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## Interaction Effects of Multiple Levels of Disadvantage and Kinship Foster Care in African American Youth

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INTERACTION EFFECTS OF MULTIPLE LEVELS OF DISADVANTAGE  
AND KINSHIP FOSTER CARE IN AFRICAN AMERICAN YOUTH

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

BY

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## CHAPTER I

### INTRODUCTION

#### Mental Health in Foster Care

Many children in out-of-home care have a mental health disorder. A review of the literature shows prevalence rates for emotional and behavioral disorders at reportedly 30 – 40% of foster children during the 1970s (Moffatt, Peddie, Stulginkas, Pless, & Steinmetz, 1985; Schor, 1982), as compared to recent data suggesting that as many as 80% of children entering foster care have significant mental health problems (Clausen, Landsverk, Ganger, Chadwick, & Litrowinik, 1998; Pilowsky, 1995; Simms, Dubowitz, & Szilagyi, 2000). Evidence suggests increased variability in the numbers of children entering foster care with reported mental health problems, from 35% to as high as 85% (Leslie et al., 2000). Years of research and data have consistently shown that these prevalence rates are higher than those found in peers of the same age, as well as in other children with similar backgrounds of abuse and deprivation (Pilowsky, 1995). These steep rates of mental health problems point to the necessity to try to improve the system in order to help foster youth.

Children in foster care typically have a variety of mental health problems. Prevalence rates are elevated for both internalizing and externalizing behaviors as compared to peers of their same age. Roughly one-third of a sample of children removed from the home had clinically-elevated levels of internalizing behaviors (McCrae, 2009). Research suggests that externalizing behaviors, such as delinquency and aggression, are particularly common in foster care children. Other studies have shown that involvement with child welfare services is strongly

associated with specifically delinquent behaviors (Grogan-Kaylor, Ruffolo, Ortega, & Clarke, 2007; McCrae, 2009; Ryan, Testa, & Zhai, 2008; Wall & Barth, 2005). The high prevalence of internalizing and externalizing behaviors experienced by foster youth, as well as a wide range of other mental health problems, indicate a need to improve services and placements in foster care.

### Kinship Care and Mental Health

It is now recognized that mental health problems may be worsened simply through removal from the home and placement into foster care. It is likely that removing a child from his or her home and primary caregivers may be disruptive and traumatic, which could increase the developmental and behavioral problems in foster youth (Simms et al., 2000). To combat some of the negative effects of removing children from their homes, kinship foster care has become a popular placement type for children.

Relatives and other kin relations have taken children into their homes when the children's parents were unable to care for them on their own. Often these placements were informal, without a legal change in guardianship or interference through a government agency. However, in 1979 the *Miller v. Youakim* Supreme Court case decreed that kin could not be excluded from the definition of foster parents and, in some cases, would be eligible for the same benefits and government aid as nonrelative foster parents (Berrick & Barth, 1994). Since then formal kinship care – in which child welfare caseworkers remove a child from the home and place him or her with a family member – has become a highly utilized resource. As with many relatively new constructs and

policies, though, research regarding the efficacy of kinship foster care in promoting well-being in youth placed in out-of-home care lacks definitive evidence.

There are many reasons for child welfare services to opt to “officially” place children with other family members when removed from the home. It is presumed that this process is less disruptive, as the child is being placed with someone he or she already knows. Furthermore, placement with relatives may facilitate communication and contact with the child’s parents (Berrick, Barth, & Needell, 1994). Children in kinship foster care are often able to remain housed with siblings, which has been cited as both a protective and a stabilizing factor (Barth et al., 2007). Generally kinship foster care placements are more stable, with more children in these settings experiencing as few as one placement, as opposed to nonkinship foster care in which it is not uncommon for children to have five or more placements (Berrick et al., 1994; Iglehart, 1994). These factors have been the driving rationale for why children may fare better when placed with kin rather than non-kin.

Although research supports the potential of kincare to increase stability in placements, findings on the impact of kincare on mental health outcomes have been mixed. Some studies have implied that kinship foster care has positive effects on youth placed out of the home. In one study, kinship foster parents were less likely to report internalizing and externalizing problems in the youth in their care than nonkinship foster parents (Hegar & Rosenthal, 2009). Other research has supported better mental health functioning in general for youth placed in

kinship foster care. Iglehart (1994) found that only 10 percent of children placed into kinship foster care were reported to have a serious mental health problem, as opposed to 18 percent of children placed into nonkinship foster homes. Similarly, Keller et al. (2001) found that children placed in kinship foster care were no more likely to exceed clinical cut-offs on competence or problem behavior scales on the Child Behavior Checklist (Achenbach, 1991) than children in the general population; however, children placed in nonkinship foster care were significantly more likely to score in the clinical range on this measure. While there is research to suggest positive effects of kinship foster care on mental health outcomes of youth, other studies have found null or negative effects on kinship foster care.

Some research suggests that kinship youth have greater emotional and behavioral problems compared to both the general population (Dubowitz, Zuravin, Starr, Feigelman, & Harrington, 1993) as well as youth in nonkinship foster homes (Berrick et al., 1994; Cuddeback, 2004). Teachers reported higher behavioral problems in kinship foster youth compared to nonkinship foster youth, while kinship foster youth reported experiencing greater internalizing problems than nonkinship foster youth (Hegar & Rosenthal, 2009). A study by Dubowitz et al. (1994) suggested that 26% of children in kinship foster care reported clinically significant levels of externalizing behaviors, with aggression and delinquency most commonly identified, as well as 14% who reported clinically significant levels of internalizing behaviors. They concluded that it is unclear whether kinship foster care has any advantage over nonkinship foster care due to the significant prevalence of emotional and behavioral problems in these youth. This

conclusion is supported by research showing no significant differences between behavioral problems in kinship and nonkinship foster youth (Iglehart, 1994).

Other research suggests that while youth in kinship care have greater externalizing behavioral problems than youth in the general population, there is little to no difference between the prevalence of these externalizing and internalizing problems and those in youth in nonkinship foster homes (Shore, Sim, Le Prohn, & Keller, 2002). There is evidence that children in kinship foster care may fare similarly to youth in nonkinship foster homes, and that both groups show poorer mental health outcomes than youth in the general population.

The mixed findings in these studies may be related to the limitations of research on youth placed in different out of home settings. First, it appears that different results may be due to who is reporting the behavioral problems (Hegar & Rosenthal, 2009). Secondly, samples used may be heterogeneous. Some studies examining kinship foster care use families who have been placed into these homes through government policy, while some include informal kinship foster placements. Therefore, conflicting results may be related to differences in how and why kinship foster care was used. Finally, while some research has controlled for the reason for placement, there may be a selection bias due to differences that likely exist between kinship and nonkinship foster youth and the prevailing reasons for their removal from the home. For example, youth may be less likely to be placed with relatives or other kin in instances of more serious or pervasive forms of abuse. Furthermore, youth placed into kinship foster care may have more social support than children placed in nonkinship foster homes in the event that

the latter does not have family or kin as an option for housing and care. These reasons for removal and placement may contribute to mental health outcomes, and may be related to the mixed results found when studying kinship foster youth.

