesized Main Effect Models 2, 4, 6, and 9



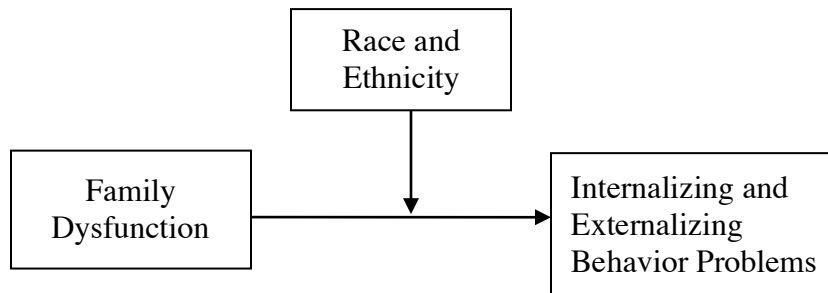
Interaction Effects

Figure 3. Research Question 1: The Moderating Effect of Kinship Support



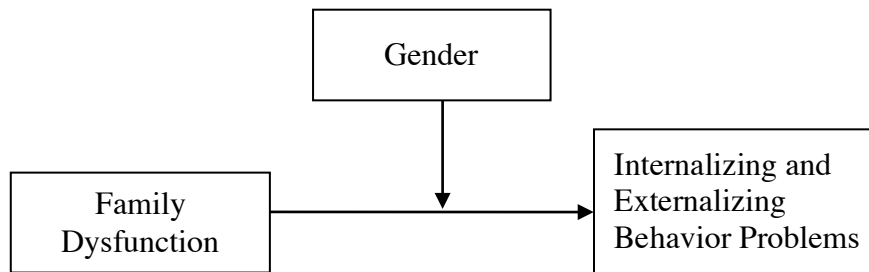
1. Kinship Support
 - a. Research Question One: Will kinship support moderate the association between family dysfunction and internalizing as well as externalizing problems?

Figure 4. Research Question 2: The Moderating Effect of Race/Ethnicity



2. Race and ethnicity
 - a. Research Question Two: Will race and ethnicity moderate the association between family dysfunction and internalizing as well as externalizing problems?

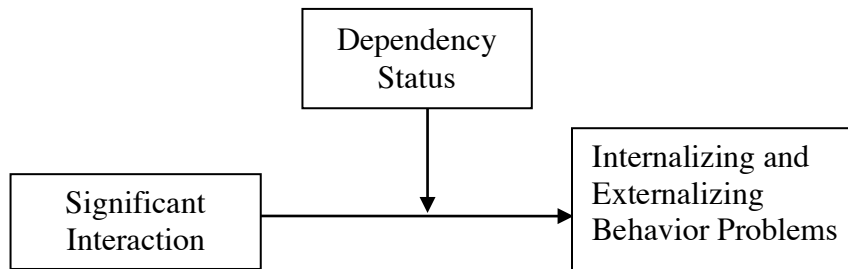
Figure 5. Research Question 3: The Moderating Effect of Gender



3. Gender

- a. Research Question Three: Will gender moderate the association between family dysfunction and internalizing as well as externalizing problems?

Figure 6. Research Question 4: The Moderating Effect of Dependency Status



4. Dependency Status

- a. Research Question Four: Will dependency status moderate the association between any significant interaction that is found and behavioral problems?

CHAPTER V

METHOD

Participants

Data for this study were collected as a part of the Recruitment and Kin Connections Project (RKCP). The RKCP was conducted in conjunction with the Illinois Department of Child and Family Services (DCFS) to expand upon traditional child welfare practices by identifying and engaging relatives, fictive kin, and community supports of youth who enter foster care. The participants were children and adolescents between the ages of six and 13 who entered the care of the DCFS in Cook and Will counties between October 1st, 2011 and June 1st, 2014. One child from each family was selected to represent an independent sample. Overall, participants included 171 individual youth whose ages ranged from 5.99 to 13.96 years old. The average age of the youth participants was 10.15 years ($SD=2.49$), and females comprised slightly more of the sample than males (50.3%). The sample represented an ethnically diverse population: 64.9% African American, 15.8% Latino, 9.9% multi-ethnic, 7.6% Caucasian, and 1.8% Asian American. Of all 171 youth, the most common reason for referral to DCFS care was neglect ($n = 120$), followed by physical abuse ($n = 56$), dependency ($n = 22$), and sexual abuse ($n = 12$).

Procedure

Once a list of eligible participants for the study was provided by the Illinois DCFS,

research assistants at Loyola University Chicago searched the Illinois DCFS Statewide Automated Child Welfare Information System (SACWIS) database to find all kin and fictive kin who were identified in the Integrated Assessment (IA). As required by the state of Illinois, the IA is completed within 45 days of youth coming into DCFS care through Temporary Custody. An IA screener, a licensed mental health professional, conducts in-person interviews with each youth and his or her parent(s) and foster parent(s) to examine the medical, social, developmental, mental health, familial, and educational domains of both the child and the adults involved in rearing the child. The main objective of the IA is to make appropriate placement decisions and to develop a service plan that meets the medical, developmental, educational, and behavioral or mental health needs of families. The IA also provides information on the youth's family composition, history of abuse or neglect, and placement history. The final report of the IA was uploaded to the SACWIS database of DCFS, which was then accessible by research assistants at Loyola University Chicago. Research assistants completed file reviews based on the SACWIS database to collect information on youth and their kin, and conducted phone interviews with caseworkers to confirm their involvement in the youth's life.

In addition to collaborating with the caseworkers, research assistants contacted foster families within two to three weeks after youth entered DCFS care to assess the youth's well-being by conducting a home visit assessment. As a part of the home visit assessment, the Child Behavioral Checklist/4-18 (CBCL/4-18) was administered to the youth's foster parent to assess the youth's internalizing and externalizing behavior problems. The first home visit assessment was conducted during the first six weeks of the

youth's entry into foster care (Time 1), and the second home visit assessment occurred six months after entry (Time 2).

Measures

Demographic and Familial Information

The RKCP Kin Identification and Level of Engagement Form was completed by research assistants at Loyola University Chicago after reviewing files on the Illinois DCFS SACWIS database for each participant. The form collected information on youth's race/ethnicity, gender, age, family composition, and the availability of the youth's kin (e.g., maternal grandmother, maternal great-aunt, paternal aunt, maternal cousin) and "fictive kin" (e.g., close family friend, godparent). Moreover, this form also collected information on the type of kinship support that the identified kin provided to youth. The categories of kinship support included visitation, phone calls, homework help, mentoring, transportation assistance, coaching, sending birthday cards or letters, invitations to family events, attendance at important events, and providing respite as well as support to biological parents and foster parents. Afterwards, the data gathered from the SACWIS were verified by conducting a phone interview with a caseworker of each youth.

Kinship Support Clusters

In order to understand how different types and amount of kinship support influence foster youth's adjustment, the present study applied the kinship support clusters (e.g., low or high involvement of extended family members) that were identified by performing a hierarchical agglomerative cluster analysis using Ward's method. Based on the information gathered on the RKCP Kin Identification and Level of Engagement Form (e.g., youth's kin and fictive kin, and their type of support provided), all of the youth's

relatives were categorized into the following relative types: maternal/paternal great-grandparents, maternal/paternal grandparents/great-aunts/great-uncles, maternal/paternal cousins and parents' cousins, maternal/paternal aunts/uncles, and siblings (age of 16 or above). Moreover, total kinship support scores for each of youth's relative types were calculated. To address the issue of independence, one child or adolescent was randomly selected from each family. Using the aforementioned relative types and total kinship support scores, a hierarchical agglomerative cluster analysis was performed, using Ward's method. The two kinship support typologies identified are as follows: Cluster 1) low involvement across all relative types (low kinship support group), and Cluster 2) high involvement of maternal relatives and low involvement of paternal relatives (high kinship support group) (see Table 1).

Table 1. Kinship support clusters

Relative Type	Cluster 1 (n=56)	Cluster 2 (n=115)
Maternal Great-Grandparents	.68(1.43)	.15(.67)
Maternal Grandparents	4.41(3.68)	.89(1.18)
Maternal Aunts/Uncles	5.00(3.46)	.71(1.15)
Maternal Cousins	2.02(3.44)	.17(.46)
Paternal Great-Grandparents	.23(.97)	.02(.13)
Paternal Grandparents	.41 (.76)	.61(1.79)
Paternal Aunts/Uncles	.52(1.14)	.51(1.68)
Paternal Cousins	.09(.55)	.30(1.48)
Siblings (age of 16 or older)	.93 (1.92)	.44(.99)

Note. Standard deviations in parentheses.

Child and Adolescent Needs and Strengths (CANS)

Family dysfunction, severity of child maltreatment, and youth outcomes (i.e., internalizing and externalizing behavior problems) were evaluated using the Child and Adolescent Needs and Strengths (CANS; Lyons et al., 2008;). The CANS is completed as

a part of the Integrated Assessment (IA) during the first 45 days upon entering care by a DCFS staff member, who establishes a reliability of 85% rating accuracy (State of Illinois DCFS). This structured instrument assesses the needs and strengths of a youth across multiple domains (e.g., traumatic stress symptoms, child strengths, life domain functioning, behavioral or emotional needs, risk behaviors) as well as the needs and strengths of a caregiver. The CANS helps guide a treatment plan for youths with emotional and behavioral health needs, and assists with a case plan (e.g., placement decision making).

