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Title: 'Difficult to place'? Understanding child and family level factors affecting placement stability for youth in foster care

Abstract approved:_____

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Introduction: Youth in foster care face greater rates of trauma and subsequent mental health challenges (Bruce et al., 2009; O'Neill et al., 2012; Seltzer et al., 2012; etc.) that place increased burden on their caregivers (Daniel, 2011; McKeough et al., 2017), suggesting that these specific groups of youth in foster care may be difficult to place with suitable caregivers. From a child welfare research perspective, discovering ways to support caregivers to better support these youth may help decrease placement stability challenges for youth in care. More research is needed to determine what child and foster caregiver characteristics may contribute to placement stability trajectories for youth with behavioral problems and/or emotional disabilities. The present study aims to examine the interplay of youth mental health, placement stability and the role of the foster family for youth in care using an existing data set. Methods: Data in the parent study were collected on 328 youth (164 sibling dyads) in foster care in an NIMH funded RCT (Kothari et al., 2017) and included information on various behavioral problems and/or emotional disabilities, number of placement changes in the system, feelings of integration in the foster home, relationship to current caregivers, and demographic caregiver characteristics. The present study conducted a secondary analysis of a subsample of this dataset. Results: Results from this

investigation suggest that youth who experience more behavioral and/or emotional problems/disabilities (i.e., depression, PTSD, aggression, ADHD, etc.) experience more frequent placement disruptions than youth who have fewer. In preliminary findings, youth identified as difficult to place indicated no differences in youth reported feelings of home integration when compared to youth not identified as difficult to place. Results also suggest that relationship to caregiver (e.g., kinship/stranger) is associated with D2P scores, and caregiver education is associated with D2P scores for older siblings only. Conclusion: Youth in care who experience behavioral and/or mental health problems are more likely to experience placement disruptions than youth who do not, and there are child and family factors that are critical to understand. Future research should continue to explore these factors because these findings have important practice and policy implications.

‘Difficult to Place’? Understanding Child and Family Level Factors Affecting Placement Stability for Youth in Foster Care

by

Kylee M. Probert

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I understand that my thesis will become a part of the permanent collection of Oregon State University libraries. My signature below authorized release of my thesis to any reader upon request.

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Kylee M. Probert, Author

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CHAPTER 1: INTRODUCTION

Of the 440,000 youth under 17 were living in foster care in the United States in 2016 (Children’s Bureau, 2016), many are removed from their homes after experiencing trauma, abuse, or neglect (Bruce et al., 2009). These experiences put youth at increased risk for a variety of negative health outcomes, including behavioral problems (i.e., aggression, hyperactivity, etc.), mental health problems (i.e., depression, anxiety, etc.) (Price et al., 2009), and trauma-related health issues (like PTSD symptoms) (Bruce et al., 2009). The child welfare population also includes a sizeable group of youth in care with specialized healthcare needs (CSCHN) related to mental health, including diagnosed disorders (i.e., learning disabilities, attachment disorders, etc.), which again puts them at risk for negative health outcomes throughout later adulthood (Seltzer et al., 2017). Furthermore, within the already at-risk population of youth in foster care, youth with severe trauma-related mental health issues, behavioral issues, and disorders may be especially vulnerable, and may require extra care and services from the child welfare system. These hyper-vulnerable groups of youth have higher rates of placement disruptions than typically developing youth in foster care (O’Neill et al., 2012, McKeough et al., 2017), suggesting that they may be more difficult to place with caregivers who can meet their ongoing needs. Furthermore, youth in foster care with mental health challenges are twice as likely to have placement disruptions than youth without these challenges (Eggertsen 2008).

Foster caregivers play an important role in the outcomes and development of youth in care. Quality caregiver involvement helps improve academic outcomes, social-emotional

competence, (Pears et al., 2010), and serves as a buffer for childhood trauma in youth (Bruce et al., 2009). Youth in foster care who suffer from mental health or behavioral problems may require additional care supports from caregivers (Seltzer et al., 2017), including heightened medical spending, knowledge of treatment options for youth (Lauver, 2008), emotional support, and stress management skills (Greeno et al., 2016). Foster caregivers who are better able to meet the needs of their youth in care may be more likely to maintain stable placement in their homes. Highly vulnerable groups of youth may be more difficult to place with suitable caregivers than other youth in care (McKeough et al., 2017).

While the number of youth entering the child welfare system has increased in the last five years (Annie E. Casey Foundation, 2017) recruitment of foster caregivers has failed to match this growth (Delfabbro et al., 2010). For example, in 2016, Oregon reported 7,653 youth in foster care, and around 1,000 of these youth were adopted or placed in permanent guardianship, suggesting a need for more caregivers and long-term placements (Children's Bureau, 2016). This gap suggests that there are more youth in need of homes than there are caregivers, creating a need for increased recruitment of capable caregivers to match this growth. Because foster caregivers who are willing and capable of caring for CSHCN youth in foster care, it is important to consider relationship dynamics of youth and caregivers, as well as additional factors that may motivate (or make hesitant) a caregiver to take in a difficult to place youth. Specific aspects of youth-caregiver relationships are much less studied, and more research is needed to determine which caregiver level factors may influence this dynamic for CSHCN youth. Therefore, understanding the motivations and characteristics of foster caregivers that are willing to take youth often considered difficult to place may help researchers and professionals working with foster families to understand the needs of foster caregivers in order to streamline recruitment and

decrease retainment issues that child welfare systems currently face. From a child welfare perspective, ensuring a positive placement match between youth and caregivers from the beginning (by making sure caregivers are able to meet needs of youth, etc.) will help minimize risk of placement change and avoid further subsequent consequences later on in life (Waid et al., 2016).

The present study has several goals. First, the study will examine behavioral and/or emotional problems typically experienced by youth in foster care, and will test to see if these challenges, when summed together, are associated with placement instability for youth in foster care. Second, the study will examine potential home- and caregiver- level influences on the relationship between emotional and/or behavioral problems and placement stability, including positive home integration, and caregiver characteristics, in an effort to understand areas for further research pertaining to recruiting caregivers for youth with behavioral problems and/or emotional disabilities.

Theoretical Framework

Theoretical Framework

The theoretical framework used in this study is the Person-Process-Context-Time Model, which is an extension of the bioecological model introduced by Bronfenbrenner & Morris (2006). This framework is an integrative approach to human development in that it emphasizes an interaction between humans and their environment. For this study, within the PPCT model, youth in foster care are still considered the individual through which development is affected by the PPCT model.

First, *process* refers to proximal processes, or an interaction, that regularly occurs between the individual and a person or object; they are the driving force of development. The form of these

proximal processes are also influenced by the context (environment) and person characteristics (Bronfenbrenner & Morris, 2006). For example, a youth's interactions with family members or their case worker can be described as proximal processes. Second, *time* refers to ways in which proximal processes occur ad influence development over time (Bronfenbrenner & Morris, 2006). While neither of these are emphasized in the current study, it is important to note that research examining factors affecting placement stability for youth in foster care should examine all four components of the PPCT model. Rather, the other two components of the model, *person* and *context* will be emphasized here.

Person characteristics are central to the PPCT model because they encompass aspects of the person that can affect and influence these proximal processes. Person characteristics can be described in three ways. Demand or "personal stimulus" characteristics describe things that are easily seen about the person, such as age or gender. For youth in foster care, these personal demand characteristics (age, gender, ethnicity) have been found to be associated with placement instability (Avery, 2000), suggesting that demand characteristics can affect the environment he or she is in. Resource characteristics include things like past experiences, mental health resources, and access to supports/skills helpful in development. For youth in foster care, this can look like exposure to previous trauma, emotional and/or behavioral problems, etc. Finally, force characteristics include things like temperament (Tudge et al., 2009). These types of characteristics are changed by their environments, but are also able to change the environments that they are in (Bronbenbrenner & Morris, 2006). The current study explores whether or some person characteristics (in particular, ones related to mental health) may influence a youth's environment by indirectly affecting his or her placement stability trajectory. More research is

needed to examine whether resource and force characteristics affect placement stability for youth in foster care.