In a recent study, Barth, Guo, Green, and McCrae (2007) attempted to address the confounding role of selection bias in statistically adjusting for the differential reasons for placement into out-of-home placement settings. To do this, they used propensity score matching (PSM), which uses observational data and attempts to match treatment groups in the study sample based on variables contributing to selection bias. This method attempts to statistically account for the differential factors that may be more likely to place a participant in one group or the other, suggesting that outcomes are related to the treatment itself and not due to those factors that determine placement into either group (Rosenbaum & Rubin, 1985). Barth et al. (2007) suggested that those children who were placed in kinship care presented significantly better outcomes after modeling selection bias. This study suggested that kinship care promoted better outcomes for youth placed out of the home, especially in externalizing behavioral outcomes. Internalizing behavioral scores improved for children placed in both kinship and nonkinship care, but there was a greater improvement in children placed in kinship care.

Although Barth et al. (2007) suggested that kinship care may be a better placement option for children, this methodology is not without limitations. Generally with PSM, it is possible that in the attempt to balance groups, many cases are not included. If too many cases are dropped, those who remain may no longer be representative of the general population being studied, questioning the

external validity of the findings. It is unclear for whom the Barth et al. (2007) findings apply. Furthermore, moderating effects cannot be studied when using PSM. Thus, the study was not able to examine differences based on race or ethnicity, although there is differential use of kinship foster care for African American families. It is possible that outcomes may be different based on race and ethnicity due to factors related to the out-of-home setting into which a child is placed that remain unaccounted for in propensity score matching.

#### Kinship Care and African American Families

While research has suggested that kinship care may be beneficial for out-of-home placements, it is unclear whether or not these effects are found across populations. Kinship care is not utilized equally across race and ethnicity. A consistent trend is that African American youth are more likely to be placed in kinship foster care than other populations (Iglehart, 1994; Smith & Devore, 2004; Swann & Sylvester, 2006). Researchers have theorized that the disproportionate placement of African American youth in kinship foster care has been related to cultural assumptions and familial willingness. Even so, it is important to identify whether or not this placement is more beneficial than traditional foster care settings for African American youth.

Different reasons may exist for placing African American youth into kinship care. For example, kinship foster care is used more commonly for African American youth with the belief that culturally these families encourage large family networks of support (Brown, Cohon, & Wheeler, 2002; Harris & Skyles, 2008; Iglehart, 1994; Swann & Sylvester, 2006). African American families are

more likely to rely on kin or fictive kin in times of need (Brown et al., 2002), which is supported by some research (Harris & Skyles, 2008; Smith & Devore, 2004). Due to the increased desire to use kinship placements for children who are removed from the home and evidence regarding the expectation and willingness of African American families to support kin, child welfare services are particularly likely to opt for kinship placements for this population.

Considering the disproportionate use of kinship care for African American youth, it is important to identify whether or not this type of placement is efficacious in producing beneficial outcomes for this population. Findings regarding the efficacy of the kinship foster care model in promoting better mental health outcomes have been mixed. There is some research that indicates better outcomes in youth placed in kinship foster care (Barth et al., 2008). However, the effects of out-of-home placement type within racial or ethnic group have not been examined. Due to the disproportionate use of kinship foster care in African American youth, it is necessary to identify if this placement type promotes better mental health outcomes within this population when compared to other out-of-home placements.

#### Contextual Factors in Kinship Foster Care

Many factors may predict when kinship care will be more or less effective in decreasing internalizing and externalizing behavioral outcomes. African American families' willingness to take care of kin may result in some youths being placed in settings that do not have appropriate resources to support the child. Some researchers have expressed concern that children being placed in

kinship foster care are moving to homes similar to those from which they have been removed (Ehrle & Geen, 2002; Iglehart, 1994). Perhaps kinship care functions effectively to protect youth placed out of the home contingent on the presence of other factors.

The apparent lack of resources in many kinship foster families may occur at multiple levels of contextual influence. A number of possible factors have been theorized but not empirically tested. On a broader scale, kinship homes tend to be in more chaotic neighborhoods than nonkinship homes (Berrick, 1997). Research indicated that children who live in impoverished neighborhoods exhibit worse mental health outcomes, such as anxiety, depression, and conduct disorder symptoms (Leventhal & Brooks-Gunn, 2003; Meier, Slutske, Arndt, & Cadoret, 2008). African American families may be more likely to accept the challenges of kinship care, but may also do so while experiencing extremely difficult economic hardships to the detriment of mental health outcomes.

More proximally, demographic characteristics of caregivers may also be relevant to children's mental health. Many kinship caregivers are grandmothers, some of whom have health problems that come with old age (Iglehart, 1994). In a qualitative study examining what factors promoted or inhibited effective foster parenting, kinship foster caregivers reported a significant age disparity (such as between a grandmother and a teenage child), which was a barrier to successful fostering (Coakley, Cuddeback, Buehler & Cox, 2007). Another study of characteristics of caregiving environments based on a nationally representative sample found 75% of kinship caregivers were 40 years old or older and reported

significantly worse physical health than nonkinship caregivers (Barth, Green, Webb, Wall, Gibbons & Craig, 2008). Old age and poor physical health of the caregiver may be stressors for children that predict better or poorer outcomes for kinship foster youth placed in their care. Both the age and physical health of the caregiver may interact with the kinship setting to predict worse mental health outcomes in children.

The effects of kinship foster care among African American youth may depend on the presence of multiple contextual risks. It may be that kinship foster care improves the mental health of kinship foster youth compared to those children placed in foster homes and other out-of-home settings when the kinship foster children are placed in more enriched settings, while no differences exist if these children are placed in poorer settings. An examination of how kinship care settings and environmental factors interact to produce better or poorer mental health in the domains of internalizing and externalizing behavior is necessary to determine in what situations kinship foster care is a better option for African American youth placed out of the home.

#### Rationale

Although kinship care has become the placement type of choice for children removed from their homes (Geen & Berrick, 2002), few conclusions have been reached on whether or not this placement is efficacious in reducing mental health problems for all children. Some research suggests that children placed in kincare demonstrate significant gains in emotional and behavioral outcomes compared to children placed in other out-of-home settings. African

American children are much more likely to be placed into kinship foster care than children of other races and ethnicities. Some researchers suggest that these placements are due to a historical use of family and other kin relationships to help care for children when families are in need (Brown, Cohon, & Wheeler, 2002). However, some researchers and policy-makers have expressed concern that placement into kinship care is only placing children with families and environments similar to that from which they were removed initially (Dubowitz et al., 1994). The use of kinship foster care within African American youth and families must be examined further to inform policy and practice in the child welfare system.

It is likely that environmental and familial factors of both kinship and nonkinship foster care settings play a role in emotional and behavioral outcomes of the children in their care. Although children are removed from their home in the hope that they will be placed in a better environment, it appears that many African American children in kinship foster care may be moving to homes rife with similar disadvantages to those in their previous home. Research suggests that African American children entering kinship foster care are moving to homes that are in more violent and less cohesive neighborhoods (Berrick, 1997), with caregivers who are older (Iglehart, 1994; Coakley et al., 2007; Barth et al., 2008) and have poorer physical health (Iglehart, 1994; Barth et al., 2008). Furthermore, there may be individual factors such as child age, gender, change in placement in addition to initial removal from the home at baseline, and reason for out-of-home placement that directly influence mental health outcomes, regardless of placement

type (McCrae, 2009). When examining emotional and behavioral outcomes in African American youth, these risk factors must be considered simultaneously to determine the efficacy of kincare in creating safe and enriched environments.