The CANS consists of 105 questions, and assesses seven areas of youth functioning, including Trauma Experience, Traumatic Stress Symptoms, Youth Strengths, Life Domain Functioning, Acculturation, Youth Behavioral/Emotional Needs, and Youth Risk Behaviors. For each item on the CANS, severity ratings are reported on a four-point Likert scale of “0” to “3”, where a score of “0” indicates no evidence of any needs or strengths, a score of “1” indicates a need for monitoring or preventive activities, a score of “2” indicates a need for addressing the problem, and a score of “3” indicates a need for immediate or intensive action. The CANS manual provides a detailed description of what each numerical rating constitutes for the specific dimension items.

Through a principal components analysis, items from the CANS were selected to represent family dysfunction, internalizing and externalizing symptoms. The listwise deletion technique was used for missing data. Two items were selected to represent family dysfunction ($\alpha=.76$): family relationships and family conflict. Five items from the CANS represented internalizing behavior problems ($\alpha=.71$): depression, anxiety, somatization, traumatic grief/separation, and adjustment to trauma. Lastly, seven items

the CANS represent externalizing behavior problems ($\alpha=.84$): oppositional behavior, conduct, attention deficit/impulse control, anger control, danger to others, sexual aggression, and delinquency. All of these Cronbach's alpha coefficients were above Nunnally's (1978) criterion for acceptable internal consistency.

Internalizing and Externalizing Behavior Problems

Of all youth who participated in the study, a subsample of the participants had the Child Behavior Checklist/4-18 (CBCL/4-18; Achenbach, 1991) completed by their foster parents. The CBCL/4-18 is a widely used instrument for screening emotional and behavioral problems in 4 to 18-year-old children and adolescents. For each of the 120 items, a primary caregiver rates on a Likert scale of "0" to "2" where a score of "0" means not true, a "1" means somewhat true, and a "2" means very true. There are a total of eight subscales, including Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior. Of these subscales, the broad internalizing scale is comprised of the Withdrawn, Somatic Complaints, and Anxious/Depressed subscales. The externalizing scale, on the other hand, is consisted of the Delinquent Behavior and Aggressive Behavior subscales. The CBCL/4-18 was normed on a sample of 2,368 non-handicapped youth from the age of 4 to 18 (Achenbach, 1991). In the normative sample of 338 boys and 262 girls, inter-parent correlations for the behavior problems were high, ranging from .65 to .75. Internal consistency reliability (alpha) for the eight subscales was also high, ranging from .62 to .92 for boys (age 4 to 11) and from .66 to .92 for girls (Age 4 to 11). Based on the author's recommendations, raw scores were used instead of standardized

scores. The results of the internalizing and externalizing scales on CBCL/4-18 were compared to those on CANS to check for consistency between these two measures.

Statistical analyses

Hypotheses and research questions were tested using hierarchical ordinary least squares regressions. The outcome variables (i.e., internalizing and externalizing behavioral problems) were assessed using the internalizing and externalizing scales of the CBCL/4-18 and the CANS. Variables were entered into two blocks. In the first block, variables related to main effects hypotheses (i.e., child maltreatment, family dysfunction, kinship support, race and ethnicity, and gender) were entered simultaneously.

In the second and final block, interactions related to moderation research questions (e.g., kinship support x child maltreatment, kinship support x family dysfunction) were entered. The second block used a forward entry approach due to a lack of a current understanding of the interactions to be tested in this study. For any significant interactions, simple slopes analyses were conducted using Holmbeck's (1997) recommendations.

Moreover, for any significant interaction that was found, a three-way interaction was tested to see if the dependency status would moderate the interaction. The context of how dependency cases come into care is different from that of maltreatment cases. Unlike maltreatment cases where a caregiver inflicts or allows someone else to inflict physical injury on a child, or neglects to meet a child's needs, dependency cases occur when a child has no caregiver responsible for care or supervision, a caregiver is unable to provide care because of the child's extraordinary needs (e.g., severe behavioral problems, illness, disability), or the caregiver is unable to provide care due to his/her own issues (e.g.,

physical or mental illness, substance abuse, developmental disability, arrest). Given the uniqueness of dependency cases, a multiple hierarchical regression analysis was to be conducted to test whether the significant interaction found in the study would be moderated by dependency.

The main effects would be entered in the first block, followed by interaction terms in the second block. Lastly, the three-way interaction (two significant interaction variables and dependency status) would be entered in the third block. The second and third blocks would use a forward entry approach for the same reason as mentioned above. Also, simple slopes analyses would be conducted to probe any significant interactions. Lastly, Pearson's chi-squared test, also known as the chi-squared goodness-of-fit test was performed to test whether kinship support clusters will differ by race and ethnicity.

CHAPTER VI

RESULTS

Descriptive Statistics

Descriptive statistics were computed for the overall sample ($n=171$) used in the analyses (Table 2). Youth ranged from 5.99 to 13.96 years old, with a mean age of 10.15 years ($SD=2.49$), and females comprised slightly more of the sample than males (50.3%). The majority of the youth were African-American (64.9%), followed by Latino (15.8%).

The descriptive statistics for the CANS scales (i.e., Child Maltreatment, Family Dysfunction, Internalizing and Externalizing Behavior Problems), and the individual items comprising the scales are also presented in Table 2. The results suggest that the scales as well as the items comprising the scales varied in their rated severity. For example, the average scores for the family dysfunction items (i.e., family conflict and relationship) neared the moderate range of impairment across youth (i.e., a “2” rating on the CANS). Regarding child maltreatment, physical abuse ($M=1.10$, $SD=.87$) and neglect ($M=1.46$, $SD=.93$) were, on average, the items rated highest. In terms of behavior problems, youth generally showed greater internalizing behaviors, where the item-level mean was 1.05 ($SD=.44$), than externalizing behaviors, where the item-level mean was .35 ($SD=.44$). Regarding internalizing behaviors, adjustment to trauma ($M=1.50$, $SD=.67$) was the highest rated item, whereas anger control ($M=.65$, $SD=.80$) was the highest rated item for externalizing behaviors.

Table 2. Descriptive Statistics for Variables Used in Analyses

Variable	<i>N</i>	%	Mean (<i>SD</i>)	Min/Max
Demographics				
Age	171		10.15(2.49)	5.99/13.96
Gender (male)	85	49.7		
Gender (female)	86	50.3		
African American	111	64.9		
Latino	27	15.8		
Caucasian	13	7.6		
Kinship Support				
High Kinship Support	56	32.7		
Low Kinship Support	115	67.3		
Child Maltreatment	166		3.68 (2.06)	0/10
Sexual Abuse	166		0.43 (0.78)	0/3
Physical Abuse	166		1.10 (0.87)	0/3
Emotional Abuse	166		0.69 (0.76)	0/3
Neglect	166		1.46 (0.93)	0/3
Family Dysfunction	166		2.90 (1.50)	0/6
Family Conflicts	166		1.55 (0.75)	0/3
Family Relationships	166		1.35 (0.91)	0/3
CANS Internalizing Behaviors*	163		1.05 (0.44)	0/2.20
Adjustment to Trauma	166		1.50 (0.67)	0/3
Traumatic Grief/Separation	166		1.30 (0.72)	0/3
Depression	166		1.29 (0.70)	0/3
Anxiety	166		1.04 (0.72)	0/3
Somatization	163		0.12 (0.35)	0/2
CANS Externalizing Behaviors*	140		0.35 (0.44)	0/2
Attention Deficit/Impulse Control	166		0.53 (0.75)	0/3
Oppositional Behavior	166		0.46 (0.68)	0/2
Conduct	166		0.19 (0.49)	0/2
Anger Control	163		0.65 (0.80)	0/3
Danger to Others	166		0.28 (0.65)	0/3
Sexual Aggression	166		0.05 (0.30)	0/2
Delinquency	140		0.09 (0.32)	0/2
CBCL Internalizing Behaviors (T1)	57		8.37(9.69)	0/54
CBCL Internalizing Behaviors (T2)	39		7.15(6.69)	0/25
CBCL Externalizing Behaviors (T1)	57		11.53(12.13)	0/49
CBCL Externalizing Behaviors (T2)	39		13.03 (11.65)	0/47

Note. * Indicates item-level means computed for CANS Internalizing and Externalizing Scales for comparison purposes. CANS = Child and Adolescent Needs and Strengths. CBCL = Child Behavior Checklist.

Correlational analyses were conducted between the four CANS scales, including family dysfunction, child maltreatment, and internalizing and externalizing behavior problems, and can be seen in Table 3. The correlations ranged from small (.27 for the relationship between child maltreatment and externalizing behaviors) to moderate (.42 for family dysfunction and externalizing behaviors). None of the correlations were high enough to indicate that multi-collinearity might affect interpretation of the multivariate regression results. As expected, family dysfunction was significantly, positively correlated with child maltreatment, and internalizing and externalizing behavior problems. Internalizing and externalizing behavior problems were also significantly correlated with one another.

