INDIVIDUAL AND ORGANIZATIONAL CHARACTERISTICS ASSOCIATED WITH
SUPERVISOR RETENTION IN TREATMENT FOSTER CARE SETTINGS

A Thesis in
Health Policy and Administration
by
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Abstract

Previous research on what individual-level and organizational characteristics may be related to supervisor retention in treatment foster care (an evidence-based model for delivering children’s mental health services) settings have been limited. This study uses quantitative interviews collected between 1998-2002 from mental health agency directors and treatment foster families in North Carolina. The study utilizes a bivariate analysis to begin to explore the relationships among individual-level supervisor and organizational characteristics and individual supervisor retention. The study also looks at whether individual supervisor retention is related to the perceptions by treatment foster parents of their respective supervisors, specifically whether the supervisor understood the child and parent needs in the treatment foster care (TFC) program.

Analysis of the individual characteristics shows that there was a statistically significant relationship between supervisor retention and supervisor’s age, specifically that older and more experienced supervisors were more likely to stay in the TFC program. In terms of treatment parent characteristics, older (more than 45 years old) parents and those who were female were also related to supervisor retention in the program. Furthermore, if the supervisor had a very good understanding of the child’s needs as per the parent’s perception, this was related to supervisor retention. The organizational characteristic analysis in this study reveals that organization size and ownership status were not significant predictors of individual supervisor retention in the TFC program.

This study may provide future guidance to mental health care professionals on how to evaluate supervisor retention strategies for TFC programs that assess the interpersonal relationship dynamics between supervisors, treatment foster parents, and foster children.
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CHAPTER 1: Introduction

Over the past two decades, treatment foster care (TFC) has evolved into an evidence-based model for delivering children’s mental health services in the United States. One of the critical components underlying this intervention is the relationship between the agency supervisors, foster parents, and children in the TFC program. Successful relationships take time to develop, and turnover is a significant problem in many health and social service agencies (Ellett, Ellis, Westbrook, and Dews, 2007). Therefore, the retention of agency supervisors may be an important prerequisite of TFC program implementation. However, much is unknown about what supervisor and organizational characteristics are related to supervisors’ ability to stay with an organization that provides TFC programs.

The intent of this thesis is to evaluate how individual supervisor and organizational characteristics relate to retention of supervisors. The study will use quantitative interview data collected between 1998-2002 from 45 mental health agency directors and 183 treatment foster families in North Carolina. These interviews will attempt to shed light on how some of the individual and organizational factors of agencies, supervisors, and foster families are associated with individual supervisor retention at organizations that offer focused children’s mental health services.
CHAPTER 2: Background

Motivation and Question to be Addressed

There are ongoing recruitment and retention challenges associated with mental health care professionals in the United States (Koppelman, 2004). This can be readily conceptualized as employee turnover. The annual turnover of mental health care professionals who implement and sustain evidence-based practices can range from 25-50% (Aarons and Sawitzky, 2006). More than half of all experienced (those with more than 5 years of experience) mental health professionals either change jobs or exit the profession altogether after treating individuals with a spectrum of behavioral issues (Sheidow, Schoenwald, Wagener, Allred, and Burns, 2006). Although more than 80% of all funding for mental health care programs is spent on direct and indirect labor costs (Sheidow et al., 2006), determinants of employee retention have not been extensively addressed in this field. The motivation for this thesis is to investigate what individual supervisor characteristics and organizational characteristics may be related to retention in treatment foster care settings. Identifying these characteristics may prove useful to understanding how to retain qualified mental health workers in order for evidence-based mental health programs to produce meaningful treatment outcomes and to curb labor costs.