According to the *context* piece of the PPCT model, human interactions should be interpreted in several different contexts, or systems, in order to fully understand development. For youth in foster care and their families, the foster child is at the center of those systems, and the interactions between members of the family (biological and foster) as well as external influences (e.g., parent's work or youth's school), are all important to integrate to understand factors affecting placement stability for youth in foster care (Piel, 2017). Contexts in a youth's life in foster care may look like environments that they themselves, their siblings, caregivers, or friends are a part of. Specifically, Bronfenbrenner and Morris (2006) outlined four important contexts according to the bioecological model: microsystem, mesosystem, mesosystem, and macrosystem. The first level, also known as the *microsystem*, is the innermost layer of the model and encompasses aspects and contexts that are most closely related to the youth. This includes foster caregivers, siblings, and relationships with those in the foster home. The microsystem also encompasses experiences that the youth has in that context. Although other microsystems exist, such as school or peers, the foster home will be the focus of this study. This is because the microsystem of the foster home is central to understanding placement stability for youth in foster care, because these experiences most closely affect a youth's adjustment to his or her new environment, and because the foster home is where the strongest relationships are often developed, like ones between caregivers and siblings.

The *mesosystem* is the second layer of the model, and refers to an interaction between systems. The *macrosystem* refers to larger entities or processes that are enacted onto the youth, and for youth in foster care this could look like policies related to child welfare that occur at the

government level. Finally, the *exosystem* refers to experiences or contexts that are not experienced directly by the child (Bronfenbrenner & Morris, 2006). For youth in foster care, this could look like experiences that foster caregivers may have, like work life, that are not experienced directly by the youth, but spillover and affect the youth's microsystem. While this study emphasizes microsystem components, all of these systems interact to create a bidirectional environment where development is influenced in several different areas simultaneously (Bronfenbrenner & Morris, 2006).

As the present study has three parts, the PPCT model, specifically person and context (i.e., microsystem) can be mapped on to the study in several different ways. First, the study examines behavioral and/or emotional problems experienced by youth, which functions as a person component (or a force characteristic) of the model. Other person characteristics of youth that are examined in this study include age, gender, and race/ethnicity (which are demand characteristics). The present study hypothesizes that these person characteristics will impact the microsystem of the foster home by influencing placement stability trajectories for youth in foster care. Placement stability, then, is a proxy for microsystem quality, or "fit" between a youth and his or her environment. In this study, context characteristics pertaining to the microsystem include home level resource characteristics, including positive home integration, and placement with a sibling. As this study also considers caregiver characteristics, relationship to caregiver, caregiver education, work, and family income will also function as context characteristics pertaining to the microsystem in this model. The current study predicts that these context characteristics can also influence placement stability in a bidirectional nature, such that less positive contexts (such as less positive home integration, and separation from a sibling) will predict less stable placements.

Identifying Youth as 'Difficult to Place'

Youth who are older, male, or of ethnic minority groups have higher numbers of placements and longer delays in placement stability (Avery, 2000). In addition, youth who need to be placed with their siblings may have a harder time finding placements, because fewer caregivers are willing to take in two or more youth simultaneously, especially if one or both of the siblings have a disability (Avery, 2000). Finally, youth with severe disabilities have higher rates of placement instability than typically developing youth (Avery, 2000), because of the increased demands placed on caregivers of youth with disabilities (McKeough et al., 2017). Less is known about how the severity or type of disability may affect placement stability (Roper et al., 2014). In current research, many of the characteristics associated with difficulty in achieving placement stability (i.e., age, ethnicity, disability status, etc.), are often considered relatively stable and cannot be changed or improved with additional services or interventions. Characteristics associated with mental health, however, are prime areas for intervention in child welfare research because of their more dynamic nature.

In addition, current research suggests that mental health challenges, including behavioral issues, externalizing behaviors, and trauma related health concerns (Fuentes et al., 2015; Greeno et al., 2016; McKeough et al., 2017) may place increased demands on caregivers, lending to challenges with placement stability. This distinction is important because supports and resources can be put in place for subgroups of youth and caregivers facing placement challenges associated with mental health, while factors like age, gender, ethnicity, and number of siblings are much more static in nature. In the context of this study, youth in foster care who are identified as difficult to place include youth who have trauma-related health issues, high levels of internalizing and externalizing behaviors, and youth with medical complexities related to mental

health (i.e., attachment disorders, emotional disorders, etc.). The term "difficult to place" or "D2P" will be used to refer to these factors related to mental health that impact placement stability for youth in foster care.

While many studies have examined different types of behavioral and/or emotional problems as they relate to placement severity (see literature review), more research is needed to determine how much these problems overlap as well as how severe youth's behaviors are. For example, a youth with clinical levels of behaviors related to exposure to trauma may face increased placement challenges. However, a youth with clinical level behaviors *and* a PTSD diagnosis may place an even greater caregiving burden on their foster caregivers, thus resulting in even more placement challenges. By examining different measures of youth's behavioral and/or emotional problems, researchers may be able to capture the complex challenges faced by youth in different stages of the development of behaviors. Given that youth may experience many types of disorders simultaneously, it is also critical to understand the comorbidity and severity of behaviors as they relate to placement instability. Accounting for the potential comorbid nature of behaviors allows studies to examine the relationship between number of symptoms experienced (severity) and number of placements experienced. Previous research has used single measures of behavioral problems in an attempt to understand placement instability for youth in foster care, but this could be missing the complex nature of youth's emotional and behavioral problems, hence the innovative approach being taken in this study. The following section of this literature review will examine common behavioral and/or emotional problems experienced by youth in foster care.

Externalizing Behaviors

Second, youth in foster care are at increased risk for behavioral problems (such as aggression, conduct issues, etc.) both prior to being placed in the foster system and within foster care placements (Dorsey et al., 2012). Youth with behavioral challenges associated with trauma often experience difficulties in school, as well as difficulties forming interpersonal relationships, which may hinder their ability to form positive relationships with caregivers. Also, youth with behavioral issues may place increased demands on caregivers, through caregiver stress and management of behaviors (Salas et al., 2015).

Youth in foster care with severe behavioral challenges tend to transition through foster homes more frequently than those without. Chamberlain et al. (2006) found that foster caregivers are willing to tolerate an average of six behavioral problems in youth in foster care over the course of their placement before they reach caregiver burnout and request to have the youth moved to a different home. Therefore, youth in foster care with more behavioral problems have more issues finding suitable placements, and are at increased risk for rapid placement transitions. As mentioned above, O'Neill et al. (2012) also used an externalizing dimension of the child behavior checklist (CBCL) to examine the effects of problem behaviors in youth in foster care on placement instability, and found that for every point that externalizing CBCL scores increased for youth in foster care, the odds of achieving placement stability decreased by 12%. In fact, externalizing behaviors were the only significant child characteristic found by O'Neill to be associated with placement instability (2012), suggesting that youth with behavioral issues are particularly difficult to place and maintain in a placement. This research suggests that the CBCL may be a useful tool in measuring behaviors as they relate to youth in foster care, but more research may be needed to determine how severity of externalizing behaviors may impact placement stability.

Internalizing Behaviors

First, youth with mental health challenges (such as depression and anxiety) are overrepresented in child welfare cases, with up to three fourths of youth displaying symptoms of at least one mental health condition that requires medical treatment (Price et al., 2009). Experiences prior to placement in the foster system may cause mental distress for youth, including removal from their home, separation from social circles, and in some cases, maltreatment or abuse (Dorsey et al., 2011). In addition, experiences within the foster system may contribute to youth's poor mental health, including rapid transitions from home to home, and lack of stable adult attachments in their lives (Bruce et al., 2009).

Current research has found mixed results with regards to the relationship between mental health and placement stability (Barber, Delfabbro, & Cooper, 2001; O'Neill et al., 2012). Typically, measures of internalizing and externalizing behaviors have been used as indicators of mental and behavioral health challenges faced by youth (e.g., Child Behavior Checklist, CBCL; Achenbach, 1991). With relation to internalizing behaviors (such as depression, anxiety, etc.,) there have been mixed findings as well. In a study by Barber, Delfabbro, and Cooper (2001), youth in foster care who scored high on internalizing and externalizing behaviors as measured by the Child Behavior Checklist (CBCL) had a higher number of placements than youth scoring in typical ranges. However, O'Neill et al (2012) found that internalizing behaviors measured by the CBCL were not a significant predictor of placement instability in youth in foster care, rather externalizing behaviors were a more accurate predictor. It is possible that other additional types of measurement of mental health (such as diagnosis of a mental health condition, or measurements related to trauma specifically) may be helpful to measure health challenges related to placement instability for youth in foster care. More research is needed to determine how

mental health issues- including internalizing behaviors- influence placement stability, as well as what measure(s) and/or reporting agents may be appropriate to identify these issues in populations of youth in foster care.