Table 3. Intercorrelations Among the Four CANS Scales

	1	2	3	4
1. Family Dysfunction	--			
2. Child Maltreatment	.32**	--		
3. Internalizing Behaviors	.39**	.40**	--	
4. Externalizing Behaviors	.41**	.27**	.29**	--

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

Correlational analyses were conducted on the four CANS scales (i.e., Family Dysfunction, Child Maltreatment, and Internalizing and Externalizing Behavior Problems) and CBCL Internalizing and Externalizing Behavior Problems from Time 1 and 2 (see Table 4). Internalizing behavior problems from the CANS and the CBCL were not significantly correlated, ranging from .19 to .21. Externalizing behavior problems from the CANS and the CBCL, however, were significantly correlated, ranging from .45 to .51 for the CBCL at Time 1 and Time 2. Internalizing behavior problems from the

CBCL from Time 1 were significantly correlated with internalizing behavior problems from Time 2 as well as externalizing behavior problems from both Time 1 and 2, ranging from .48 to .73. The problem behavior scales from the CANS were significantly correlated with each other, and those from the CBCL were also significantly correlated with one another.

Table 4. Intercorrelations Among Four CANS and CBCL Scales

	1	2	3	4	5	6	7	8
1. Family Dysfunction	--							
2. Child Maltreatment	.25	--						
3. Internalizing Behaviors	.53**	.52**	--					
4. Externalizing Behaviors	.35*	.28*	.37**	--				
5. CBCL Internalizing Behaviors (T1)	.26	.13	.21	.60**	--			
6. CBCL Internalizing Behaviors (T2)	.29	.04	.19	-.04	.52**	--		
7. CBCL Externalizing Behaviors (T1)	.33*	.19	.23	.51**	.73**	.42**	--	
8. CBCL Externalizing Behaviors (T2)	.44**	.18	.31	.45**	.48**	.63**	.79**	--

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

Main Effects

Family Dysfunction

Hierarchical ordinary least squares regressions were conducted to test Hypotheses 1A and 1B, which examined whether family dysfunction was associated with internalizing and externalizing behavior problems after controlling for child maltreatment, kinship support, race and ethnicity, and gender. Consistent with Hypotheses 1A and 1B, results indicated that greater dysfunction in youth's family-of-origin was associated with more internalizing and externalizing behavior problems

among youth in foster care ($\beta=.41$, $t(162)=3.78$, $p<.001$; $\beta=.78$, $t(162)=4.47$, $p<.001$).

Hypotheses 1A and 1B are presented in Tables 5 and 6, respectively.

Child Maltreatment

Hierarchical ordinary least squares regressions were conducted to test Hypotheses 2A and 2B, which examined a main effect of child maltreatment on internalizing and externalizing behaviors, after controlling for family dysfunction, kinship support, race and ethnicity, and gender. Results indicated that greater severity of child maltreatment was related to more internalizing and externalizing behavior problems among youth in foster care ($\beta=.32$, $t(162)=4.10$, $p<.001$; $\beta=.26$, $t(162)=2.25$, $p<.05$). Hypotheses 1A and 1B are presented in Tables 5 and 6, respectively.

Kinship Support/Involvement

Hierarchical ordinary least squares regressions were conducted to test Hypotheses 3A and 3B, which examined a main effect of kinship support or involvement on internalizing and externalizing behaviors. Results were in support of Hypothesis 3B, but not 3A. Greater kinship support was related to less externalizing behavior problems among youth in foster care, after controlling for family dysfunction, child maltreatment, race and ethnicity, and gender ($\beta=-1.21$, $t(139)=-2.44$, $p<.05$). However, kinship support was not associated with less internalizing behavior problems among youth in foster care. Hypotheses 3A and 3B are presented in Tables 5 and 6, respectively.

Racial and Ethnic Differences

Pearson's chi-square analyses were conducted to test whether kinship support clusters differ by race and ethnicity. The results indicated that there was no significant

relation between kinship support clusters and race and ethnicity: $\chi^2(4, N=171)=3.76$, $p=.44$.

Gender

Before conducting regression analyses, the gender variable was dummy-coded.

Contrary to the hypotheses 5A and 5B, results revealed that gender was not significantly associated with internalizing and externalizing problem behaviors. Hypotheses 5A and 5B are presented in Tables 5 and 6, respectively.

Table 5. Hierarchical Regression Summary Table: Main Effects of Family Dysfunction, Child Maltreatment, Kinship Support, and Gender on Internalizing Behavior Problems

Variable	B	SE B	β
Family Dysfunction	.41	.11	.28**
Child Maltreatment	.32	.08	.30**
Kinship Support	-.26	.32	-.06
Gender	.38	.31	.09

* $p<.05$. ** $p<.01$

Table 6. Hierarchical Regression Summary Table: Main Effects of Family Dysfunction, Child Maltreatment, Kinship Support, and Gender on Externalizing Behavior Problems

Variable	B	SE B	β
Family Dysfunction	.78	.17	.36**
Child Maltreatment	.26	.12	.18*
Kinship Support	-.1.21	.50	-.18*
Gender	-.87	.47	-.14

* $p<.05$. ** $p<.01$

Interaction Effects

Research Question 1

To test Research Question 1, which tested for a moderating effect of kinship support on the relation between dysfunction of family-of-origin and behavior problems while controlling for child maltreatment, a multiple hierarchical regression analysis was conducted. The main effects, including child maltreatment, family dysfunction, and

kinship support, were entered in Step 1 of the analyses. In Step 2, one interaction term created for kinship support and family dysfunction was entered. This resulted in a regression being conducted with internalizing behavior problems as the dependent variable, and another regression being conducted with externalizing behavior problems as the dependent variable. Thus, a total of 2 regression analyses were conducted to test this research question.

For significant interactions between kinship support and family dysfunction, simple slope analyses were conducted to determine the simple effects contributing to the significant interaction term identified (Holmbeck, 1997). This clarified the relation between family dysfunction and outcomes at different levels (high vs. low) of kinship support.

Greater severity of child maltreatment and family dysfunction was associated with more internalizing behavior problems ($\beta=.34$, $t(162)=4.41$, $p<.001$; $\beta=.27$, $t(162)=2.06$, $p<.05$). Moreover, there was a significant interaction between family dysfunction and kinship support ($\beta=.48$, $t(162)=2.22$, $p<.05$). A simple slopes analysis revealed a significant positive relationship between family dysfunction and internalizing problems for children in both the low ($\beta=.27$, $t(162)=2.06$, $p<.05$) and high ($\beta=.74$, $t(162)=4.15$, $p<.001$) kinship support groups. However, a t-test comparing the high and low kinship groups slope difference indicated that the slopes were significantly different ($t(207)=2.37$, $p<.01$); the relationship between family dysfunction and internalizing behaviors was stronger for the high kinship support group. The results are represented in Table 7 and post-hoc analyses are represented in Figure 7.

Lastly, in order to determine at what points the two subgroup regression lines (high vs. low kinship support) differ from each other, the Johnson-Neyman procedure for determining regions of significance was conducted using Fraley's (2012) application. The results showed that the regression of internalizing behavior problems on kinship support was significant for all values that fall -1.42 standardizations below the mean of family dysfunction. In other words, the low kinship support group was associated with significantly more internalizing behavior problems than the high kinship support group when they both had low family dysfunction. On the other hand, when both kinship support groups were exposed to high family dysfunction, their difference in their association with internalizing behavior problems was not significant. The results of the regions of significance, as indicated by the shaded region, are represented in Figure 8.

Table 7. Hierarchical Regression Summary Table: Interactions Between Family Dysfunction and Kinship Support on Internalizing Behavior Problems

Variable	B	SE B	β
Model 1			
Family Dysfunction	.42	.11	.29**
Child Maltreatment	.33	.08	.31**
Kinship Support	-.22	.33	-.05
Model 2			
Family Dysfunction	.27	.13	.18*
Child Maltreatment	.34	.08	.32**
Kinship Support	-.17	.32	-.04
Family Dys x Kinship Support	.48	.22	.19*
<i>Note. R^2 = .24, p = .000 for Model 1, R^2 = .26, p = .028 for Model 2. *p < .05. **p < .01</i>			

Figure 7. Reported Internalizing Behavior Problems as a Function of Family Dysfunction and Kinship Support