The present study examined relationships between emotional and behavioral outcomes in African American youth placed in foster care, placement type (i.e., kinship or nonkinship foster care), and environmental and familial factors. Analyses focused on African American youth due to their disproportionate placement into kinship foster care and to isolate effects of kinship care within this population. It was anticipated that findings from this study will identify the efficacy of kinship foster care for African American youth in decreasing internalizing and externalizing behaviors, and may ultimately help to further inform policy regarding out-of-home placement for children.

#### Statement of Hypotheses and Research Questions

Hypothesis I. Among African Americans, kinship foster care will be associated with decreases in internalizing outcomes when compared to youth in other nonkinship out-of-home foster care after statistically controlling for demographics, change in out-of-home placement between waves, and reason for removal from the home.

Hypothesis II. Among African Americans, kinship foster care will be associated with decreases in externalizing outcomes when compared to youth in other nonkinship out-of-home foster care after statistically controlling for demographics, change in out-of-home placement between waves, and reason for removal from the home.

Hypothesis III. The relationship between kinship foster care and internalizing outcomes will be moderated by family resources, as indicated by neighborhood, caregiver age, and caregiver physical health, such that there will be increases in internalizing outcomes when a) families live in high-risk neighborhoods, b) caregivers are older, and c) caregivers are in poor health.

Hypothesis IV. The relationship between kinship foster care and externalizing outcomes will be moderated by family resources, as indicated by neighborhood, caregiver age, and caregiver physical health, such that there will be increases in externalizing outcomes when a) families live in high-risk neighborhoods, b) caregivers are older, and c) caregivers are in poor health.

Research Question I. Is the interaction between placement type and caregiver age on internalizing outcomes further moderated by the caregiver's reported physical health?

Research Question II. Is the interaction between placement type and caregiver age on externalizing outcomes further moderated by the caregiver's reported physical health?

## CHAPTER II

### METHOD

This section presents information on participant recruitment, study procedures, and measurement materials. Data were derived from the National Survey of Child and Adolescent Well-Being (NSCAW), which contains data from a longitudinal, nationally representative sample (NSCAW Research Group, 2002).

#### Research Participants

The present study used data from the National Survey of Child and Adolescent Well-Being (NSCAW), a nationally representative longitudinal study of 5501 children whose families were investigated by child welfare services between October 1999 and December 2000. The present study used data from baseline and the 3<sup>rd</sup> wave (18 months later) for African American youth aged four to 14 years whose child welfare investigation resulted in removal from the home after initial investigation at baseline. Figure 1 displays the sampling hierarchy. Participants with complete data at both waves included 198 caregivers and youth. Youth on average were 9.80 (3.16) years; 54.55% were female. Over two fifths of youth resided in kincare (42.93%), with remaining youth living in other out of home placement settings, such as nonkinship foster homes and group therapy homes.

#### Measures

##### Emotional and Behavioral Problems

Behavior problems were measured using the Child Behavior Checklist (CBCL; Achenbach, 1991). Items are on a 3-point Likert scale (*not true, somewhat or sometimes true, very true or often true*). There are 113 items for

children ages 4 to 18. Behaviors are categorized as Externalizing or Internalizing, and there is also a Total Problems scale, which results from the addition of both of these behavior scales. This measure was completed at baseline and at 18-month follow-up by the current caregiver reporting on the target child. This measure has been used frequently for research purposes and has well-documented reliability for externalizing ( $r = .93$ ) and internalizing scales ( $r = .89$ ; Achenbach, 1991). For the purposes of this study, both Internalizing and Externalizing scale scores were used.

### Placement Type

Information on the type of out-of-home placement was identified using records from various sources at baseline. Placement type was defined by the child's current placement at baseline into one of four categories: foster home; kincare setting; group home/residential program; and other out-of-home care arrangement. These placement types were identified using information from the child, caregiver, and caseworker. If discrepancies regarding placement were found in these reports, the first non-missing response found from the caregiver, then the child, and then the caseworker was used based on NSCAW coding schemes. A dichotomized placement type variable was created to compare children placed in kinship foster care to those in any other foster care setting, as operationalized in Barth et al. (2007).

### Neighborhood

Caregivers were asked about their neighborhood at baseline. Nine items were asked on the abridged community-environment measure developed for the

Philadelphia Family Management Study (Furstenburg, 1990). The first five items ask how much of a problem certain occurrences are within the neighborhood. These questions are rated on a 3-point Likert scale (not a problem at all, somewhat of a problem, or a big problem in your neighborhood?). The final four items asked the respondents to compare their neighborhood to others on safety, neighbor support, parent involvement, and whether or not it is a better or worse place to live. A sum score of the mean of the nine community items was developed to measure the overall neighborhood environment, with higher scores indicating worse neighborhoods. Sufficient reliability has been reported for this measure in NSCAW ( $\alpha = .86$ ; Hazen, Connelly, Kelleher, Barth, & Landsverk, 2006).

#### Caregiver Age

Current caregiver age, in years, was self-reported at baseline. No other reports of age were given, and the variable was not verified.

#### Caregiver Physical Health

Caregiver's physical health at baseline was assessed using the Short-Form Health Survey (SF-12), which is a shortened version of the SF-36, with 12 items as opposed to 36 items. It measures both mental and physical health, with higher scores indicating better health. Descriptive statistics for SF-12 scores by gender and age using the normative sample from SF-36 were very similar to SF-36 descriptive statistics, indicating that it is appropriate to use the norms and other interpretation guidelines from the original SF-36 (Ware, Kosinski, & Keller,

1996). Test-retest reliability was high for physical health (.89). In 12 validity tests involving physical criteria, relative validity estimates ranged from .43 to .78 (median = .67; Ware, Kosinski, & Keller, 1996). In NSCAW, internal consistency for Physical Health is moderate ( $\alpha = .59$ ).

### Child Demographics

Child demographic information was collected. Gender is a dichotomous variable (male/female), derived from five source variables reporting gender when discrepancies existed. The hierarchy was as follows: the majority from the parent, caseworker, and youth-reported gender; the majority of all responses on the five source variables; if gender still cannot be determined, parent report of the youth's gender at baseline was used. The child's age was also given. Youth, parents and caseworkers were asked for the child's date of birth, which was used to calculate age. When age discrepancies existed, age was determined by the following reporting hierarchy: youth, casework, parent. The race variable of each child was measured at baseline as a four-option categorical variable (Black/Non-Hispanic, White/Non-Hispanic, Hispanic, Other) and derived from reports given by caseworkers and parents.

### Change in Living Environment

Whether or not a child experienced any change in their living situation between baseline and 18-month follow-up was gathered at Wave 3. Current caregivers at Wave 3 were asked whether the child had lived in any other

placement since the date 18 months prior to the interview. The change in living situation since baseline was reported as a dichotomous variable (yes/no).

### Abuse Type

The most serious type of abuse or neglect experienced by the child was derived at Wave 1, placing children into one of ten categories. The variables were then recoded to indicate physical abuse, sexual abuse, emotional abuse (including emotional maltreatment, moral/legal maltreatment, educational maltreatment, exploitation, and other), and neglect (including physical neglect didn't provide, neglect – no supervision, and abandonment).