Trauma and Mental Health

Youth in foster care are likely to experience some form of trauma or neglect prior to placement in the foster system, which has been linked to symptoms of trauma expressed by youth in care (Dorsey, 2012). Trauma exposure in youth is linked to a variety of mental health challenges that persist across the lifespan, including substance abuse, problems forming interpersonal relationships, and conduct disorder in teens and young adults (Scott, Smith & Ellis, 2013). Sexual abuse and community violence are cited as common experiences associated with post traumatic stress symptoms in youth in foster care (Salazar et al., 2012). For example, a study by Dorsey and colleagues (2012) found that over 50% of traumatized youth in therapeutic foster care settings (TFC) had experienced some sort of sexual abuse, which has been linked to post traumatic stress disorder (PTSD) symptoms in later life. Other types of traumatic events that are associated with poor mental health in youth in foster care include other forms of maltreatment (neglect, physical or emotional abuse), and exposure to community or domestic violence. The high prevalence of trauma exposure and related mental health issues in youth in foster care may indicate a need for trauma-related measurement as a separate indicator of mental health in youth in foster care.

It is possible that youth-reported symptoms of trauma (like anxiety, nightmares, bedwetting, etc.) may provide a unique insight into the effects of trauma exposure on mental health and placement stability. Incorporating the voice of youth who have experienced trauma (through youth report of trauma-related symptoms) may provide unique insight, and the use of

multiple reporting agents, such as parent report of behaviors as well as youth report of symptoms may provide an all encompassing picture of the challenges faced by youth and caregivers.

Mental Health and Related Disorders

Third, youth in foster care with disorders related to mental health, including emotional disabilities, require increased needs in terms of care (Daniel, 2011; Seltzer et al., 2017). Specifically, youth with diagnosed emotional disabilities have additional needs that may place increased demands on caregivers, including increased financial needs, access to appropriate medical care and related supports, daily task completion, and management of behaviors (Brown & Roger, 2009; Goetting & Goetting, 1994; Lauver, 2008). With relation to mental health, determining what types of disabilities play the largest roles in placement instability for youth in foster care would be beneficial in developing permanency plans and devoting necessary resources to those youth.

The Adoption and Foster Care Analysis and Reporting System (AFCARS) codes for various disabilities when determining placement for a child as he or she enters the child welfare system. There are four existing disability types that AFCARS use: emotional disabilities, intellectual disabilities, vision/hearing disabilities, physical conditions, and other disabilities (AFCARS). Given this study's focus on mental health for youth in foster care, diagnosed disorders pertaining to emotional disabilities will be analyzed here.

Emotional Disabilities

Emotional disabilities are defined as one or more of the following: an inability to build or maintain satisfactory interpersonal relationships; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal problems (AFCARS).

These disabilities include ADHD, mood disorders (such as depressive disorder, bipolar disorder, etc.), autism, Down Syndrome, schizophrenia, reactive attachment disorders, and adjustment disorders (Seltzer et al., 2017). Some of these disabilities are disproportionately higher for youth in foster care compared to their peers. For example, ADHD prevalence rates are 3-4 times higher for youth in foster care when compared to youth in the general population (American Acadamy of Pediatrics). Youth with ADHD may place increased demands on caregivers, including increased caregiver stress, managing child behaviors, and burdens on relationships with siblings and biological children (Mires et al., 2017; Reed, 1994).

Youth in foster care with mood disorders (depressive disorders, bipolar disorders etc.) may experience different challenges to placement stability than youth who display internalizing and externalizing behaviors in general. This is because diagnosis of a disorder may increase caregiver burden through maintenance of doctors visits, medication, and other related services (Brown & Rodger, 2009; Daniel, 2011). Youth who display high internalizing and externalizing behaviors may not be diagnosed with a mental health condition, therefore may impact caregiver burden differently. Research examining mental health as a predictor of placement instability may do well to consider behaviors that have not been diagnosed as a disability as well as diagnosis of a condition itself.

Finally, youth with autism or Down syndrome experience challenges with regards to placement stability as well. Goetting & Goetting (1994) interviewed 57 foster caregivers of children with developmental disabilities (CWD) about their motivations for care, as well as the challenges faced by caregivers of CWD. The authors found that caregiver willingness depended on the type of disability (e.g., autism vs other type of disability) , and age of child. Similarly, Roper et al. (2014) found that reports of caregiver burden were higher for parents of children

with autism than of children with Down Syndrome, although these findings differed by parent gender. Parents of children with multiple disabilities did not report higher caregiver burden than parents of a child with autism or Down syndrome, suggesting that more research is needed to determine how multiple disabilities affects caregiver burden and care motivations for foster caregivers of youth with multiple disabilities (Roper et al., 2014). Youth in foster care with emotional disabilities may also face challenges with relation to medical care, suggesting that caregivers may face increased stress when obtaining specialized services for their youth (Brown & Rodger, 2009).

Overall, youth in foster care with mental and behavioral health challenges, including medical complexities related to mental health, are commonly identified in current child welfare research as more difficult to place than typically developing youth in foster care, meaning multiple groups of high vulnerability youth exist within an already vulnerable population of youth. Frequent and rapid transitions also increase the risks these youth experience which may lead to additional negative health outcomes that persist into adulthood (Brown & Rodger, 2009). Research has examined the effects that a youth in foster care's health condition(s) may have on placement stability, but examining these youth identified as difficult to place specifically may shed new light on foster families that may be specific to health related needs. These health related needs (i.e., emotional supports, assistance with transportation to therapy or doctor visits, medical needs) may increase caregiver burden and make it more difficult for caseworkers to find suitable placements for youth, especially in a contest where finding a home in general can be difficult regardless of suitability, as is often the case for youth in foster care. Current research on placement instability for youth in care suggests that a shift in research focus towards examination of caregiver characteristics and needs of caregivers may be an appropriate way to approach

placement stability issues for youth identified as difficult to place in foster care, as well as a useful way for professionals working with youth in foster care to support their caregivers in their caregiving needs.

Foster Caregivers

Although extensive research has examined the effects of child characteristics and child health on placement stability in youth in foster care (Chamberlain et al., 2006; Seltzer et al., 2017; Waid et al., 2016), less attention has been paid to the roles that families and foster caregivers may play in affecting placement stability (O'Neill et al., 2012; Waid et al., 2016). Foster caregivers play a unique role in the lives of youth in foster care, but also face challenges in forming and maintaining relationships with youth, as well as caregiver role ambiguity and insecurity (Leathers, 2006; Sprey-Wessing & Portz, 1982). Furthermore, caregivers of youth in foster care who are difficult to place may face increased challenges meeting the needs of their youth. Foster caregivers of youth with mental health challenges are more likely to meet needs of youth if they have the skills and resources to manage their youth's health (e.g., reliable knowledge of health related supports, reliable transportation and scheduling options, etc.), as well as manage increased caregiving demands and stress (e.g, access to self care options, parenting education classes or supports, stress management strategies, etc.). These resources can include supports from the child welfare system (e.g., ongoing trainings, adept case workers, respite care, etc.), as well as additional supports outside the system (e.g., school communication, informal support systems, sibling care, etc.) (Daniel, 2011; Fuentes et al., 2015; Greeno et al., 2016). Therefore, finding placements with willing and able caregivers who can provide suitable home environments that meet the needs of youth in foster care with mental health challenges

may help both prevent further placement instability and decrease risk for more negative health outcomes later in adulthood.

Foster parents must manage multiple roles that makes their experiences unique when compared to biological parents (Brown & Rodger, 2009; Sprey-Wessing & Portz, 1982). Foster parents often times fit into multiple categories simultaneously, and often fear that they lack a cultural script of obligations as a foster parent (Sprey-Wessing & Portz, 1982). Another example of role ambiguity for foster caregivers can be found in a study by Mires, Lee, & McNaughton (2017) regarding school involvement. Mires, Lee, & McNaughton (2017) found that foster caregivers experienced role ambiguity in school settings for their youth in care with learning disabilities. For example, schools might find difficulty in deciding an advocate for a foster child, because of the ambiguity surrounding biological and foster parent roles, meaning that communication is not consistent between foster families, caseworkers, and school systems (2017). Both role ambiguity and lack of communication between respective institutions can increase caregiver burden for foster parents in general, suggesting that caregivers of difficult to place youth in foster care particularly may face stressors from multiple life domains (outside of child-related factors or behaviors).