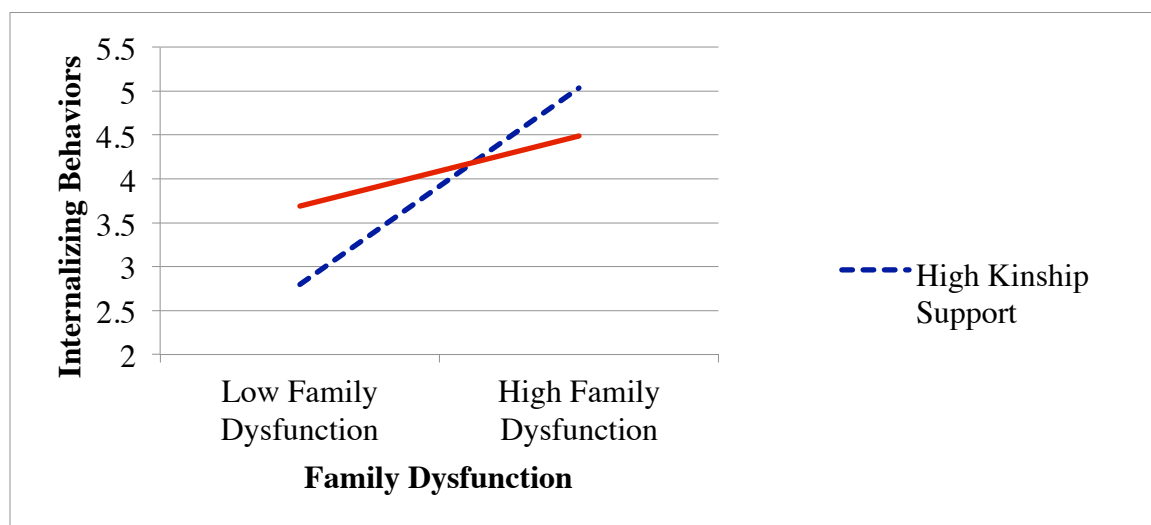
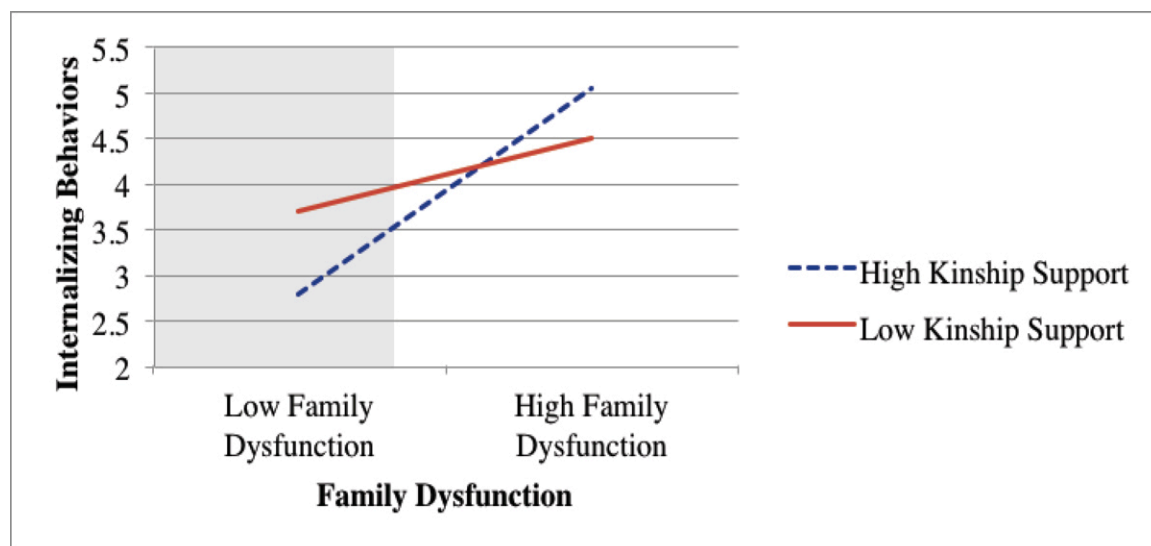


Figure 8. The Regions of Significance with Respect to Kinship Support



In terms of externalizing behavior problems, greater family dysfunction and less kinship support were associated with greater externalizing behavior problems ($\beta=.81$, $t(139)=3.86$, $p<.001$; $\beta=-1.21$, $t(139)=-2.41$, $p<.05$). However, kinship support did not

have any moderating effect on youth's externalizing behaviors. The results are represented in Table 8.

Table 8. Hierarchical Regression Summary Table: Interactions Between Family Dysfunction and Kinship Support on Externalizing Behavior Problems

Variable	B	SE B	β
Family Dysfunction	.81	.21	.37**
Child Maltreatment	.23	.12	.15
Kinship Support	-1.21	.50	-.18*

Note. $R^2=.23$, $p<.001$. * $p<.05$. ** $p<.01$

Research Question 2

A multiple hierarchical regression analysis was conducted to test Research Question 2, exploring the potential moderating effect of race and ethnicity on the relation between family dysfunction and behavior problems, while controlling for child maltreatment. The dummy-coded race and ethnicity, family dysfunction, and child maltreatment were entered in Step 1. In Step 2, the interaction term created for family dysfunction and race and ethnicity was entered. Family dysfunction and child maltreatment had main effects on internalizing behavior problems for all African American, Latino, and Caucasian groups ($\beta=.47$, $t(162)=2.85$, $p<.0.01$; $\beta=.46$, $t(162)=3.86$, $p<.001$; $\beta=.38$, $t(162)=3.44$, $p<.01$, respectively for family dysfunction; $\beta=.33$, $t(162)=4.16$, $p<.0.001$; $\beta=.31$, $t(162)=3.89$, $p<.001$; $\beta=.33$, $t(162)=4.20$, $p<.001$, respectively for child maltreatment). Race and ethnicity did not have any main effect for internalizing behaviors for all African American, Latino, and Caucasian groups ($\beta=.47$, $t(162)=.16$, $p=.87$; $\beta=.37$, $t(162)=.81$, $p=.42$; $\beta=.41$, $t(162)=.67$, $p=.50$). On the other hand, only family dysfunction had a main effect on externalizing behavior problems for all African American, Latino, and Caucasian youth ($\beta=.64$, $t(139)=2.31$, $p<.0.05$; $\beta=.82$,

$t(139)=4.24, p<.001; \beta=.81, t(139)=4.45, p<.001$). However, race and ethnicity did not have any main effect for all three racial and ethnic groups ($\beta=.64, t(139)=.70, p=.49; \beta=.43, t(139)=.56, p=.58; \beta=-.45, t(139)=-.42, p=.98$). Lastly, the interaction terms between the dummy-coded race and ethnicity and family dysfunction were not significant for any racial and ethnic group.

Research Question 3

To test Research Question 3, which explored the potential moderating effect of gender on the relation between dysfunction of family-of-origin and behavior problems, while controlling for child maltreatment, a multiple hierarchical regression analysis was conducted. Gender, family dysfunction, and child maltreatment were entered in Step 1. The interaction term between gender and family dysfunction was entered in Step 2. Gender did not have any main effect on internalizing and externalizing behavior problems ($\beta=.41, t(162)=1.31, p=.19; \beta=-.83, t(139)=-1.72, p=.09$). The interaction term was also not associated with both internalizing and externalizing behavior problems ($\beta=.05, t(162)=.26, p=.80; \beta=-.35, t(139)=-1.04, p=.30$). However, child maltreatment and family dysfunction had main effects on internalizing behavior problems as well as externalizing behavior problems while only family dysfunction had a main effect on externalizing behavior problems, as demonstrated by hypotheses 5A and 5B.

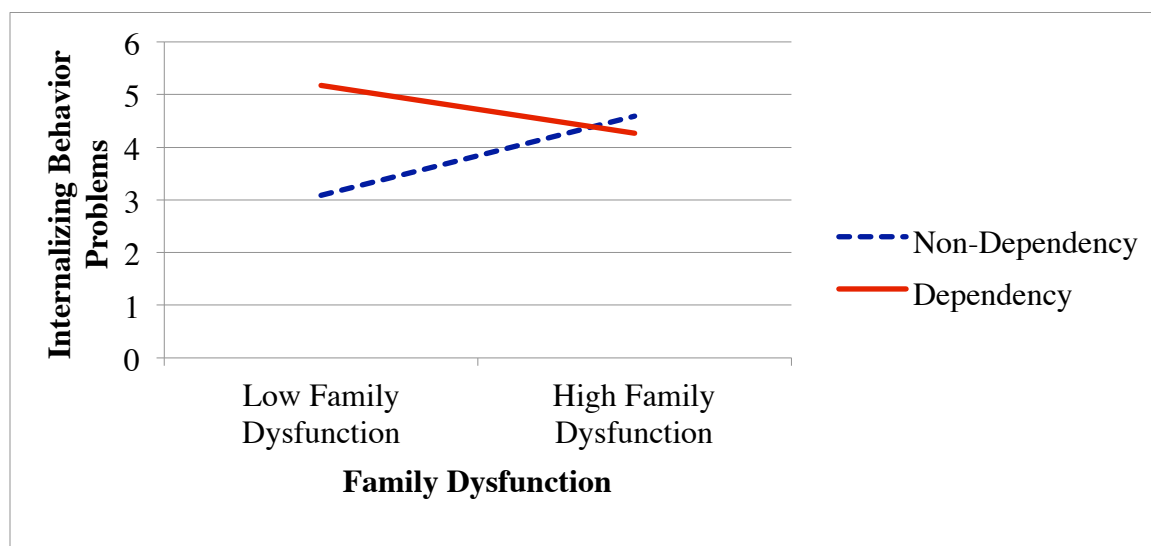
Research Question 4

Given the uniqueness of dependency cases, a multiple hierarchical regression analysis was conducted to test whether the significant interaction found between family dysfunction and kinship support regarding internalizing behavior problems (re: Research Question1) would be moderated by dependency status. Since the interaction was not

found for externalizing behavior problems, a three-way interaction was only tested for internalizing behavior problems.