### Procedure

Data were collected using a probabilistic sample method, as described by the NSCAW Research Group (2002). The United States was divided into nine sampling strata, eight of which were the eight states with the highest child welfare caseloads, and the ninth consisted of the remaining 42 states and the District of Columbia. Families were randomly selected from 97 counties throughout the nation. All children had been involved in a child welfare investigation within the past 6 months. The children's current caregivers were sent a letter to notify them of the study, as well as a brochure with answers to common questions. Then, as stated within the recruitment materials, the child's current family was contacted by phone or in person through a home visit to schedule a time for the first interview. Interviews were conducted within the families' homes. The current caregiver was interviewed, as well as the child who had been the source of the

investigation at baseline and followed-up over four additional time points over seven years. Each family was called for a shorter phone interview 12 months later (the 2<sup>nd</sup> wave) and were then contacted for a full follow-up interview at 18 months past baseline (the 3<sup>rd</sup> wave), 36 months past baseline (the 4<sup>th</sup> wave), and 59-97 months past baseline (the 5<sup>th</sup> wave).

## CHAPTER III

### RESULTS

The present study examined the relationships between child welfare placement type, internalizing and externalizing behaviors, and family characteristics such as caregiver age, physical health, and neighborhood, among African American families. Descriptive statistics, including means, percentages, and standard deviations, are reported for each variable in Table 1. Of the 5501 families sampled for NSCAW, 281 met inclusion criteria – African American aged 4 years and older at baseline who were placed out of home at initial investigation. Complete baseline data were available for 225 of these youth. Missing cases did not have caseworker reported type of abuse at investigation.

Attrition analyses were conducted to evaluate differences between participants with missing data at Wave 3 ( $n = 27$ ) and those who reported on all key variables at baseline and Wave 3 ( $n = 198$ ). No differences were found between attrited and non-attrited youth on placement type. As displayed in Table 2, significant differences were found between attrited and non-attrited youth whose initial reason for removal from the home was sexual abuse ( $p = .037$ ). Specifically, attrited youth were less likely removed due to sexual abuse, likely reflecting designed oversampling of sexually abused youth at baseline. Additionally, youth who attrited had significantly higher internalizing scores at baseline ( $p = .008$ ). While differences existed on internalizing problems, differences did not emerge on externalizing problems, limiting concerns on differential attrition of mentally ill adolescents.

Hierarchical multiple regressions analyzed the independent and interactive effects of placement type and contextual factors on internalizing and externalizing behaviors after controlling for child demographics, type of abuse that led to placement out of the home, and a change in the child's living situation between waves 1 and 3. Separate regressions were used for internalizing and externalizing outcomes. Variables were entered into the regression equations by blocks in the following order. First, baseline internalizing and externalizing scores were entered. Second, child age, child gender, type of abuse, and change of living environment between baseline and 18-month follow-up were entered. Third, the dichotomous placement type variable was entered. Fourth, contextual factors including the community environment scaled score, caregiver age, and caregiver physical health were entered. Fifth, interaction terms were entered between placement type and community environment scores, placement type and physical health scores, placement type and caregiver age, and caregiver age and physical health. In the last step, a three-way interaction term was entered between placement type, physical health scores, and caregiver age.

In the model predicting internalizing outcomes in African American foster youth, only the first and final blocks of the model were significant. Results are displayed in Table 3. Higher initial levels of internalizing problems reported by caregivers predicted symptoms 18 months later, suggesting stability in emotional problems among youth. A main effect of placement type was significant ( $p = .048$ ) such that youth placed in other out-of-home settings exhibited greater increases in internalizing symptoms. In addition, a main effect of child age

approached significance ( $p = .073$ ), indicating that older youth exhibited greater increases in internalizing symptoms. The three-way interaction term between placement type, caregiver physical health, and caregiver age also approached significance ( $p = .082$ ) after accounting for internalizing scores at baseline, covariates (child age, child gender, type of abuse, change in living situation between waves 1 and 3), placement type, caregiver age, caregiver physical health, community environment, interaction terms between environmental factors and placement type. We interpreted this marginally significant finding given the limited power to detect three way interactions and a similar pattern found for externalizing problems. The interaction indicated that when caregivers were older and had poorer health, children placed in kinship foster care were reported as having greater increases in internalizing problems compared to youth placed in other out-of-home foster settings. Findings are visually displayed in Figure 2.

The model predicting externalizing outcomes in African American foster youth was also significant in the first and final steps. Results are displayed in Table 4 and visually presented in Figure 3. The final step, including externalizing scores at baseline, covariates (child age, child gender, type of abuse, change in living situation), placement type, caregiver age, caregiver physical health, community environment, interaction terms, and the three-way interaction term between placement type, caregiver physical health, and caregiver age was significant ( $p = .033$ ). The significant interaction indicated that youth placed in kinship foster homes with older caregivers in poorer health had greater increases in externalizing scores across the 18-month follow-up. The only other significant

predictor variable of externalizing behaviors at 18-month follow-up was wave 1 externalizing scores at baseline. No other entered variables significantly predicted externalizing outcomes at follow-up.

## CHAPTER IV

### DISCUSSION

This study evaluated the utility of using kinship foster care as the out-of-home placement type of choice for African American youth removed from their homes due to neglect and abuse. Hypotheses predicted that youth placed in kinship foster care would show decreases in internalizing and externalizing problems over time as seen in prior research on out-of-home placement (Barth et al., 2008; Hegar & Rosenthal, 2009; Iglehart, 1994; Keller et al., 2001). Findings from this study partially support these predictions among African American youth. Placement into other, non-kinship out-of-home settings relates to increases in internalizing problems over an 18 month period, whereas placement in kinship foster predicted stable levels of emotional problems. Thus, it appears that African American youth placed in kinship care may not improve, but the setting has a preventative effect on worsening of problems.

Type of foster care placement was not predictive of change in externalizing symptoms 18 months later; externalizing behaviors remained stable across time points regardless of out-of-home setting. It is unclear why the type of placement accounts for increases in internalizing scores but not externalizing scores. There may be less room for detectable change in externalizing behaviors. Whereas internalizing behaviors increased over time for youth in nonkin care out of home placement settings, the already higher levels of externalizing problems may make any increases unnoticeable. Additionally, characteristics of nonkin care

settings may provide less support for adolescent behavior regulation, while offering benefits for emotional adaptation. Removal from the home is known to be disruptive to youth and their functioning (Simms et al., 2000). While this disruption may consistently affect externalizing behaviors across foster care settings, perhaps kinship foster settings are more amenable to supporting the more emotional aspects of the change in living situation. It is also possible that kinship settings are no more receptive or apt at addressing internalizing symptoms, but rather nonkinship settings fail to offer opportunities to address these concerns. In addition to known family members, kinship foster care may allow youth to remain in contact with other social supports through peers, school, or their community in a manner that is not available when placed in a nonkinship home (Barth et al., 2007; Dubowitz et al., 1994; Ehrle & Geen, 2002).

To further test the role of context on mental health, this study hypothesized and found that placement type was significant when in combination with structural characteristics of the home settings. Contextual factors associated with placement type predicted increases in both internalizing and externalizing scores. A complex relationship exists between placement type, caregiver age, and caregiver health when predicting mental health. Youth placed in kinship care with caregivers who were both older and in poorer physical health had greater increases in internalizing and externalizing scores over time. These findings confirm researchers concerns that impaired caregivers may provide poorer support to youth, which impacts child well-being (Iglehart, 1994; Barth et al., 2008). Placement into kincare fails to promote well-being when African

American youth are placed with kin who are older and in poorer health, such as grand- or great grandparents. While these factors do not separately predict increases in internalizing and externalizing scores over time, their presence together with the placement type distress for youth.