Because of the increased needs and supports that difficult to place youth may require from foster caregivers, it is particularly salient to consider caregiver characteristics and caregiver's role in placement stability processes. As noted earlier, the rate of youth in need of homes is increasing, but recruitment of foster carers is not matching this growth (Delfabrro et al., 2010). Foster caregivers may be hesitant to take in a youth with additional needs (often considered difficult to place) due to a fear of role ambiguity, feelings of being overwhelmed, challenges associated with forming relationships and child behaviors, (Lauver, 2008), and/or

wanting to protect biological children from potential harm (Reed, 1994). This means that there is an increased rate of youth in foster care who need placement with capable foster caregivers, but declining rates of caregivers who are able to provide the supports needed for youth with mental health and behavioral challenges. In addition, foster caregivers who have difficult to place youth in their home often face challenges with increased costs, navigating the healthcare system, building rapport with caseworkers, handling child behaviors, managing self care, and a need for specialized, ongoing informational training throughout care (Bown, 2009; Lauver, 2008, McKeough et al., 2017), suggesting that these caregivers are at increased risk for caregiver burnout and turnover of placements for youth (Brown & Rodger, 2009). Examining characteristics, motivations, and needs of caregivers may aid recruitment and training efforts to support able caregivers of difficult to place youth.

Also, because of increased financial needs for difficult to place youth, as well as increased demands for time-consuming care, work life of foster caregivers may influence placement stability as well. Little is known about how time spent at work or income may affect placement stability for caregivers and difficult to place youth in foster care. As discussed above, increased financial needs of youth with health challenges may play a role in motivations for care, if caregivers feel that their financial compensation is inaccurate (Kirton, 2001). In addition, increased caregiving needs may be time consuming (e.g., transportation to physicians, assistance with daily tasks, etc.). Foster caregivers who work more hours may feel increased caregiver burden or stress if their caregiving role at home is also time consuming. It is possible, therefore, that foster caregivers who make less money or who work more hours may feel incapable of meeting the needs of their difficult to place youth, especially if they feel unable to access additional supports or resources related to care needs. Understanding how time and money

constraints related to work may affect placement stability will be important for understanding the needs of foster caregivers as they care for youth.

In addition, the relationship between a youth and caregiver may play a role in placement stability for youth with behavioral and/or emotional problems in foster care. Kinship placement refers to the caregiver's relationship to the youth, if they are related (i.e., grandparents, aunts/uncles, neighbors, family friends, strangers, etc.), while nonkinship placement refers to other non-relative adults that could take in a youth, like neighbors or strangers. O'Neill et al (2012) found that youth in foster care who are in nonkinship placements are 87% more likely to have placement disruptions over the span of a year than youth placed with relatives, suggesting risk for placement instability in nonkinship homes. Relatives caring for difficult to place youth have additional motivations to care for youth because they knew them prior to beginning care (Waid et al., 2016). They also may be more likely to normalize child mental health behaviors (Blakeslee et al., 2017), meaning that youth may not get the supports they need to improve their health. Because of this conflict, more research is needed to determine how placement type may influence stability for this specific population of youth in care.

Home Level Influences

Relationships within the foster home, including caregivers and siblings, may play a role in placement stability for youth in foster care with behavioral and/or emotional problems. First, relationship quality between foster family members plays an important role in placement stability for youth in care. For example, Leathers (2006) found that positive relationships between youth and their foster caregivers was associated with placement stability, and that positive relationships with their caregivers moderated the effect of behavior problems on placement stability.

Furthermore, foster caregivers of 'difficult to place' youth tend to report higher levels of stress and more negative relationships with youth than caregivers of typically developing youth (McKeough et al., 2017), emphasizing the salience of the role of relationship quality in the foster home for youth identified as 'difficult to place.'

Relationship quality within the foster home can be reported by caregivers or youth in foster care. In O'Neill et al., parent report of emotional security in parent-child relationships was not a significant predictor of placement stability in early or middle childhood for youth in foster care (2012). In contrast, youth report of their relationships with members of the foster home may be a more accurate predictor of placement stability for youth in care.

Positive home integration refers to how a youth in foster care feels about their placement in the home, including ways in which they feel included in the house, and how close they feel with their caregivers (Kothari et al., 2016; Waid et al., 2017). This includes whether or not the youth feels supported in their foster home. Positive home integration describes not only how integrated a youth feels he or she is in the foster family, but also how they feel about relationships in the foster home, including caregivers and siblings. Positive home integration links to a variety of positive health outcomes for youth in foster care (Kothari et al., 2016). But, more research is needed to determine if youth's feelings of home integration are different for youth with behavioral and/or emotional problems than for youth without. Understanding how youth identified as 'difficult to place' experience relationships within the foster home context should help determine how home integration may impact placement stability for youth.

Finally, placement status with siblings, or sibling living situation (SLS), may also play a role in placement stability for youth in care (Waid, 2014). A majority of youth in foster care have siblings who are also in care (Hegar, 2005; Waid, 2014). Placement with a sibling in foster care

has been shown to lead to quicker reunification with parents (Albert & King, 2008), but less is known about how sibling living situation impacts placement stability (Waid, 2014), and research on the relationship between SLS and placement stability for youth commonly identified as difficult to place is even more scarce. From a caregiver perspective, increased caregiver burden has been shown to affect sibling relationships and placement stability for youth with health challenges (Leathers, 2006; Roper, 2014). From the perspective of the youth, placement with biological siblings may be protective for youth in foster care (Kothari et al., 2014), creating a conflict that suggests that more research is needed to understand the role that sibling co-placement may have in placement stability for difficult to place youth in foster care. Considering placement status with a sibling in foster care as a predictor of placement stability over time may be a useful way to promote health and wellbeing for youth who are difficult to place (Waid, 2014).

Present Study

The present study aims to examine mental health-related factors that may impact placement stability for youth in foster care, characteristics of caregivers of those youth, and influences of relationships within the foster home. The study will address these topics by examining the following questions using an existing dataset:

1. Will youth who are identified as difficult to place (i.e., measured as youth with high externalizing behaviors, high internalizing behaviors, and/or one or more diagnosed emotional or intellectual disorders) have higher rates of placement disruptions when compared to other youth in foster care?
    a. It is expected that youth who score higher on the created D2P measure will have more placement disruptions than other youth in foster care.

2. Do youth identified as difficult to place (as measured in question 1) differ in their relationships within the foster home (as measured with positive home integration) when compared to youth who have not been identified as difficult to place?

   b. It is predicted that youth in foster care who face more placement challenges will be more likely to experience more negative home integration than youth who do not face these placement challenges.

3. Based on the findings in the above research question, it is possible that characteristics of caregivers may also play a role in integration of the home. Do caregivers of youth identified as difficult to place work outside the home more frequently, receive more education, make more money, or take relative youth at higher rates than caregivers of youth not identified as difficult to place?

   b. It is predicted foster caregivers of high scoring D2P youth will indicate that they make more money, receive more education, spend less time at work, and be more likely to be related to youth than caregivers of youth not identified as difficult to place.

CHAPTER 2: METHODS

Sample

Data for this study come from an existing randomized clinical trial (RCT) called Supporting Siblings in Foster Care (SIBS-FC; Kothari et al., 2014; Kothari et al., 2017). SIBS-FC is the largest study to examine a dyadic sibling intervention among youth in foster care (Kothari et al., 2017). The program is a 12-session intervention (8 skill-building sessions plus 4 community activities) delivered in the community (e.g., community setting, foster homes) and aimed to promote social and self-regulatory skills to aid in development of relationships. Multi-

method and multi-agent data were collected on and about youth in foster care (sibling dyads) in the state of Oregon, regardless of whether or not the siblings lived together. Specifically, data were collected on a variety of measures from 164 older siblings (M_{age} = 13.1, *SD* = 1.4) and 164 younger siblings (M_{age} 10.7, *SD* = 1.7) in foster care, for a total of 328 youth in care. Data were also extracted from DHS administrative data upon a youth's entry into the foster care system. Of the full sample, 72% of youth in foster care lived in the same placement as their sibling. In addition, approximately 50% were female, and 60% identified as non-white. Fifty-six percent of youth lived in non-relative foster homes, and youth had been with their current caregivers for around two years (Kothari et al., 2017). This sample is reflective of the child welfare population at both the local (Oregon) and national levels. For example, the 2012 Adoption and Foster Care Analysis and Reporting System (AFCARS) report indicated that 39% of youth in foster care nationally were in this 7–15 year age range and 58% were non-White. Data is not readily available, however, for foster caregivers at the state level, suggesting a need for a more readily available dataset including caregiver characteristics.

Because diagnosis data for the creation of the D2P variable relies on DHS administrative reports of information about emotional disabilities listed in the Diagnostic Statistical Manual for Mental Disorders (DSM), only youth with specific diagnostic data were used as part of analysis in this investigation. As a result there were 196 youth used for analysis in this study. Using a comparative table examining potential differences between the full sample and those with available DHS administrative data pertaining to DSM diagnoses, it was found that youth who did not have DHS administrative data available were less likely to be placed with a sibling in the same home, and were more likely to have half siblings in foster care (compared to full or step siblings). The two groups were comparable in all other demographics.