Child maltreatment, dependency case, kinship support, and family dysfunction were entered in Step 1. Three two-way interaction terms between family dysfunction and kinship support, family dysfunction and dependency, and kinship support and dependency were entered in Step 2. Lastly, the three-way interaction term among kinship support, family dysfunction, and dependency was entered in Step 3. The results indicated that there was a significant interaction between family dysfunction and dependency ($\beta = -.83$, $t(161) = -2.40$, $p < .05$), such that family dysfunction was not significantly associated with internalizing behavior problems for dependency cases ($\beta = -.30$, $t(161) = -.99$, $p = .32$). Family dysfunction, however, was significantly associated with internalizing behavior problems for non-dependency cases ($\beta = .50$, $t(161) = 4.40$, $p < .01$). This finding is consistent with the earlier findings where family dysfunction was associated with internalizing behavior problems. It is not surprising that family dysfunction had no significant association with internalizing behavior problems for dependency cases, since these youth are not necessarily removed from their caregivers due to a high level of family dysfunction. The post-hoc analyses are represented in Figure 9.

Figure 9. Reported Internalizing Behavior Problems as a Function of Family Dysfunction and Dependency Status



CBCL Subsample

The moderating effect of kinship support found on the association between family dysfunction and internalizing behavior problems (CANS) was tested using the CBCL internalizing behavior problems scale with a sample of 38 youth. A multiple hierarchical regression analysis was conducted to test whether kinship support would moderate the effect of family dysfunction on internalizing behaviors longitudinally over 6 months (from Time 1 to 2), while controlling for the baseline internalizing behaviors (Time 1) and child maltreatment. Child maltreatment, Time 1 internalizing behavior problems, family dysfunction, and kinship support were entered in Step 1. The interaction term created for kinship support and family dysfunction was entered in Step 2.

The results showed that only the internalizing behavior problems from Time 1 had a significant main effect ($\beta=.36$, $t(38)=2.81$, $p<.01$) while family dysfunction, kinship support, and child maltreatment did not. The interaction term was also not significant ($\beta=-1.54$, $t(38)=-1.04$, $p=.31$). This may be due to the small sample size.

CHAPTER VII

DISCUSSION

The present study's primary goal was to expand knowledge of the protective effects of kinship support on behavior problems among youth who enter foster care after experiencing maltreatment and dysfunction in the family-of-origin. The study utilized an ecological framework to examine interactions between support from the extended family network and dysfunction in family-of-origin among youth in foster care. The current study was the first known study to closely examine the effect of statistically derived kinship support groups among foster youth. Consistent with predictions, results showed that family dysfunction and maltreatment were significantly associated with externalizing and internalizing behaviors. The study demonstrated that kinship support was negatively associated with externalizing behaviors, and with internalizing behaviors when family dysfunction was low. There was no racial and ethnic difference found across the kinship support groups. Moreover, gender as well as race and ethnicity did not moderate the association between family dysfunction and behavior problems. The following discussion goes into further depth regarding the results on externalizing and internalizing behavior problems.

Family Dysfunction

The present study tested the influence of dysfunction in family-of-origin on foster youth's externalizing and internalizing behavior problems. As expected in light of the

association between family functioning during childhood and subsequent adjustment problems among adults (e.g., Higgins & McCabe, 2003), as well as evidence that dysfunctional family environment is associated with adjustment problems among adolescents with histories of child sexual abuse in the general population (Fergusson et al., 1996), greater dysfunction in youth's family-of-origin was associated with more externalizing and internalizing behavior problems among youth in foster care. The literature has emphasized the importance of assessing the contribution of family functioning to subsequent psychological adjustment problems among people with histories of child maltreatment (e.g., Mancini et al., 1995; Hulseley et al., 1992). However, previous studies have mostly used general, non-foster care populations to examine the impact of childhood family functioning and childhood maltreatment on later adjustment (e.g., Higgins & McCabe, 1994, 2003; Fergusson et al., 1996). Expanding upon the literature on the general population, the current study focused on youth who have recently entered the system. The present study was the first of its kind to assess whether functioning in family-of-origin is associated with youth's adjustment at entry into foster care, even after controlling for child maltreatment, kinship support, race and ethnicity, and gender.

Given the maltreatment histories so common among youth in foster care, interventions commonly focus on trauma (e.g., Trauma-focused CBT) to ameliorate foster youth's symptoms associated with maltreatment. However, the results in this study suggest that the experience of family dysfunction has a unique, independent association with externalizing and internalizing behavior problems. The implication of this result

may be that both trauma-based and family-based services (e.g., parent training, family therapy) should be widely available treatments for youth in foster care.

Child Maltreatment

The current study also examined the effect of child maltreatment on externalizing and internalizing behavior problems, after controlling for family dysfunction, kinship support, race and ethnicity, and gender. Consistent with the notion that the experience of child maltreatment is associated with a wide range of problems in functioning and various forms of psychopathology (e.g., Jaffee et al., 2007; Guibord et al., 2011; Orton et al., 2009), the severity of child maltreatment was associated with both externalizing and internalizing behavior problems among youth in foster care.

Grant and colleagues (2003) proposed a general conceptual model of the role of stressors in the etiology of child and adolescent psychopathology, suggesting that there is specificity in relations among stressors, moderators, mediators, and psychopathology. According to this proposition, a certain type of stressor (e.g., physical abuse) is associated with a particular type of psychological problem (e.g., depression) via a particular mediating process (e.g., coping style) in the context of a particular moderating variable (e.g., gender). However, the literature on child maltreatment has generally shown that there is a lack of specificity in the relationships between maltreatment types and particular adjustment problems (e.g., Higgins & McCabe, 1998; Kamsner & McCabe, 2000; Mills et al., 2013). Research suggests that it is the experience of multi-type maltreatment (i.e., multiple types of maltreatment) that is related to poor levels of adjustment. Based on these findings, the present study assessed the severity of multi-type maltreatment instead of the specificity of maltreatment types. Specifically, this study

measured maltreatment as a composite score of the severity ratings on different types of maltreatment (i.e., sexual abuse, physical abuse, emotional abuse, neglect). Consistent with previous research, the present study confirmed that the experience of child maltreatment poses a risk for behavior problems (e.g., Jaffee et al., 2007; Guibord et al., 2011; Orton et al., 2009). These findings help explain the high prevalence rates of mental health problems reported among foster youth, who commonly enter child welfare after experiencing severe maltreatment. The results also suggest that the overall severity of maltreatment is a valid assessor of foster youth's adjustment problems.

Kinship Support

Externalizing Behavior Problems

As expected in light of the association between kinship support and youth's problematic behaviors (i.e., involvement in delinquent activities, such as use of drugs, vandalism, and physical assault) among youth in single-parent households (Taylor et al., 1993), greater kinship support was associated with fewer externalizing behavior problems among youth in foster care, after controlling for family dysfunction, child maltreatment, race and ethnicity, and gender. However, in the same study, Taylor and colleagues found that kinship support was not associated with problem behaviors for adolescents from two-parent households, indicating that the positive effects of kinship support may be more pronounced among youth with greater needs regarding the functioning and well-being of the family. It is possible that the sample of foster youth in the present study is comparable to the youth in single-parent households in Taylor et al.'s (1993) study, and that both groups of youth are in great need of support, resources, help, and care. Findings from

both the present study and Taylor et al.'s study (1993) suggest that kinship support is a valuable contributor to youth's resilience among those faced with more difficulties.

In contrast to Taylor et al.'s (1993) findings, McCabe and Clark's (1999) study among urban African American youth revealed that kinship support was not significantly associated with "acting out" behaviors. Although McCabe & Clark's (1999) study controlled for socioeconomic risks, it did not examine how the effects of kinship support may vary across different socioeconomic groups or family structures (single- vs. two-parent home), as it was done by Taylor et al. (1993). In other words, the main effect of kinship support might have been lost in the study because SES was not assessed as a moderator. Taken together, the results suggest that support and involvement from kin are uniquely and negatively associated with externalizing behavior problems specifically among youth who face great risk factors. However, more research is needed in this area to further test this hypothesis, particularly research that explores the potential protective effects of kinship support in more highly stressed families.

Internalizing Behavior Problems

In contrast to the findings for externalizing behavior problems, kinship support was not independently associated with internalizing behavior problems among foster youth. This is consistent with previous studies, which found that urban African American youth's perceived kinship support is not directly associated with fewer internalizing behavior problems (McLoyd et al., 2004; Taylor, 1996; Taylor et al., 1993; McCabe & Clark, 1999). The association between kinship support and internalizing behaviors may be a complex one. However, there is very limited research on the moderating effect of kinship support, which the present study sought to address with a child welfare sample.

Interactive Effects between Kinship Support and Family Dysfunction

Internalizing Behavior Problems

The present study found that kinship support moderated the association between family dysfunction and internalizing behavior problems among youth in foster care. This finding from the present study is consistent with McCabe and Clark's (1999) findings where the interaction between kinship support and familial stressors was significantly associated with shy or anxious symptoms among urban African American youth. However, the results of the post-hoc probing of the moderator in this and McCabe and Clark's (1999) study indicate that the moderators behaved differently across the two studies.

In the conceptual scheme of Luthar et al. (2000), McCabe and Clark's (1999) study found a protective-stabilizing effect of kinship support on African American youth where those with high familial stressors and kinship support were reported to have fewer shy or anxious problems compared to those with high familial stressors and low kinship social support. Kinship support was found to be protective-stabilizing since its protectiveness was stable and present despite the increasing familial stress. In contrast, the present study revealed that foster youth with both high and low kinship support exhibited greater internalizing behavior problems when they experienced greater dysfunction in family-of-origin. At a low level of family dysfunction, youth with low kinship support exhibited significantly more internalizing behavior problems compared to those with high kinship support.