There are many reasons why this effect may exist. Research suggests that children placed with kin exhibit better mental health outcomes, which is supported by previous research (Barth et al., 2008; Hegar & Rosenthal, 2009; Iglehart, 1994; Keller et al., 2001). However, children may only benefit from a kinship placement when contextual stressors are limited. It is not surprising that a child experiencing multiple stressors may have poorer outcomes. What is interesting in this study is that kincare children are more likely to exhibit poorer outcomes if stressors exist specifically within a kinship foster care environment. It is possible that it is much more difficult to manage living with a sick caregiver if that caregiver is a loved one, such as an aunt or grandmother, as opposed to a previously unknown foster parent. These youth may take on more responsibilities for the home, or they may deal with the grief associated in caring for an aging relative as a teen. These contextual factors may account for the variance in findings from research on kinship foster families, and indicate a need to address potential stressors within the home that may detract from caregiving (Berrick et al., 1994; Cuddeback, 2004; Dubowitz et al., 1993)..

Research also suggests that service provision for families in kinship care is not utilized to its full extent, in that a greater number of these families do not receive the same level of monitoring and caseworker supervision as compared to

nonkinship foster homes (Berrick & Barth, 1994; Berrick et al., 1994). The disconnection to child welfare services may miss opportunities to identify and engage youth in needed mental health treatments. Furthermore, kinship foster parents request and receive fewer financial services by means of foster care payments than nonkinship foster parents (Ehrle & Geen, 2002). Caregivers may need to have the resources to follow up on receipt of services, which would be more difficult and perhaps of lower priority for caregivers who are ill and preoccupied with day-to-day needs and their own medical care. The extreme vulnerability to economic hardship experienced by kinship foster families may compromise the ability to monitor and follow through with disciplinary techniques compared to other caregivers.

#### Future Directions

Kinship foster care shows promise to support mental health of African American youth placed in out of home settings. However, it is important for caseworkers to recognize the multitude of factors affecting the quality of care and living arrangements available for foster youth. Kinship foster homes are not required in all states to meet the same standards as nonkinship foster homes (Falconnier et al., 2010). Future research should identify what, if any, differences there are in outcomes in kinship and nonkinship youth where these homes are required to meet the same standards, versus states in which they are not. Falconnier and colleagues (2010) suggest comprehensive measures be created to evaluate quality of kinship care homes in order to understand the settings in which a youth is placed. Placements with impaired caregivers limit the potential benefits

associated with African American kinship care settings. This study highlighted the importance of caregiver characteristics that child welfare currently assesses in making placement decisions. Greater attention to kin age and health at the time of placement may promote future child functioning, and evaluations of kinship homes prior to placement may be necessary in order to provide the most beneficial settings for youth. A greater understanding of the effects of kin caregivers' age and health in youth outcomes may guide necessary changes to child welfare service placement procedures. It is also important that future research identify other contextual factors of out of home placements that may differentially affect a child's functioning, such as kinship caregiver mental health, number of children in the home, and potential for exposure to violence either in the home or in the community.

Additional research is needed to further understand the receipt of services in kinship foster families in terms of both financial assistance and caseworker monitoring and supervision. Youth may benefit from kinship foster settings when caregivers have sufficient support and ability to provide the consistency needed for child well-being. Studies may evaluate outcomes of those homes and families who do receive benefits through either the foster care system or other forms of cash assistance, as well as striving to identify not just who is receiving these services, but what barriers caregivers face that may prevent receipt. A better understanding of families connections to child welfare caseworkers may also identify potential opportunities to improve services. It may be that caseworkers who have greater contact and interaction with families may mitigate the effects

associated with caregiver aging and health problems. Taken together, these evaluations may be important indicators to effect policy change in regards to standards and requirements of child welfare service caseworkers.

### Limitations

The present study is not without limitations to be considered. The sample size was relatively small despite using a national probability. Studies with larger samples of African American families may be used to replicate findings. In addition, the sample size was diminished due to attrition. Analyses comparing those who attrited and those who did not did not suggest an overall differential pattern of findings, although there were differences in the number of youth who had experienced sexual abuse, as well as higher internalizing problems in attrited youth. These differences may have affected findings, although it is presumed that the effects would be minimal.

Another limitation of note is many of the variables used were solely caregiver-reported. Other than derived variables (which pulled data from multiple sources) and some demographics, outcome variables, environment, and caregiver health were all reported by caregivers. Thus, findings mainly reflect the perceptions and experiences of the caregivers, and do not capture directly experiences of the youth in the study. Relatedly, different caregivers reported on child mental health at different time points for many youth. Although prior research has found stability across reporters and over time for children in child

welfare (Glisson, Hemmelgarn, & Post, 2002), variation may have been introduced in assessing change in mental health over time.

Approximately half of the sample under study had a change in their living environment between baseline and follow-up. No main effect on mental health existed in this study of moving or staying; however, it is possible that there is a great deal of within group variation. Some youth may have changed placements multiple times in that 18-month period. Furthermore, it is likely that the reason for the change in placement could affect a youth's mental health functioning. For example, youth who changed placement due to death of a caregiver would likely be having greater difficulties than youth who change placement due to reunification with their biological parent. Future research should identify and control for not just a change in placement, but also the reason the youth had a change in living environment when assessing their functioning over time.

A final consideration is in regard to comparisons of youth in kinship versus nonkinship foster care. First, in keeping with previous research on this population, those youth categorized as living in nonkinship foster care included various settings. Some youth may have been living in group homes while others may have lived with foster families. It is possible that there are between-group differences among those youth placed into nonkinship foster care; however, small sample size limited these comparisons in this study. Additionally, exploratory analyses suggested that youth in this study placed into kinship foster homes were more likely to have caregivers with poorer physical health and less likely to change living situations between baseline and 18-month follow-up. This pattern is

in keeping with prior research regarding kinship foster families (Barth et al., 2008; Berrick et al., 1994; Iglehart, 1994), but does indicate the need to exert caution when comparing these groups.

## CHAPTER V

### SUMMARY

Child welfare services' current practice is to attempt to identify kinship foster settings first when removing a child from their home, a practice used disproportionately for African American youth. In this study, potential contextual factors of foster homes (i.e., community environment, caregiver's age, caregiver's physical health) were identified as possible moderators of the relationship between the type of out-of-home placement (i.e., kinship, other out-of-home placement) used and changes in internalizing and externalizing scores in African American youth. Results confirm a significant increase in internalizing and externalizing scores when youth are placed in kinship foster homes with caregivers who are older and in poorer health. In addition, kinship foster placements were preventative of increases in internalizing scores at 18-month follow-up. Results of this study are important in illustrating the need for child welfare services to consider multiple factors when choosing appropriate settings for youth removed from their homes.

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Table 1  
*Means and Standard Deviations of African American Adolescents Placed Out of Home (N = 198) for Study Variables*

Variables	Mean	Standard Deviation
Wave 1 Internalizing	10.72	8.74
Wave 1 Externalizing	17.75	12.34
Child gender (%)		
Female	54.55	--
Male	45.45	
Child age	9.80	3.16
Abuse Type (%)		
Physical Abuse	27.27	--
Sexual Abuse	14.14	--
Emotional Abuse	9.60	--
Neglect	48.99	--
Change in placement (%)		
No change	47.47	--
Change	52.53	--
Placement Type (%)		
Kinship	42.93	--
Nonkinship	57.07	--
Caregiver age	45.64	13.06
Caregiver physical health	-8.14	10.24

Community Environment	1.43	0.39
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*Notes.* Change in placement refers to the percentage of youth who experienced a change in placement or living situation between baseline and 18-month follow-up.