The full SIBS dataset had 260 caregivers. From the full sample of foster caregivers, data from primary reporting (foster) caregivers were used. Approximately 51% of primary reporting caregivers were female. Primary reporting caregivers were around 56 years of age, on average. Overall, 68% of caregivers had received at least a high school degree, and 54% identified as White. Finally, 66% of caregivers spent at least 30 hours per week working outside of the home, and foster households received incomes that averaged between 4,000 and 5,000 dollars per month. From the original SIBS sample of 260 caregivers, 114 cared for youth that had available D2P scores. Of those 114 caregivers, 12 reported on variables of interest (education, work, and income), resulting in a sample of 12 caregivers used for analysis.

Table 1: Descriptive Table of the Sample Used in Current Study

	Older Siblings				Younger Siblings			
	Total N	% of Sample	M	SD	Total N	%	M	SD
Youth Characteristics								
Age	92	50	13.09	1.45	90	50	10.79	1.85
Gender [a]	92	50			90	43.3		
Race [b]	92	47.8			90	48.9		
# Placements	92		4.4	3.66	90		3.99	3.06
D2P Score*	92		4.14	2.17	90		3.56	2.35
PHI	90		8.34	1.63	84		8.57	1.35
Home Characteristics								
Family Income [c]	5	60	5.00	2.17	11	54.5	5.00	1.73
Kin/NonKin [d]	90	64.4			87	40.2		
Sibling living Situation [f]	92	75			90	74.4		
Caregiver Education [g]	10	50			10	90		

Work Outside Home [h]	10	50		11	72.7

[a] % Female, [b] %White, [c] % Income less than 4,000/month, [d] % Lives with relative, [f] % Siblings live together, [g] % Caregivers with a college degree (2 or 4 year), [h] % Caregivers work outside the home

*See Table 2 for contents of this variable

Measures

Difficult to Place. Three separate measures (i.e., two standardized-- Child Behavior Checklist and Child Report of Posttraumatic Symptoms, and one from administrative records-- DSM-oriented diagnoses) were combined to create a count measure examining the extent to which a youth were identified as "difficult to place." Baseline scores on these three measures were used to create an overall difficult to place score, so that youth scoring in clinical ranges for CBCL or CROPS would receive 1 point to indicate presence of behavioral problems or PTSD symptoms, and youth with diagnosed emotional disabilities would receive 1 point for each type of disability they were diagnosed with. The resulting variable (D2P) is a count of behavioral problems and/or emotional disabilities experienced by youth, with "0" indicating no identified difficulty in placement, and "10" indicating very difficult to place.

First, the Child Behavior Checklist (CBCL) is a 118 item questionnaire that asks caregivers to report on their youth's internalizing and externalizing behaviors in the last six months (Achenbach, 1991). Foster caregivers rated items are on a scale of 0-2, with "0" indicating "not true of my child now or in the last 6 months" and "2" indicating "very true or often true of my child in the last 6 months". Youth scoring in borderline (60-63) or clinical (>63) ranges will receive one point for each of the subscales (internalizing and externalizing). Around 32% of youth fell into either borderline or clinical ranges for the internalizing measure, and around 40% of youth fell into borderline or clinical ranges for externalizing behaviors.

Second, the Child Report of Posttraumatic Symptoms, or CROPS, is a 25 item questionnaire that asks youth in foster care to report on their post-traumatic stress symptoms (Greenwald & Rubin, 1999). Example questions include "I avoid reminders of bad things that have happened, and response options include "none," "some," or "lots." Youth scoring above 18 will receive 1 point on the difficult to place measure, as is congruent with the scoring guidelines put forth by Greenwald and Rubin (1999), which indicates that youth scoring above 18 may need clinical attention and care. Around 58% of youth scored above 18 on this measure.

Third, reports of health diagnoses extracted from the Department of Human Services (DHS) ORKIDS administrative database were used to measure health in youth in foster care. Youth were assessed by their physicians prior to beginning the study, and record of any DSM diagnoses were included in this dataset. Emotional disorders (according to AFCARS) that were included in the dataset were adjustment disorders, ADHD, ODD, bipolar disorder, depressive disorder, conduct disorder, anxiety, and emotional disturbances. Each disorder that fell within these categories (excluding non-emotional disorders) was coded as "1" for "existing diagnosis" at baseline and 0 for "no diagnosis present," which means that youth who were diagnosed with any emotional disorder prior to baseline received 1 point for each diagnosis. Youth in foster care who have diagnoses in different categories received 1 point for each positive diagnosis prior to baseline of the study. This results in a possible sum score range for "DSM diagnoses" of 0-8. One hundred thirty-eight youth were diagnosed with at least one emotional disorder using this method, and scores ranged from 0-7.

By using these three measures, the D2P score was created by using a sum score across the three measures (e.g., CBCL, CROPS, and DSM diagnoses). In the analytic sample, youth received a maximum of 2 points on CBCL (i.e., one possible point for clinical level on CBCL

internalizing and one possible point for clinical level on CBCL externalizing), a maximum of 1 point on CROPS, and a maximum of 7 in the DSM diagnoses, resulting in a possible range of 0-10 for the D2P score. Youth scored an average of 3.85 on this measure (sd=1.82), and actual scores ranged from 0-10.

Number of Prior Placements. Number of placements prior to beginning the sibling intervention was extracted from DHS administrative records and included number of placements from time of entry into the welfare system up to pre baseline placements, and was recorded as a count. In other words, DHS administrative records indicated the number of placement disruptions for a youth in foster care prior to beginning the study (at baseline). Youth experienced around 4 placements on average at entry into the study, and ranged from 1 to 22 placements prior to baseline.

Relationship to youth. Reports were extracted from the Department of Human Services (DHS) data on each current foster caregiver's relationship to youth in foster care, and were separated into two categories: nonrelative foster care and kinship care. Kinship care referred to any foster home where the caregiver was biologically related to the child, including grandparents, aunts, uncles, etc. Nonrelative foster care referred to stranger and friend foster caregivers who were not related to the youth. Around 39% of caregivers had kinship relationships with their youth.

Relationship with Youth. Youth in foster care reported on their positive home integration (PHI) to indicate their relationship quality with their foster caregiver as well as their sense of integration into the foster home. The PHI (Kothari et al., 2016) is measured using 9 youth-reported items on a 10-point Likert scale, with "10" meaning more positive relationships and experiences with integration in the home. Example question items include "To what extent do

you feel included in your foster family?" This measure has received good test-retest reliability for both older and younger siblings at baseline, $\square\square\ \square = 0.87, \square\square\ \square = 0.84$ (Kothari et al., 2016).

Sibling living situation. Sibling living situation was extracted from DHS and included "together" placements, in which siblings lived together in the same foster home, and "apart" placements in which siblings did not live in the same home. Siblings placed together were coded a 1, and siblings placed apart were coded a 0. Approximately 70% of youth in foster care living with their siblings at the beginning of the SIBS-FC study (Kothari et al., 2017).

Caregiver Work. Foster parents reported on their family income as well as hours spent at work per week. Monthly family income was recorded in ranges of 1,000 dollars/month, and parents were asked to report on which range their family fit into best (e.g., between 1,000 and 2,000 dollars/month). Response options ranged from less than 1,000 dollars/month to more than 8,000 dollars/month. Of the full sample, 260 caregivers reported on demographics, but because only caregivers of youth with available D2P scores were used, only 18 caregivers reported on income. On average, caregivers used in this sample reported an income between 4,000 and 5,000 dollars per month. Regarding hours spent at work, parents were asked to report on whether or not they worked outside the home (parents who indicated "no" to this question were reported as having worked 0 hours/week outside the home). This question is used for analyses, and of the caregivers used in this study, 26 reported on this question.

Caregiver Education. Caregivers reported on the highest level of education that they have received at the time of reporting at baseline. Education levels were listed in categories with items listed on a 1 to 7 point scale, with "8th grade or less" scored as 1, and "postgrad" scored as 7. On average, primary caregivers reported having received "some college" experience.

Procedures

The 328 youth (164 dyad pairs) were recruited through the Department of Human Services (DHS). Eligible participants were considered if they met a set of inclusion criteria, including: (a) an older sibling who has been in foster care for at least 90 days, (b) a younger sibling with the same biological mother as the older sibling (this includes half siblings) who is within 4 years of age of the older sibling, and (c) all participants were English-speaking. Participants were excluded from the study if they were planning to move outside the participating counties, or if the youth had a profound cognitive disability. Younger siblings were not excluded if they lived with biological relatives, and in the occurrence of multiple younger siblings within a family, the sibling closest in age to the focal older sibling was selected.