In other words, the protective effect of kinship support was present among youth with low dysfunction in family-of-origin, and kinship support was not protective when

the level of dysfunction in family-of-origin was high. Since kinship support only partially buffered the adverse effects of family dysfunction on youth adjustment, such that the buffering effect was not present when stress levels were high, kinship support in the present study is considered protective but reactive (Luthar et al., 2000). The protective effect of kinship support may be less pronounced when the level of dysfunction in the family-of-origin is too potent a risk to be buffered by kinship support. Hammack et al.'s (2004) study of exposure to community violence supports this notion that social support factors that appear to be protective at low levels of risk may fail to reduce the vulnerability for adverse outcomes in conditions of extreme risk. This study found protective-stabilizing effects of social support for witnessing violence, and protective-reactive effects for high victimization among urban African American youth. Hammack and colleagues (2004) suggested that this pattern of findings is indicative of a situation of overwhelming risk where factors that were protective at low levels of risk (e.g., witnessing violence) fail to buffer youth in high conditions of risk (e.g., experiencing high victimization). For example, the effects of witnessing violence may be "ameliorated more easily" compared to the effects of being a victim of an attack (Hammack et al., 2004). The difference in the degree of stress experienced in these two different circumstances that yielded protective-reactive and -stabilizing effects is important to note.

In fact, the difference in findings between the present study and McCabe and Clark's (1999) study (i.e., protective-stabilizing v. protective-reactive) may also be due to the difference in the intensity of stressors. Youth in the present study experienced a number of additional familial stressors that the sample used in McCabe and Clark's

(1999) study did not, such as separation from family and the experience of being in foster care. Separation from family is, indeed, a unique context of being in foster care that can be very challenging or traumatic to youth. The intensity of family dysfunction in the context of being in foster care may be much greater than those in the context of residing with family and working out issues together. As such, kinship support may exert a protective-reactive effect on youth who are in conditions of high stress or risk, such as those in foster care, whereas it has a protective-stabilizing effect on youth who experience lower levels of stress or risk, such as those in urban community settings.

This consistent pattern of findings from the current study and Hammack et al.'s (2004) study is most likely related to the intensity of the stressor assessed (i.e., dysfunction of family-of-origin, violence exposure). As Hammack and colleagues (2004) reasoned, "the emotionally damaging effects" of high dysfunction in family-of-origin may overwhelm foster youth and the potentially adjustment-promoting effects of kinship support, and vulnerability to experience adjustment problems is "virtually inevitable." Thus, the finding that social support was not protective of developing internalizing behavior problems at high levels of dysfunction in family-of-origin is not entirely surprising, given the traumatic nature of such life events, including the separation from family and placement in foster care.

It is important to note that this finding on the moderating effect of kinship support was not replicated with a longitudinal sample using the CBCL data. Unfortunately, the sample size of the longitudinal data was too small, including only 38 youth. Only the baseline internalizing behavior problems reported by foster parents at Time 1 predicted internalizing behavior problems at Time 2. The interaction between family dysfunction

and kinship support did not predict internalizing behavior problems. Future studies should examine how kinship support affects foster youth's internalizing behavior problems over time by using a larger sample.

Externalizing Behavior Problems

In contrast to the findings for internalizing behavior problems, kinship support was not found to moderate the relationship between family dysfunction and externalizing behavior problems among foster youth. This finding is inconsistent with McCabe and Clark's (1999) study, which found that kinship social support moderated the relationship between familial stressors and "acting out" behaviors. In McCabe and Clark's (1999) study, children with high familial stressors and kinship support were reported to have fewer "acting out" problems compared to those with high familial stressors and low kinship support. As such, McCabe and Clark (1999) showed that kinship support partially shielded children from the negative effects of familial stress. In the present study, however, kinship support was not found to have any moderating effect on foster youth's externalizing behavior problems. Unlike the protective-reactive effect of kinship support on internalizing behaviors, kinship support was protective against foster youth's externalizing behaviors regardless of the degree of dysfunction in family-of-origin.

The disparity in findings in the present study and McCabe and Clark's (1999) study may be in part due to the present study's focus on foster youth, who are a unique group of youth who experience particular problems (e.g., removal from parents, sibling separations, sudden change of neighborhood, maltreatment) that urban youth may not. Thus, McCabe and Clark's (1999) findings on urban youth may not be generalized to urban youth in foster care. Moreover, McCabe and Clark (1999) measured kinship

support by assessing children's perceptions of social and emotional support provided by kin. While the present study found similar main effects of kinship support on youth adjustment as Taylor et al. (1993) did, it is important to note that kinship support was measured differently across these studies. In previous studies (e.g., Taylor et al., 1993; McCabe & Clark, 1999), kinship support was commonly measured by youth's report of their perception of or satisfaction with their kin's social and emotional support. As McCabe & Clark (1993) noted, it is unknown whether children's reported perception of kinship support actually correspond to actual support enactment. Youth who come from overly harsh, abusive families tend to inflate self-reported perception of kinship support and overestimate the degree to which others care about them (McCabe & Clark, 1999). To avoid any under- or over-reporting of the degree to which adult relatives and fictive kin provide support, the present study used more objective methods of measuring kinship support, such as conducting file reviews on the DCFS database as well as phone interviews with caseworkers. These different methods of gathering data on kinship support (i.e., actual availability or amount of support v. amount of support felt) may contribute to the disparity in findings.

Overall, the present study showed that the amount of support provided to foster youth and their caregivers was uniquely associated with externalizing behavior problems regardless of functioning of the family-of-origin. On the other hand, kinship support was found to be protective for internalizing behavior problems only when the intensity of family dysfunction is low. The comparison between the present study's findings and prior work (e.g., McCabe & Clark, 1999; Taylor et al., 1993) emphasizes, yet again, that foster youth is a unique population with complex needs, and that findings from community

samples may not be generalized to the foster youth population. Officials in the DCFS, who decide on the use of services for youth and provide treatments, should make informed decisions regarding the use of mental health services, with the understanding that the factors that buffer the adverse outcomes at a low stress level may not still be protective at a high stress level.

Interaction Effects among Kinship Support, Family Dysfunction, and Dependency

Given the uniqueness of dependency cases, the present study examined whether the dependency case status would influence the effect of interaction between family dysfunction and kinship support on foster youth's internalizing behavior problems found in the present study. However, the three-way interaction revealed that dependency did not affect the interaction between family dysfunction and kinship support. In fact, further probing showed that family dysfunction was positively associated with internalizing behavior problems for non-dependency cases, but not dependency cases. This finding may be explained by previous research, which suggests that family dysfunction and child abuse commonly co-occur (e.g., Dong et al., 2003; Dube et al., 2001). The association between family dysfunction and dependency, however, has not been clearly established yet. As such, the interaction found between family dysfunction and dependency case status was reflective of previous findings that the likelihood of child maltreatment increases as the severity of family dysfunction increases, and thereby affecting youth's problem behaviors. This finding, however, has implications for services set in place for foster youth; youth who enter foster care due to dependency may be in need of different services compared to those who entered child welfare due to maltreatment since they may be exposed to different risk factors for adjustment problems.

Gender Differences

In contrast to findings from previous research on gender differences in the effects of family environment characteristics on psychological functioning (e.g., Eschenbeck et al., 2007; Maschi et al., 2008; Meyerson et al., 2002), the present study did not identify any significant gender differences in the impact of family dysfunction and child maltreatment on behavior problems. For example, Meyerson et al. (2002) found gender differences in the effects of family environment characteristics on psychological functioning among adolescents, in that family conflict was found to be predictive of depression for female adolescents, but not male adolescents. The literature on gender-specific coping styles has shown that males and females react to stress differently; where adolescent males often cope with stress by externalizing their behaviors and females by internalizing their behaviors (e.g., Eschenbeck et al., 2007; Grogan-Kaylor et al., 2008; Maschi et al., 2008). However, the literature on gender specific coping responses has mostly focused on adolescents (e.g., Eschenbeck et al., 2007; Maschi et al., 2008) whereas the present study used a younger age group, age 8 to 13. Further research is needed to examine whether gender specific coping styles exist for young children, and if the same styles are found among children in foster care. Future research should also examine whether gender differences in foster youth's exhibiting problems become more pronounced with age.

Interactive Effects between Gender and Family Dysfunction

Based on the literature on gender-specific coping responses, the study sought to explore the moderating effect of gender on the association between family dysfunction and adjustment problems. However, gender was not found to buffer the adverse effects of

family dysfunction on foster youth's behavior problems in the present study. This is consistent with findings from the present study that gender was not associated with behavior problems among foster youth between the age of 8 and 13. As discussed before, previous studies on gender differences in the effect of family environment on psychological functioning have mostly focused on an older sample (e.g., Meyerson et al., 2002) compared to the present study. Future studies should examine when gender differences in coping styles and prevalence of adjustment problems appear among youth in foster care. Treatments for foster youth should take this information into account and provide gender appropriate services.