Table 2

*Comparison of Included Participants (n = 198) and Those with Missing Data at Wave 3 (n = 27)*

Variables	$\chi^2$	<i>t</i>	<i>p</i>
Wave 1 Internalizing	--	-2.655	.008
Wave 1 Externalizing	--	-1.232	.219
Female	1.817	--	.178
Child Age		-1.732	.085
Abuse Type			
Physical Abuse	.433	--	.511
Sexual Abuse	4.361	--	.037
Emotional Abuse	1.019	--	.313
Neglect	1.856	--	.173
Placement Type	2.842	--	.092
Caregiver Age	--	-.450	.653
Caregiver Physical Health	--	-.111	.912
Community Environment	--	-.225	.822

*Notes.* Chi-square analyses compared binary outcomes, while t-tests were used for continuous variables. Inclusion dummy coded as *attrited* = 0 and *non-attrited* = 1.

Table 3

*Coefficient and Model Significance on Internalizing Outcomes*

Model	<i>B</i>	$\Delta R^2$	<i>SE B</i>	<i>p</i>
Step 1		.183		.000
Wave 1 Internalizing	.378		.393	.000
Step 2		.044		.104
Child gender	-.351		-.021	.744
Child age	.323		.122	.073
Abuse Type				
Physical Abuse	-.557		-.030	.786
Sexual Abuse	1.707		.071	.462
Neglect	.719		.043	.710
Change in placement	.712		.042	.530
Step 3		.005		.265
Placement Type	-2.366		-.140	.048
Step 4		.022		.150
Caregiver age	-.009		-.014	.885
Community Environment	2.397		.111	.221
Caregiver Physical Health	.070		.085	.479
Step 5		.028		.140
Caregiver age x Placement	.122		.116	.189
Community Environment x Placement	-.038		-.001	.989
Caregiver Physical Health x	-.183		-.177	.132

Placement			
Caregiver Physical Health x Caregiver	.003	.045	.656
age			
Step 6		.012	.082
Caregiver Physical Health x Caregiver	-.018	-.173	.082
age x Placement			

---

*Notes.* Child gender dummy coded as *male* = 0 and *female* = 1; The reference condition for Abuse Type combined all other abuse categories; Change in placement dummy coded as *No* = 0 and *Yes* = 1; Placement Type dummy coded as *Other OOH Placement* = 0 and *Kinship Foster Care* = 1.

Table 4

*Coefficient and Model Significance on Externalizing Outcomes*

Models	<i>B</i>	$\Delta R^2$	<i>SE B</i>	<i>p</i>
Step 1		.223		.000
Wave 1 Externalizing	.467		.475	.000
Step 2		.011		.842
Child gender	-1.281		-.053	.417
Child age	.143		.037	.584
Abuse Type				
Physical Abuse	1.705		.063	.570
Sexual Abuse	4.232		.122	.217
Neglect	2.491		.103	.379
Change in placement	.540		.022	.744
Step 3		.003		.409
Placement Type	.200		.008	.908
Step 4		.017		.239
Caregiver age	.019		.020	.833
Community Environment	1.769		.056	.536
Caregiver Physical Health	.053		.045	.711
Step 5		.007		.793
Caregiver age x Placement	.040		.026	.769
Community Environment x Placement	3.490		.077	.392

Caregiver Physical Health x	-.063	-.042	.723
Placement			
Caregiver Physical Health x	.018	.165	.112
Caregiver age			
Step 6		.018	.033
Caregiver Physical Health x	-.032	-.216	.033
Caregiver Age x Placement			

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*Notes.* Child gender dummy coded as *male* = 0 and *female* = 1; The reference condition for Abuse Type combined all other abuse categories; Change in placement dummy coded as *No* = 0 and *Yes* = 1; Placement Type dummy coded as *Other Out of Home Placement* = 0 and *Kinship Foster Care* = 1.