Caseworkers of potential participants were contacted to give consent. Potential families were mailed informational packets and contacted via phone to schedule the orientation(s). After consent and assent forms were obtained from caregivers and youths, dyad pairs were randomly assigned to receive the SIBS intervention or usual services. As baseline data will be the focus of this investigation, caregiver and youth data will be examined in addition to medical diagnoses data extracted from DHS administrative databases.

Analytic Plan

Descriptive analyses including means and standard deviations will be conducted for each of the independent variables (CBCL, CROPS, disability diagnoses, and difficult to place youth) and each of the dependent variables (number of placements, relationship to youth, relationship with youth, sibling placement type, motivations for care, hours spent at work and income). This will allow for identification of missing variables and outliers in the data. Then, various tests (i.e., Poisson regression and Chi Square tests) will be used to test hypotheses for each of the research questions, and this process is described below.

To answer the first research question: 'Will difficult to place youth in foster care (those with high externalizing behaviors, high internalizing behaviors, and/or one or more diagnosed emotional or learning disabilities) have higher rates of placement instability when compared to other youth in foster care?' A "difficult to place" (D2P) measure based on CBCL, CROPS, and mental health diagnoses scores will be created and then used in subsequent hypothesis testing. Prior to the creation of this "difficult to place" measure, descriptive statistics including means and standard deviations will determine prevalence of scores for each of these measures, and cutoff scores that have been established in the literature for CROPS and CBCL scores (Achenbach, 1991; Greenwald & Rubin, 1999) will determine point values in the difficult to place variable. Youth scoring above borderline or clinical cutoff ranges for CROPS or CBCL scores will receive 1 point for each measure (1 for externalizing subscale of CBCL, 1 for internalizing subscale of CBCL, and 1 for overall score on CROPS) and youth with positive diagnoses for any emotional disability will receive 1 point for each positive diagnosis. All of these points will be summed to create the 'difficult to place' score for all youth in the study. Because D2P scores (the predictor) reflect a count of number of behavioral and/or emotional problems experienced, and placement instability (the outcome) is represented by a count of placement transitions occurring prior to baseline, a Poisson regression model for tests of significance was used to determine association with number of prior placements for youth. In order to account for other child characteristics that may influence placement stability besides mental and behavioral health, the regression model will control for youth gender, age, ethnicity, and sibling living situation.

The second research question asks if D2P scores can predict PHI scores. As D2P (the predictor) exists as a count, and PHI (the outcome) exists as a continuous score, a simple linear

regression will be used to answer this question. To avoid nesting issues, analyses will be run separately for older and younger siblings. This question will be answered using linear regressions to test for significance between the dependent and independent variable. Specifically, the model will test whether youth report of experiences with positive home integration will be predicted by a youth's score on the difficult to place measure. The 9-item PHI was averaged to create a single mean score for each youth. Covariates included in the model are youth age, gender, kinship placement, and sibling living situation.

The third research question is designed to be an extension of the previous research question and is exploratory in nature. This question asks if there are significant differences in caregiver characteristics between caregivers of youth based on their youth's D2P scores. All of the caregiver characteristics (education, work, income, and relationship to youth) function as categorical outcome variables in this analysis. To answer this question, a series of chi square tests will be used to test for differences between groups of caregivers of high and low scoring D2P youth in their responses to income, work, education, and relationship to youth. Based on the median and mean of the D2P measure ($M = 3$), D2P scores were split into two groups, one above the mean (deemed "high-scoring D2P group") and one below the mean (deemed "low-scoring D2P group), to create a binary D2P variable. Youth in the high scoring group received 1 point, and youth in the low scoring group received 0 points. To avoid nesting issues, analyses will be run separately for older and younger siblings, and cross tabbed as such. Only primary reporting caregivers are used in this analysis. Then, a series of chi square tests will be used to look for differences in each of these characteristics based on scores in the D2P measure. Specifically, a chi square test will be run to test for differences in caregivers of low scoring and high scoring youth in each of the outcomes: caregiver educational attainment, caregiver employment status

(work/no work outside the home), monthly family income, and relationship to youth (kin/nonkin).

Missing Data

Because some youth had information available on their DHS administrative data and some did not, there was some missing data. This sample was further limited because only youth with specific types of diagnoses were examined. For research questions 1 and 2, 196 youth are used for analysis. For research question 3, which relies on foster caregiver data, missingness is higher (12 out of 114 caregivers). Although these rates of missingness are high on some variables, this only pertains to research question 3, which utilizes Chi Square tests that do not rely on large sample sizes. Therefore, data analysis moved forward in an exploratory nature, which indicates use of Chi Square tests rather than regression modelling.

CHAPTER 3: RESULTS

The present study consists of three related research questions: (1) Will youth in foster care identified as 'difficult to place' have higher rates of placement instability when compared to other youth in foster care? (2) Do youth who have been identified as 'difficult to place' differ in their experiences with positive home integration when compared to youth who are not? And (3) Do caregivers of youth who have been identified as 'difficult to place' differ from their counterparts (i.e., other foster caregivers) in their education, and/or income/hours spent at work, or relationship to youth?

First, correlations of key variables were calculated for the full sample (Table 2), older siblings, and younger siblings. For older siblings, D2P scores were significantly correlated with number of placements, relationship to caregiver, sibling living situation, and caregiver education.

Sibling living situation was significantly correlated with age, number of placements, and relationship to caregiver. For younger siblings, D2P score was significantly correlated with relationship to caregiver. Sibling living situation was associated with number of placements, age at baseline, and relationship to caregiver. Correlations for the full sample used in this study are found below (Table 2).

Table 2: Correlations of Key Variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1 D2P Score	-										
2 Youth Race [a]	-.11	-									
3 Youth Age	.15*	-.06	-								
4 Youth Gender [b]	.11	.09	.05	-							
5 Number of Prior Placements	.29**	-.14**	.11	.06	-						
6 Sibling Living Situation [c]	.23**	-.01	.15**	.04	.41**	-					
7 Relationship to caregiver [d]	.35**	-.08	.08	.02	.21**	.31**	-				
8 Caregiver Education	.55**	-.13	.22	.26	.01	.13	.01	-			
9 Work Outside the Home [f]	-.16	-.03	-.05	.68**	-.06	.07	-.05	.32	-		
10 Positive Home Integration	-.09	.01	-.06	.04	-.06	.06	-.09	-.11	.11	-	
11 Monthly Income	.13	-.19	.37	-.05	-.22	.23**	.22	.39**	.11	-.21	-

[a] Race is coded as White/NonWhite [b] Gender is coded as 0=male, 1=female [c] Sibling living situation is coded as 0=together 1=apart [d] Relationship to caregiver is coded as 0=Kin 1=Nonkin
[f] Work outside the home is coded as 0=no work outside the home 1=works outside the home

*p<.05 **p<.005

Question 1

The first research question has two parts: (1) creating the D2P variable (using CBCL, CROPS, and DSM diagnoses) (see Table 1) and (2) running a regression analysis to examine the relationship between D2P and the number of placements youth experienced. Using a Poisson regression and accounting for age, gender, race (white/nonwhite), and sibling living situation as control variables, the results indicated that D2P scores predicted the number of placements a youth experienced prior to baseline, $F(98) = 81.025$, $p < .001$. The results demonstrated that higher D2P scores (i.e., the more behavioral or emotional problems a youth has), were associated with higher number of placement disruptions. At baseline, youth scored an average of 3 on the D2P variable, and D2P predicted 31.9% of the variance in number of placement disruptions prior to baseline. Difficult to place scores significantly predicted the number of placement disruptions a youth had prior to entering the study even when accounting for age, gender, race/ethnicity, and sibling living situation. The first hypothesis for this study was supported.