Racial and Ethnic Differences across Kinship Support Groups

Inconsistent with the evidence that the prevalence of extended family networks is high among racial and ethnic minority families (e.g., Harrison et al., 1990), the present study did not find any racial and ethnic differences across kinship support groups (i.e. high vs. low). The literature describes the use of kinship support as adaptive strategies commonly utilized among ethnic minority families (Harrison et al., 1990; Rodriguez, 2002; Johnson, 2000; Pallock & Lamborn, 2006). However, the lack of racial and ethnic differences found in the kinship support groups may be due to a lack of racial and ethnic diversity of the sample used in the present study. Specifically, the sample consisted of 64.9% African American youth and only 7.6% Caucasians. Future studies should use a more evenly distributed sample, in terms of its racial and ethnic diversity, to examine whether the use of kinship support as a problem-solving and stress-coping system is a cultural pattern among families of youth in foster care.

Interactive Effect between Race and ethnicity, and Family Dysfunction

Little empirical work has focused on the moderating effect of race and ethnicity on the association between family dysfunction and adjustment problems among foster youth. In the present study, race and ethnicity did not show a buffering effect against family dysfunction. This research question was based on a hypothesis that there would be racial and ethnic differences across kinship support groups (e.g., racial and ethnic minorities in the high kinship support group). However, since there was no racial and ethnic difference found in kinship support groups, it is not surprising that race and ethnicity did not influence the association between family dysfunction and adjustment problems. The results from the present study revealed that family dysfunction has adverse effects on adjustments among foster youth regardless of their race and ethnicity.

Summary and Conclusions

Children in foster care experience significant risk factors for maladaptive outcomes, such as maltreatment, which leads to removal from the home and placement in foster care (e.g., Garland et al., 1996; Holtan et al., 2005). In addition to child maltreatment, various aspects of the context of the family-of-origin (e.g., family conflict, dysfunction, sources of support) can also influence youth adjustment (Trickett & McBride-Chang, 1995). In community samples, support from extended family members (kinship support) has been found to buffer the negative consequences of living in economic hardships, and have a positive influence on youth adjustment in general (e.g., McLoyd et al., 1994; Taylor et al., 1993; Taylor et al., 2008; Taylor, Casten, & Flickinger, 1993; Pallock & Lamborn, 2006).

However, despite the benefits of kinship support demonstrated in the general population, the literature has not examined the effects of kinship support in the child welfare system, beyond the effects of kinship caregivers (i.e., relative placements). Applying an ecological framework, the current study sought to examine the influence of different contexts, such as nuclear and extended family network, on the effects of child maltreatment and family dysfunction among youth in foster care (Jaffee et al., 2007; Zielinski & Bradshaw, 2006).

Consistent with previous research, the present study found that the intensity of dysfunction of family-of-origin and that of maltreatment were both independently associated with internalizing and externalizing behavior problems among youth in foster care. Decision makers in the child welfare system may assume what services youth need based on their assumptions about foster youth's risk factors for adjustment problems (Garland et al., 1996). The findings from the present study revealed that treating dysfunction of family-of-origin and addressing family issues may be just as important as treating the effects of maltreatment. Thus, the selection of mental health services as well as provision of the treatment module should be guided by the assessment of the severity of both family dysfunction and child maltreatment. Such informed decisions may be more effective in preventing and treating foster youth's adjustment problems.

Moreover, consistent with previous research, kinship support was found to have a positive influence on foster youth's externalizing behaviors. This finding further confirmed the notion that kinship support has positive impact on foster youth's externalizing behavior problems. However, contrary to the findings for externalizing behaviors, kinship support was found to have a protective-reactive effect on internalizing

behavior problems among youth in foster care, such that it buffered the adverse effects of dysfunction in family-of-origin only when the intensity of dysfunction was low. This finding was inconsistent with previous research (e.g., McCabe & Clark, 1999), which found a protective-stabilizing effect of kinship support on urban African American youth's internalizing symptoms. This disparity in findings may be due to the intensity of familial stress or dysfunction that youth in foster care are exposed. As Hammack and colleagues (2004) explained, kinship support may lose its buffering effect when the "emotionally damaging effects" of dysfunction in family-of-origin are too overwhelming for youth. In fact, youth in foster care experience a great amount of stress and traumatic events; they experience maltreatment and family dysfunction, followed by the removal from the home and placement in foster homes. These are all significant risk factors for maladaptive outcomes (Garland et al., 1996). Given this unique context of being in foster care, it is not surprising that the intensity of family dysfunction is too high for kinship support to exert its protective effect on foster youth's internalizing behaviors.

Contrary to expectations, there were no gender differences in the prevalence of behavior problems as well as the association between family dysfunction and behavior problems. This may have been possibly due to the young mean age of the sample used in the present study. There were also no racial and ethnic differences found in the kinship support groups as well as the association between family dysfunction and behavior problems. This may have been due to a lack of racial and ethnic diversity present in the sample.

Taken together, the results of the current study highlight the need to consider environments of family-of-origin when deciding on services youth need upon entering

foster care. As research has shown, factors that predict the use of mental health services have been mostly age, race/ethnicity, and the abuse type (see Hortwitz et al., 2012). For example, children who experienced the more “active” type of maltreatment (i.e., physical and sexual abuse) are more likely to be given services than those who experienced the more “passive” type of maltreatment (i.e., neglect) due to the assumption that the “active” type of maltreatment would have more adverse effects on youth’s psychosocial adjustment (Garland et al., 1996). However, this study emphasizes the need to consider other contextual factors, namely nuclear as well as extended family networks. The current study suggests that it is important for treatments to not only focus on the effects of maltreatment, but also the effects of having dysfunctional family relationships or high conflicts within the family-of-origin. Moreover, this study suggests that officials should seek to increase kinship support for the potential it may have to protect youth from internalizing and externalizing behavior problems. Since youth in foster care are at greater risk for developing a wide range of psychosocial problems (e.g., Garland et al., 1996; Orton et al., 2009; Guibord et al., 2011), it is crucial that officials in the DCFS make informed decisions regarding services that foster youth receive in order to provide more effective and efficient support that they need.

The present study has several strengths. This was the first study to closely examine the protective effect of support from extended family members, besides kin caregivers, on youth’s adjustment within the child welfare system. Unlike previous research, this study used an objective method of assessing kinship support to avoid youth’s tendency to inflate their perception of support they receive from their kin. Through reviewing files on the DCFS database and conducting phone interviews with

caseworkers, this study gathered information to identify specific types of relatives (e.g., maternal aunt, paternal uncle, maternal great aunt, paternal grandmother, godmother) that foster youth have and their varying types of involvement and support. Applying an ecological framework, the present study also considered the contribution of different social contexts (nuclear v. extended family network) to foster youth's behavior problems. Specifically, the study focused on characteristics of family-of-origin, the context where child maltreatment occurred, instead of youth's placement in foster care. This study was a novel in examining how youth's broader family context may interact with their nuclear family context. The findings from the present study have important implications for officials in the DCFS as well as service providers, in that youth in foster care need services to address their family issues, in addition to the effects of maltreatment.

Despite its aforementioned strengths, the present study is not without limitations. First, because the study was cross-sectional, the directions of the significant effects or causal relations are unknown. It is possible that kinship support leads to fewer externalizing behaviors, or vice versa. Moreover, the longitudinal data did not confirm the results from the cross-sectional data due to its small sample. It is unknown whether kinship support has any predictive effect on foster youth's behavior problems. Thus, future studies should examine the predictive effect of kinship support by using larger longitudinal data.

Second, the current study did not examine the effects of specific types of support on foster youth's adjustment (Taylor et al., 2008). It also did not assess foster youth's perceived kinship support. Future studies should assess kinship support using both objective and subjective methods to examine whether the actual amount of kinship

support has the same effect as the amount of perceived kinship support. It would be interesting to also examine the effects of the discrepancy in actual and perceived kinship support on foster youth's adjustment. Future research should also examine whether specific types of support (e.g., instrumental, financial, emotional) have different effects on foster youth development.

Although the current study was grounded in an ecological theory as it examined broader family contexts, it did not examine factors in other broad social contexts. Future studies should examine the impact of neighborhood and community contexts has on foster youth's adjustment, especially given that they may move to different communities upon entering foster care or placement disruptions. Moreover, expanding upon findings on kinship support, future studies should also examine how other sources of support (e.g., fictive kin, school, neighborhood, friends) may influence foster youth's adjustment.

Given the uniqueness of dependency cases, the present study examined whether dependency status affects the interaction effect found between family dysfunction and kinship support on foster youth's internalizing behavior problems. The current study did not find any significant effects. However, the sample of dependency cases was small ($n=12$) in the present study. Using a bigger sample of dependency cases, future research should examine case-specific risk and protective factors since youth enter foster care for different reasons, and they may have different needs and strengths.

Lastly, the current study's use of a single measurement of family dysfunction does not give a clear indication of which specific aspect of family dysfunction has the most impact on youth adjustment. Moreover, it is important to note that while the present study focused on two specific aspects of family dysfunction (i.e. family relationships and

conflicts), McCabe and Clark (1999) measured familial stressors by counting risk factors assessed across five measures: the Demographic Interview (e.g., primary caregiver's relation to the child, parental history of criminal behavior, substance abuse, mental illness), the Conflicts Tactics Scale (e.g., caregivers reporting severe physical violence in the spousal relationship), the Stressful Life Events Checklist (e.g., stressful events reported to have occurred in the prior year), the Parent Survey (e.g., child reported perceived endangerment by a caregiver). It is possible that kinship support may have different impact on youth adjustment depending on the types of family-related problems. Thus, future studies should use a more thorough measurement of family dysfunction to examine the protective effect of kinship support on the types of familial stress, in addition to the severity of family dysfunction.