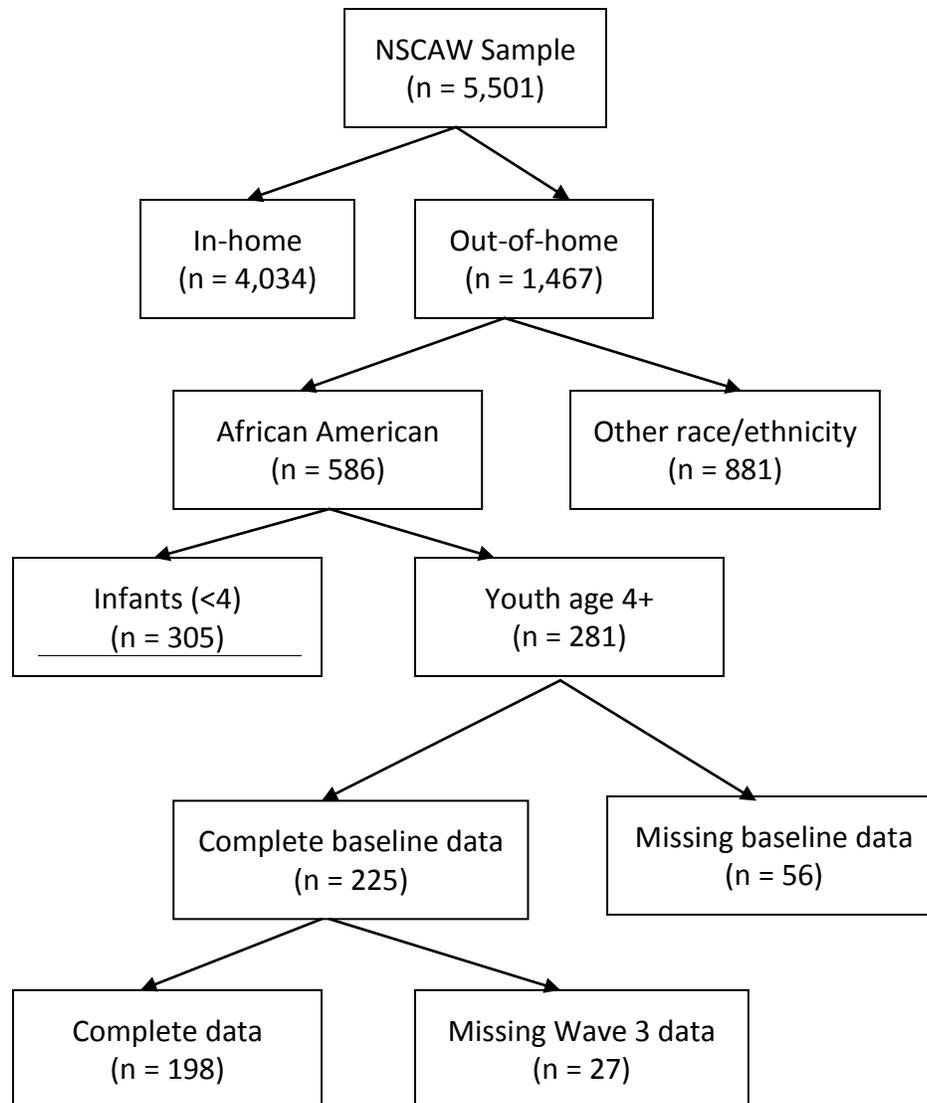
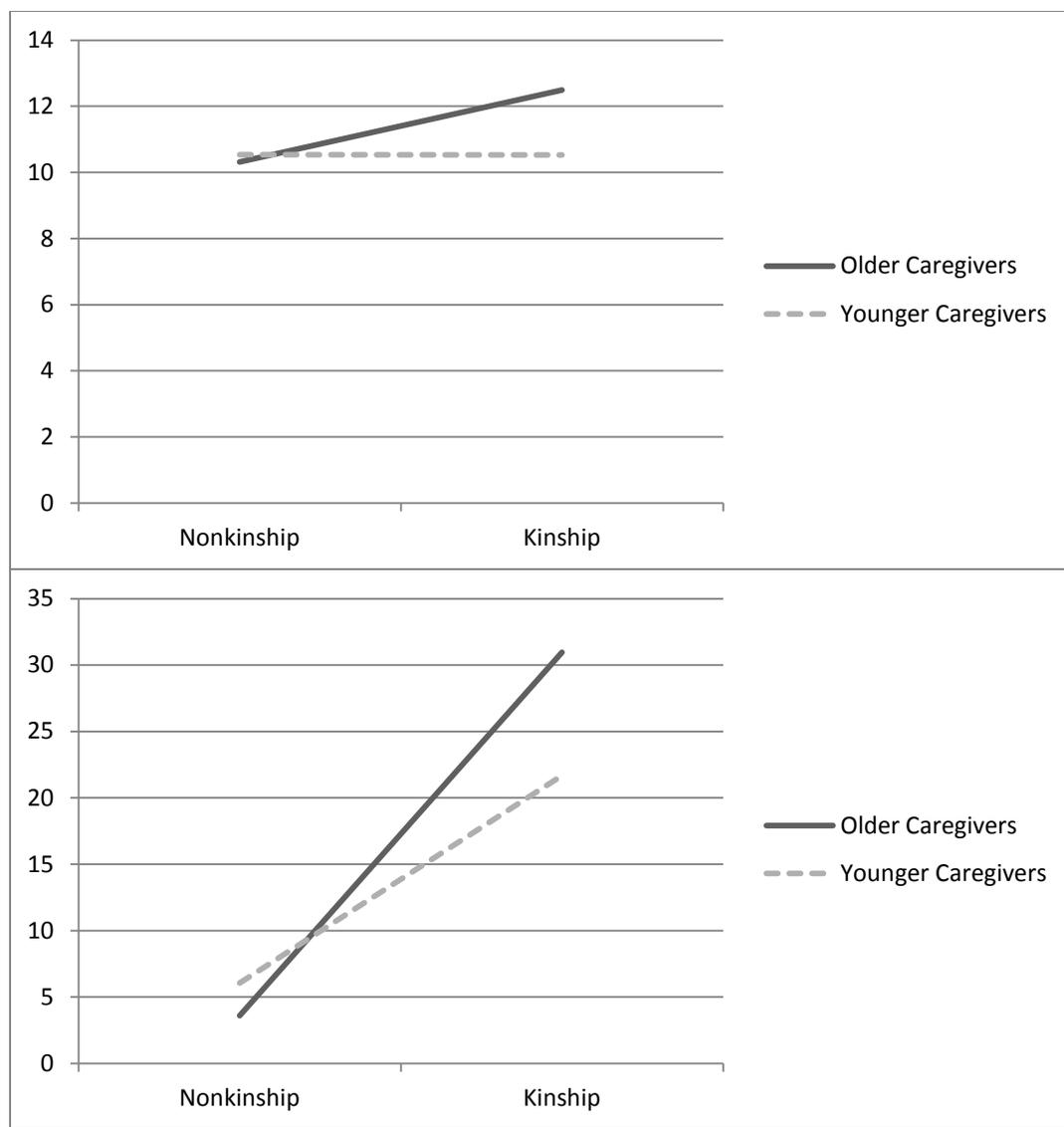
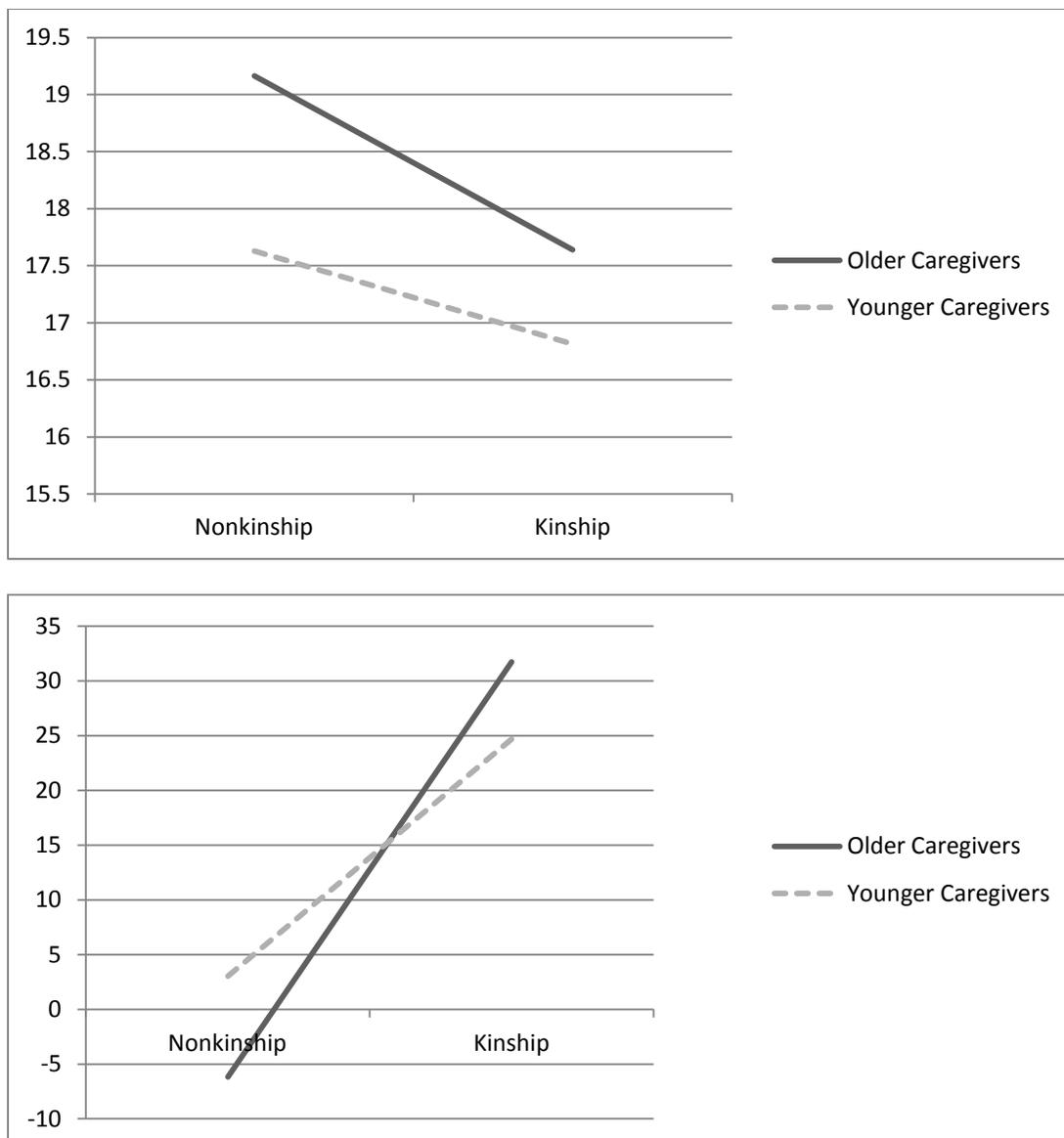


Figure 1. Sampling hierarchy based on inclusion criteria.