Table 3: Descriptive Statistics of Components of D2P Variable

	Older Siblings				Younger Siblings			
	N	Min	Mean	SD	N	Min	Mean	SD	Max
CROPS	92	5	21.72	9.10	90	0	21.58	9.51	46 / 43
CBCL-Internalizing	92	33	59.75	11.20	90	33	57.16	12.35	83 / 86

CBCL-Externalizing	92	33	61.36	12.75	95	34	60.42	11.77	83
DSM	92	0	2.30	1.78	90	0	1.81	1.82	7

Question 2

The second research question uses the created D2P measure to predict relationship quality in the foster home, as measured by the PHI. To avoid nesting issues, analyses were run separately for older siblings (n=97) and younger siblings (n=99). For older siblings, D2P scores did not significantly explain the variance in PHI scores, (Adj. $R^2 = 0.001$, $F(1, 94) = 1.142$, $p = 0.288$). For younger siblings, D2P scores also did not significantly explain the variance in PHI scores, (Adj. $R^2 = -0.008$, $F(1, 89) = .300$, $p = 0.585$. For older siblings, age at baseline was the only significant covariate in the model (B=-.294, $p = 0.02$). There were no significant covariates for younger siblings. For older siblings and younger siblings, D2P scores explained 5% and 3% of the variance, respectively. D2P scores do not significantly predict PHI, meaning that the hypothesis for this study was not supported. It is important to note, however, that D2P explained slightly more variance for older siblings than for younger siblings, indicating that differences may exist in the relationship between behavioral and/or emotional problems and positive home integration by how old the youth is, although this difference was not tested for here, so more research is needed to test for differences in the relationship between D2P and PHI for older and younger siblings.

Research Question 3

In order to further examine the relationship between youth in foster care and their caregivers, the third research question addresses characteristics of the caregiver that may be

associated with D2P scores. The third research question tests for differences in two groups: caregivers of youth who receive high scores on the D2P measure, and caregivers of youth who receive low scores on the D2P measure. Caregiver characteristics tested included: educational attainment, monthly family income, working outside the home, and relationship to youth (as measured by kin/nonkin).

Using Chi Square tests to explore potential differences between groups of caregivers, results suggest that educational attainment and relationship to youth are categories where significant differences exist. Again, to avoid nesting issues, analyses were run separately for older siblings and younger siblings. See Table 4 for complete results. Of the 10 caregivers with older siblings who reported on their educational attainment, significant differences did exist between caregivers of low scoring and high scoring youth ($X^2 = 10.00$, $p = 0.04$). Of the 11 caregivers with older siblings who reported on their employment status, differences did not exist between low scoring and high scoring youth. Of the six caregivers with older siblings who reported on their monthly family income, no differences existed between caregivers of low scoring youth and high scoring youth. Finally, of the 96 caregivers of older siblings who reported on relationship type, significant differences existed between caregivers of low scoring and high scoring youth ($X^2 = 9.8$, $p = 0.02$). Caregivers of high scoring older siblings were less likely to be related to youth biologically.

For younger siblings, a slightly different story emerges. Of the 10 caregivers who reported on educational attainment and had younger siblings, significant differences did not exist between caregivers of low scoring and high scoring youth. Of the 11 caregivers who reported on employment who had younger siblings, differences did not exist between caregivers of low scoring and high scoring youth. Similarly, of the 11 caregivers who reported on monthly family

income with younger siblings, differences did not exist between low scoring and high scoring groups. Finally, of the 93 caregivers of younger siblings who reported on relationship to youth, differences did exist between low scoring and high scoring groups (X^2=5.43, p=0.02). Caregivers of high scoring D2P younger siblings were less likely to be related to youth biologically.

Table 4: Summary of Chi Square Tests for Older and Younger Siblings

	Older Siblings				Younger Siblings			
	Total N	HighScoring	ChiSquare	P-Value	Total N	HighScoring	ChiSquare	P-Value
Caregiver Education	10	8	10.0	0.04*	10	3	4.29	0.232
Work Outside the Home	10	8	2.5	0.11	11	3	3.23	0.072 +
Family Income	5	4	5	0.17	11	3	4.95	0.422
Kin/NonKin	90	53	6.84	0.009 *	87	38	5.43	0.02*

+p<.10, *p<.05

CHAPTER 4: DISCUSSION

This study aimed to examine the relationships between mental health, placement disruptions, and home level influences for youth in foster care. Current research suggests that not only is placement stability particularly beneficial for youth in foster care, but it may also be more difficult to obtain for youth with behavioral problems and/or emotional disabilities (see above literature review). Furthermore, as Bronfenbrenner and Morris (2001) dictate in the PPCT framework, children's experiences are nested in systems and contexts, meaning that examining contextual influences outside of the child's experience (like caregiver and home level characteristics) may be a useful way to develop tools and resources to support youth in achieving placement stability, particularly for youth with behavioral problems and/or emotional disabilities.

Specifically, there were three research questions. The first research question asks if the created Difficult to Place (D2P) measure could successfully predict the number of placement disruptions a youth experiences prior to entering the study, and this finding was supported. The second research question asked if the created D2P measure could predict youth's feelings of positive home integration in the foster home, and this finding was not supported. Finally, the third research question used Chi Square tests to examine potential associations between D2P scores and caregiver characteristics (work, income, education, relationship to youth). Results of these tests suggest that relationship to youth is significantly associated with D2P score, in that youth who score higher on the D2P measure are less likely to be placed with relative caregivers.

Difficult to Place Youth and Placement Disruptions

The first research question, which uses Child Behavior Checklist scores, CROPS scores, and DSM diagnoses to create the D2P variable, and then uses the created variable to predict number of placements, had significant findings. This means that the higher a youth scores on a D2P measure, the more placements they might have prior to baseline. This finding was true for both younger and older siblings, meaning that regardless of age, the number of behavioral problems and/or emotional disabilities a youth has, the more placement disruptions they will experience.

Furthermore, this finding is consistent with other literature on placement challenges associated with mental health (Greeno et al., 2016, etc.- see above literature review) but adds an important finding: the ***more*** behavioral and/or emotional disabilities a youth has upon entering care, the harder finding a stable placement will be. Mental health and placement stability for youth in foster care is a thoroughly researched area, and these findings support the general research in that it underscores and importance for early intervention for youth in care, especially

for youth in care with behavioral problems and/or emotional disabilities. Put together, these findings suggest that mental health challenges are associated with more placement disruptions for youth in care, which is in turn linked to more behavioral problems and/or emotional disabilities later on in development (Greeno et al., 2016; Waid et al., 2016). In this sense, targeting interventions for mental health for youth in foster care early on in their foster care trajectory (e.g., when a child first enters the system) may not only reduce the number of placement disruptions they experience overall, but may also minimize health challenges and related effects over time.

From a PPCT perspective, understanding the relationship between behavioral problems and placement instability is useful for understanding contextual influences on development for a youth in foster care. Research already suggests that demand characteristics of the person such as age or gender may be associated with placement instability, and findings suggest that interactions between a youth and their environment may indeed be bidirectional in nature. Findings also suggest that other person characteristics (such as resource characteristics, or behavioral and/or emotional problems) and context characteristics (such as the foster home) may impact placement stability for youth in foster care. More research is needed, however, to determine process, time, and other contextual factors outside foster home that may impact this relationship as well.

Positive Home Integration

The second research question, which asks if D2P successfully predicts positive home integration, did not achieve significance for older or younger siblings. It is important to note, however, that future research should examine potential differences in the relationship between behavioral and/or emotional problems and positive home integration for older and younger siblings. Because results of this study indicated potential differences by age, and both models

were approaching significance, this could be a finding worth exploring further. In addition, PHI was significantly correlated with age at baseline for older siblings (but not younger siblings) so future research examining positive home integration may need to consider age as a factor as well. It may be that older youth are better equipped to recognize or describe feelings of home integration within their foster home, and thus the associations may be different for older siblings when compared to younger siblings. Differences between siblings may exist as a function of age, but they may also exist because of birth order. For example, older siblings may have different experiences with PHI than younger ones because they have more responsibilities in the home.

Findings from this analysis may also be the result of limited sample sizes. Because sample sizes were limited for this analysis, and many variables were included in the final model, a more succinct model with fewer variables and a more robust sample would increase power in this analysis. Future research should consider nested models or alternative measures of relationship quality within the foster home to test for differences in sibling groups. In addition, interventions aiming at improving relationship quality within the foster home may need to consider behavioral and/or emotional problems of the youth, as well as youth age and sibling living situation when strategizing ways to improve relationship quality in the foster home.