Overall, children in foster care are in need of services related to their experiences of maltreatment, and their experiences in foster care, which involve removal from their home and, usually, a series of multiple placements. Officials in the DCFS, clinicians, researchers, and families of youth should be informed well and recognize that foster care is a unique context where youth face many complex issues across different contexts. Thus, more research is needed to examine protective factors in different layers of ecology to promote better outcomes among youth in foster care.

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) _____ Number of youth removed: _____

Date of Temporary Custody (TC) hearing: _____ Agency: _____

Re_TC? Yes No: Dates of Re-TC hearing: _____ Date of 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."

First Relative Name: _____ **Age:** _____ **Relationship to youth:** _____
 (e.g., "Maternal Aunt")

<input type="checkbox"/> Respite	<input type="checkbox"/> Visitations	<input type="checkbox"/> Home of Relative Foster Care Option	<input type="checkbox"/> Phone calls
<input type="checkbox"/> Tutoring/HW help	<input type="checkbox"/> Mentoring	<input type="checkbox"/> Childcare	<input type="checkbox"/> Transportation assistance
<input type="checkbox"/> Coaching	<input type="checkbox"/> Birthday cards	<input type="checkbox"/> Invitation to family or other events (e.g., picnics)	<input type="checkbox"/> Attendance at important events (e.g., sports)
<input type="checkbox"/> Biological parent support	<input type="checkbox"/> Foster parent support	Positive attachment figure?	<input type="checkbox"/> Yes <input type="checkbox"/> No

☐ No involvement ☐ Other Involvement. List:

☐ Barriers to involvement (e.g., substance use, perpetrator). List:

Notes:

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

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

(#____) **Relative Name:**_____ Age:_____ Relationship to youth:_____
(e.g., "Maternal Aunt")

- | | | | |
|---|---|---|--|
| <input type="checkbox"/> Respite | <input type="checkbox"/> Visitations | <input type="checkbox"/> Home of Relative
Foster Care Option | <input type="checkbox"/> Phone calls |
| <input type="checkbox"/> Tutoring/HW
help | <input type="checkbox"/> Mentoring | <input type="checkbox"/> Childcare | <input type="checkbox"/> Transportation
assistance |
| <input type="checkbox"/> Coaching | <input type="checkbox"/> Birthday cards | <input type="checkbox"/> Invitation to family or
other events (e.g.,
picnics) | <input type="checkbox"/> Attendance at
important events
(e.g., sports) |
| <input type="checkbox"/> Biological
parent support | <input type="checkbox"/> Foster parent
support | Positive attachment
figure? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

☐ No involvement ☐ Other Involvement. List:

☐ Barriers to involvement (e.g., substance use, perpetrator). List:

Notes:

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

Estimated Current 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

TRAUMA EXPERIENCES

These ratings are made based on lifetime exposure of trauma.

For Trauma Experiences, the following categories and action levels are used:

- 0 indicates a dimension where there is no evidence of any trauma of this type.
- 1 indicates a dimension where a single incident of trauma occurred or suspicion exists of trauma experiences.
- 2 indicates a dimension on which the child has experienced multiple traumas.
- 3 indicates a dimension which describes repeated and severe incidents of trauma with medical and physical consequence.

1. SEXUAL ABUSE

This rating describes child's experience of sexual abuse or the impact of the abuse on child's functioning.

- 0 There is no evidence that child has experienced sexual abuse.
- 1 Child has experienced single incident of sexual abuse with no penetration.
- 2 Child has experienced multiple incidents of sexual abuse without penetration or a single incident of penetration.
- 3 Child has experienced severe, chronic sexual abuse that could include penetration or associated physical injury.

2. PHYSICAL ABUSE

This rating describes the degree of severity of the child's 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 intention to commit 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 to necessitate hospital treatment.

TRAUMATIC STRESS SYMPTOMS

These ratings describe a range of reactions that children and adolescents may exhibit to any of the variety of traumatic experiences described above. Unlike the Trauma Experiences which are cumulative over the child's lifetime, these symptoms are rated based on how the child is doing over the past 30 days.

For Trauma Stress Symptoms, the following categories and action levels are used:

- 0 indicates a dimension where there is no evidence of any needs.
- 1 indicates a dimension that requires monitoring, watchful waiting, or preventive activities.
- 2 indicates a dimension that requires action to ensure that this identified need or risk behavior is addressed.
- 3 indicates a dimension that requires immediate or intensive action.

14. ADJUSTMENT TO TRAUMA

This item covers the youth's reaction to any of a variety of traumatic experiences -- such as emotional, physical, or sexual abuse, separation from family members, witnessing violence, or the victimization or murder of family members or close friends. This dimension covers both adjustment disorders and posttraumatic stress disorder from DSM-IV. This is a cause and effect item that describes how the child is adjusting to trauma experienced, in the present day.

- 0 Child has not experienced any significant trauma or has adjusted well to traumatic experiences.
- 1 Child has some mild adjustment problems to trauma. Child may have an adjustment disorder or other reaction that might ease with the passage of time. Or, child may be recovering from a more extreme reaction to a traumatic experience.
- 2 Child has marked adjustment problems associated with traumatic experiences. Child may have nightmares or other notable symptoms of adjustment difficulties.
- 3 Child has post-traumatic stress difficulties as a result of traumatic experience. Symptoms may include intrusive thoughts, hyper-vigilance, constant anxiety, and other common symptoms of Post Traumatic Stress Disorder (PTSD).

15. REEXPERIENCING

These symptoms consist of difficulties with intrusive memories or reminders of traumatic events, including nightmares, flashbacks, intense reliving of the events, and repetitive play with themes of specific traumatic experiences. These symptoms are part of the DSM-IV criteria for PTSD.

- 0 This rating is given to a child with no evidence of intrusive symptoms.
- 1 This rating is given to a child with some problems with intrusions, including occasional nightmares about traumatic events.
- 2 This rating is given to a child with moderate difficulties with intrusive symptoms. This child may have more recurrent frightening dreams with or without recognizable content or recurrent distressing thoughts, images, perceptions or memories of traumatic events. This child may exhibit trauma-specific reenactments through repetitive play with themes of trauma or intense physiological reactions at exposure to traumatic cues.
- 3 This rating is given to a child with severe intrusive symptoms. This child may exhibit trauma-specific reenactments that include sexually or physically traumatizing other

children or sexual play with adults. This child may also exhibit persistent flashbacks, illusions or hallucinations that make it difficult for the child to function.

CHILD BEHAVIORAL/EMOTIONAL NEEDS

These ratings identify the behavioral health needs of the child or adolescent. While the CANS is not a diagnostic tool, it is designed to be consistent with diagnostic communication. In DSM-IV a diagnosis is defined by a set of symptoms that is associated with either dysfunction or distress. This definition is consistent with the ratings of '2' or '3' as defined by the action levels below:

For Behavioral/Emotional Needs, the following categories and symbols are used:

0 indicates a dimension where there is no evidence of any needs.

1 indicates a dimension that requires monitoring, watchful waiting, or preventive activities.

2 indicates a dimension that requires action to ensure that this identified need or risk behavior is addressed.

3 indicates a dimension that requires immediate or intensive action.

47. ATTENTION DEFICIT/IMPULSE CONTROL

Symptoms of Attention Deficit and Hyperactivity Disorder and Impulse Control Disorder would be rated here. Inattention/distractibility not related to opposition would also be rated here.

0 This rating is used to indicate a child with no evidence of attention/hyperactivity problems.

1 This rating is used to indicate a child with evidence of mild problems with attention/hyperactivity or impulse control problems. Child may have some difficulties staying on task for an age appropriate time period.

2 This rating is used to indicate a child with moderate symptoms of attention/hyperactivity or impulse control problems. A child who meets DSM-IV diagnostic criteria for ADHD would be rated here.

3 This rating is used to indicate a child with severe impairment of attention or dangerous impulse control problems. Frequent impulsive behavior is observed or noted that carries considerable safety risk (e.g. running into the street, dangerous driving or bike riding). A child with profound symptoms of ADHD would be rated here.

48. DEPRESSION

Symptoms included in this dimension are irritable or depressed mood, social withdrawal, and anxious mood; sleep disturbances, weight/eating disturbances, and loss of motivation. This dimension can be used to rate symptoms of the following psychiatric disorders as specified in DSM-IV: Depression (unipolar, dysthymia, NOS), Bipolar,

- 0 This rating is given to a child with no emotional problems. No evidence of depression.
- 1 This rating is given to a child with mild emotional problems. Brief duration of depression, irritability, or impairment of peer, family, or academic functioning that does not lead to gross avoidance behavior.
- 2 This rating is given to a child with a moderate level of emotional disturbance. Any diagnosis of depression would be coded here. This level is used to rate children who meet the criteria for an affective disorder listed above.
- 3 This rating is given to a child with a severe level of depression. This would include a child who stays at home or in bed all day due to depression or one whose emotional symptoms prevent any participation in school, friendship groups, or family life. Disabling forms of depressive diagnoses would be coded here. This level is used to indicate an extreme case of one of the disorders listed above.

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