*Figure 2.* The moderating effect of caregiver physical health on the relationship between placement type and caregiver age on youth internalizing outcomes. The top graph is of caregivers in better health, whereas the bottom graph represents caregivers in poorer health. As seen in the bottom graph, youth placed in kinship foster care with older caregivers in poor health have higher (and thus poorer) internalizing scores.



*Figure 3.* The moderating effect of caregiver physical health on the relationship between placement type and caregiver age on youth externalizing outcomes. The top graph is of caregivers in better health, whereas the bottom graph represents caregivers in poorer health. As seen in the bottom graph, youth placed in kinship foster care with older caregivers in poor health have higher (and thus poorer) externalizing scores.

## Appendix A

**COMMUNITY ENVIRONMENT**

>P\_CE0FC<  
[# IF INTNUM = 2, GOTO P\_CEEND]

>P\_CE1<  
USE CARD 17. Now I'd like to ask you some questions about your neighborhood and community. For each item I read, please tell me if this issue is not a problem at all, somewhat of a problem, or a big problem in your neighborhood. Please pick your answer from Card 17.

NOTE: ALL QUESTIONS IN THIS SECTION REFER TO "CURRENT" PROBLEMS.

Assaults and muggings? Would you say this is ...  
1 = not a problem at all,  
2 = somewhat of a problem, or  
3 = a big problem in your neighborhood?

>P\_CE2<  
USE CARD 17. Delinquent gangs or drug gangs? Would you say this is ...  
1 = not a problem at all,  
2 = somewhat of a problem, or  
3 = a big problem in your neighborhood?

>P\_CE3<  
USE CARD 17. Open drug use or drug dealing?  
(Would you say this is...READ CATEGORIES AS NEEDED.)  
1 = not a problem at all,  
2 = somewhat of a problem, or  
3 = a big problem in your neighborhood?

NOTE: THIS MEANS VISIBLE OR PUBLIC DRUG USE.

>P\_CE4<  
USE CARD 17. Unsupervised children?  
(Would you say this is...READ CATEGORIES AS NEEDED.)  
1 = not a problem at all,  
2 = somewhat of a problem, or  
3 = a big problem in your neighborhood?

>P\_CE5<

USE CARD 17. Groups of teenagers hanging out in public places and making a nuisance of themselves?

(Would you say this is...READ CATEGORIES AS NEEDED.)

- 1 = not a problem at all,
- 2 = somewhat of a problem, or
- 3 = a big problem in your neighborhood?

>P\_CE6<

For these next items, please think about how your neighborhood compares to most other neighborhoods.

Is your neighborhood ...

- 1 = safer,
- 2 = about the same, or
- 3 = not as safe as most neighborhoods?

>P\_CE7<

Does your neighborhood have ...

- 1 = more neighbors help each other,
- 2 = about the same number of neighbors help each other, or
- 3 = fewer neighbors help each other than most neighborhoods?

>P\_CE8<

Does your neighborhood have ...

- 1 = more involved parents,
- 2 = about the same number of involved parents, or
- 3 = fewer involved parents than most neighborhoods?

>P\_CE9<

Is your neighborhood ...

- 1 = a better place to live,
- 2 = about the same, or
- 3 = a worse place to live than most neighborhoods?

>P\_CEEND<

## Appendix B

**PHYSICAL HEALTH**

>P\_PH0FC<

[# IF INTNUM = 2, GOTO P\_PHEND]

>P\_PH1<

The next questions are about your health and the activities you might do. This information will be used to keep track of how you feel and how well you are able to do your usual activities. If you are unsure about how to answer a question, please give the best answer you can.

In general, would you say your health is...

- 1 = excellent
- 2 = very good
- 3 = good
- 4 = fair, or
- 5 = poor?

>P\_PH2<

How much does your health now limit you in [r]**moderate activities**[n],

such as moving a table, pushing a vacuum cleaner, bowling, or playing golf. Would you say you are...

- 1 = limited a lot
- 2 = limited a little, or
- 3 = not limited at all?

>P\_PH3<

How much does your health now limit you in climbing [r]**several**[n]

flights of stairs? Would you say you are...

- 1 = limited a lot
- 2 = limited a little, or
- 3 = not limited at all?

NOTE: "SEVERAL" MEANS TWO OR MORE.

>P\_PH4<

During the past [r]**4 weeks**[n], have you accomplished less than you would like in your work or other regular daily activities as a result of your [r]**physical**[n] health?

- 1 = YES
- 2 = NO

>P\_PH5<

During the past [r]**4 weeks**[n], were you limited in the [r]**kind**[n] of work or other activities you could do as a result of your physical health?

1 = YES

2 = NO

>P\_PH6<

During the past [r]**4 weeks**[n], have you accomplished less than you would like in your work or other regular daily activities as a result of any [r]**emotional**[n] problems such as feeling depressed or anxious?

1 = YES

2 = NO

>P\_PH7<

During the past [r]**4 weeks**[n], did you feel you didn't do work or other activities as carefully as usual as a result of any emotional problems such as feeling depressed or anxious?

1 = YES

2 = NO

>P\_PH8<

During the past [r]**4 weeks**[n], how much did [r]**pain**[n] interfere with your normal work, including both work outside the home and housework?

Would you say...

1 = not at all

2 = a little bit

3 = moderately

4 = quite a bit, or

5 = extremely?

>P\_PH9<

USE CARD 29. The next questions are about how you feel and how things

have been with you during the past [r]**4 weeks**[n]. For each question,

please look at Card 29 and tell me which answer comes closest to the way you have been feeling.

During the past [r]**4 weeks**[n], how much of the time have you felt calm

and peaceful? Would you say...

- 1 = all of the time
- 2 = most of the time
- 3 = a good bit of the time
- 4 = some of the time
- 5 = a little of the time, or
- 6 = none of the time?

>P\_PH10<

USE CARD 29. During the past [r]**4 weeks**[n], how much of the time did

you have a lot of energy? Would you say...

- 1 = all of the time
- 2 = most of the time
- 3 = a good bit of the time
- 4 = some of the time
- 5 = a little of the time, or
- 6 = none of the time?

>P\_PH11<

USE CARD 29. During the past [r]**4 weeks**[n], how much of the time have

you felt downhearted and blue? Would you say...

- 1 = all of the time
- 2 = most of the time
- 3 = a good bit of the time
- 4 = some of the time
- 5 = a little of the time, or
- 6 = none of the time?

>P\_PH12<

USE CARD 29. During the past [r]**4 weeks**[n], how much of the time has

your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)? Would you say...

- 1 = all of the time
- 2 = most of the time
- 3 = a good bit of the time
- 4 = some of the time
- 5 = a little of the time, or
- 6 = none of the time?

>P\_PHEND<