Caregiver Characteristics

The third research question, which was exploratory in nature, suggests that for caregivers of youth with behavioral problems and/or emotional disabilities, caregiver education, employment and relationship to youth may be important areas for future research as well as intervention focus. First, relationship to youth was significantly associated with D2P scores for both older and younger siblings, in that youth scoring higher on the D2P measure were less likely to be placed with a relative. This means that a substantial portion of caregivers of youth in

high scoring groups are not biologically related to the youth they care for. This may contrast with previous findings (Waid et al., 2016) that kinship caregivers have more motivations to provide care because they know the child. It may be that for youth with behavioral and/or emotional problems, relatives may already be familiar with their behaviors and the caregiving burdens associated with them, and so therefore rely on nonrelative caregivers to provide care when possible. It may also be that caregivers who choose to take in youth with behavioral problems and/or emotional disabilities do so for other reasons (e.g., religious or altruistic values, because they can't have children of their own, etc.), which is supported by the literature (Daniel, 2011), or because they feel they have adequate resources and knowledge to provide care to this hyper-vulnerable group. Research examining motivations for care in foster families should pay close attention to caregivers of youth with behavioral problems and/or emotional disabilities, as their experiences may tell a unique story about caregivers of this subgroup of youth in care. More research is needed that focuses on foster caregivers specifically in order to understand more ways to "support the caregivers to support the child" (Schorman, Coniega & Renwick, 2006) for youth with behavioral problems and/or emotional disabilities. Beyond interventions, this finding may have policy implications for foster families. Current policies incentivize care for relative youth, but these findings suggest that allocating additional supports for nonrelative caregiver, particularly those with additional trainings, certifications, etc., related to foster caregiving, may be especially salient for youth with behavioral problems and/or emotional disabilities.

Although findings for education and income were not significantly associated with D2P scores, associations did reach significance for caregiver education and older siblings, and approached significance for work and younger siblings. These findings have implications for future research for several reasons. First, despite very small sample sizes, the fact that these

associations approached significance suggests that there may be a relationship between caregiver characteristics and D2P score that we may not have been able to uncover in this sample. Future research should examine work life and educational attainment of caregivers of youth in foster care in order to fully understand this relationship. Second, that associations were different for older siblings and younger siblings suggests a need for more research in this area as well. Future research should test for differences between older and younger siblings in their associations with caregiver characteristics. For example, because younger youth may require caregivers to spend more time at home due to their age, work life may be particularly relevant for younger siblings in care. On the flipside, older youth with behavioral problems and/or emotional disabilities may need support from their caregivers navigating school systems (Mires et al., 2017), suggesting that caregivers may value their own education as a tool to help them navigate those related challenges. Both ideas point towards the need for more research in their respective areas, as well as more research on differential effects for siblings in care.

Limitations

As with any study, there are many limitations to consider. First, by adding types of behavioral and/or emotional problems into one variable, we are not able to fully examine differences in types of behaviors (e.g., externalizing behaviors vs. diagnosed bipolar disorder, etc.). This means that there may be some overlap (e.g., a youth who has clinical levels of externalizing behaviors as well as a diagnosed conduct disorder), and it means we may be missing some valuable pieces of the picture, like differences between types of disorders. In future research, it would be useful to separate these various measures of mental health in a different way so as to avoid any overlap or missingness. For example, the three separate measures may uniquely predict placement stability for youth in care, but the story might be

different for older and younger siblings. Future research should consider associations between the created D2P variable and the component measures to see which approach would best be able to predict placement trajectories for youth in care. Because this summative nature is a new way to measure mental health in the context of youth in foster care, it is still pertinent to this research question and the findings are applicable to this population.

Second, this study utilized baseline data from a major RCT involving siblings in foster care. While data collected in the larger study relatable to the topic of mental health for youth in foster care, only baseline data was utilized, meaning there might be a different story to be told over time. In addition, while SIBS encompasses a wide variety of information pertaining to multiple reporting agents in the foster home (i.e., youth and caregivers), research examining characteristics of the foster home that may be related to youth mental health may need to utilize more home-level and caregiver specific characteristics to be able to fully examine effects. Placement stability is a dynamic variable that changes over time, meaning that using a more longitudinal approach to analysis while also being more inclusive of factors relevant to caregivers may provide a more holistic view of the relationships between the given constructs. Additionally, mental health is a dynamic variable as well, meaning that if caregivers are able to seek appropriate treatment for their youth in care (e.g., counseling), symptoms may improve over time, but symptoms may worsen for youth not able to receive treatment, which may impact placement stability further, again pointing to the need for longitudinal analysis.

Third, caregiver report of their personal and home characteristics such as educational attainment and income received very high levels of missingness in their reports. While high levels of missingness made more complicated measures of statistical analysis more difficult, it is still important to note that because very few studies have been able to collect and analyze data on

foster caregivers, this novel approach in child welfare research should still be considered a strength, because results suggest areas for future research. For example, it is helpful from a research perspective to note where potential differences in low scoring and high scoring D2P groups may exist (like caregiver education and relationship to youth) so as to target variables and related research questions for future research. Future studies examining foster caregivers in a more central light would help answer these research questions and detect where interventions or supports may be necessary to aid foster families.

Along those lines, the sole measure of relationship quality within the foster home used in this study was positive home integration, or PHI. The PHI is a well-established measure of home integration for youth in care (Waid et al., 2017). However, baseline scores for PHI did not indicate much variability in scores at baseline, although scores became more varied over time. It may be that youth felt relatively satisfactory with their placements at baseline, but may feel differently as time progresses. It may also be that the restricted nature of this small sample made the ability to detect variation more difficult. For instance, it may be that youth with available DSM diagnoses data (or available D2P scores) indicate less variation in feelings of home integration at baseline than the full sample of youth in care. This indicates a need for future research examining PHI over time for youth in foster care with behavioral problems and/or emotional disabilities. In addition, PHI examines feelings of integration in the foster home in general. While this may be helpful for understanding how a youth feels about their placement, it would also be helpful to know how a caregiver specifically feels about their placement, or a caregiver-report of integration in the foster home. This would be useful from a research perspective because it could help describe foster caregiver characteristics associated with placement stability. Future research may need to examine measures of relationship quality

between youth and caregivers specifically in order to fully understand how to support caregivers of these youth. For example, youth who experience rejection by foster parents may exhibit more behavioral problems as a result (Lipscombe et al., 2003), pointing to the relative significance of intentionally crafted questions and measures that focus on that relationship specifically, so as to create a more accurate proxy for the caregiver-youth relationship.

Implications

It seems that for youth experiencing behavioral problems and/or emotional disabilities, their experiences in the foster care system may be different than for youth not experiencing these challenges. These experiences may also differ by how old the youth is while in care (e.g., older siblings vs. younger siblings.). Examining characteristics, motivations, and needs of caregivers may aid recruitment and training efforts to support able caregivers of difficult to place youth. Examining where potential differences exist among caregivers will allow for expansion on current supports for caregivers, as well as developments of new supports to (1) meet needs of caregivers (2) support continued care over time and (3) minimize subsequent placement disruptions for youth. In particular, foster caregiver education may be a prime area for intervention and child welfare research. Parent education programs may be a useful tool for caregivers, especially those caring for youth with mental health challenges. Some parent education programs have begun adaptations to become more relevant to foster caregivers (e.g., KEEP), but more development is needed to incorporate child behaviors and caregiver stress into existing interventions.

Beyond parent education programs for foster parents, findings again point to the relative importance of early action for youth in foster care. For example, when a youth is first placed in a home, it would be helpful for child welfare agencies to provide measures of mental health for

youth so that caregivers can recognize any behavioral problems and/or emotional disabilities right away. This points to a need for more thorough and responsive screening process (like a triaged system) for mental health for youth so that caregivers can be prepared and supported to meet their needs. In addition, results pertaining to kinship suggest that structured supports for caregivers and youth may look different depending on whether they are related or strangers to each other.

Finally, because of the unique nature of the larger SIBS study, findings point to the importance of the role of sibling relationships for youth in foster care. Although sibling relationships were not the central focus of this study, future research should consider effects of the relationship between siblings for high D2P scoring youth. Research suggests that warm, positive relationships between siblings in care is a major protective factor in moderating the traumatic effects of foster care (Waid, 2014; Wojciak et al., 2018) but more research is needed to examine the nature of this relationship for youth with behavioral or mental health challenges.

Research examining placement stability for youth in foster care often encompasses child level and home level factors. Factors affecting placement stability for youth in foster care may look different for youth with behavioral problems and/or emotional disabilities than for typically developing youth. By thoroughly studying this subgroup of hyper-vulnerable youth in care, child welfare systems may be better able to meet the needs of these youth. In addition, caregiver and home level characteristics may be related to placement stability for youth, indicating another direction for future research. Research should look beyond minimizing problem behaviors in youth and instead examine characteristics of the foster home as well as caregivers to help achieve placement stability for youth. By doing this, child welfare systems are better able to

"support the caregivers to support the child" as well as support the child themselves in order to create safe, stable home environments for youth.

CHAPTER 5: BIBLIOGRAPHY

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