Chamberlain’s Treatment Foster Care (TFC) model established a new evidence-based framework for providing mental health services to children and adolescents with major behavioral and emotional problems in a family-based treatment environment (Chamberlain, 2002; Farmer et al., 2009). TFC allows foster parents to serve in dual capacities as primary mental health care providers and surrogate caregivers to individual youths within their own homes. Foster parents are provided with a multi-faceted and systematic training and support system that attempts to maximize their chances of success in the TFC program. While
Chamberlain’s model is the premier evidence-based version, there are TFC programs in the U.S. that use a variety of approaches and models (FFTA, 1995; Farmer et al., 2009). These programs share essential features (e.g., treatment foster parents as primary front-line treatment providers; training, support, and supervision that are viewed as “more intense” than for traditional foster care), but vary widely in implementation and effectiveness (Farmer, et al., 2002; Farmer, et al., 2009). An underlying feature of TFC models is a reliance on intensive in-vivo supervision and support for treatment foster parents by their agency-based supervisors. It is assumed in the field that development of the relationship between the supervisor and the foster parent is essential for both implementation and safety, and that such relationships develop over time. However, there have not been studies that look at the individual and organizational factors related to individual supervisor retention in TFC program settings.

Research Aims

This paper examines attributes of organizations, treatment foster care supervisors, and foster parents that may predict whether a supervisor stays with the program for 6 months or longer, which is the minimum amount of time needed for a child to potentially benefit from the TFC program (Saldana, Chamberlain, Wang, and Brown, 2011; Moore and Chamberlain, 1994). The primary research questions posed are: “What individual characteristics (i.e. age, gender, and race) are associated with supervisor retention in the TFC program?” and “What organizational characteristics (i.e. size and ownership status) are associated with supervisor retention in the TFC program?” The secondary research question related to the supervisor’s individual characteristics is: ‘Do treatment foster parent perceptions of whether a supervisor understands child and parent needs play a role the retention of individual supervisors?’

This observational study will provide preliminary information about factors related to retention
and, hopefully, basic guidance for policymakers and researchers about the factors associated with retaining qualified mental health care caseworkers.
CHAPTER 3: Literature Review

Children’s Mental Health Care Employee Retention

Previous studies have indicated that employee retention and turnover is a significant factor for a majority of mental health care agencies trying to implement evidence-based practices (Woltmann, Whitley, McHugo, Brunette, Torrey, Coots, Lynde, and Drake, 2008). The most common reasons for employee turnover from an agency perspective were low levels of clinical knowledge, adoption of new practice protocols, and overall teamwork dynamics (Woltmann et al., 2008). However, these studies do not provide information on individual supervisor characteristics that may affect employee turnover within an agency context. From an individual employee perspective, there are a variety of reasons why turnover may occur. One study suggests that male case workers under the age of 40 with high stress levels are more likely to be dissatisfied with the profession and exit altogether (Hopkins, Cohen-Callow, Kim, and Hwang, 2010). Furthermore, African-American or Latino case workers serving at agencies located in high-density urban areas may be more likely to experience higher stress levels that contribute to employee turnover (Hopkins et al., 2010). Other personal factors that may lead to employee turnover include work/life imbalances due to 24/7 on-call support, fear of litigation, and indifference to the profession at large (Ellett, Ellis, Westbrook, and Dews, 2006). However, there is a lack of literature regarding methods or strategies to evaluate or improve employee retention at an individual level within children’s mental health care agencies.
Agency Perspective on Children’s Mental Health Care Employee Retention

Agencies that retain their employees typically offer comprehensive job and retirement benefits, flexible work schedules, dynamic work environments, continuous education, and a sense of purpose (Ellett et al., 2006). Individual employees who decide to remain with their agency or organization are more likely to demonstrate a high degree of competence required to carry out the tasks of the profession, be more realistic about the short- and long-term expectations of the job, not take themselves too seriously, and are welcoming of feedback from multiple sources (Ellett et al., 2006). They are also more likely to be more introspective and thoughtful about creating positive change for children and families from an individual and community perspective. However, these studies do not provide information on organizational characteristics that may affect employee turnover within agencies that implement TFC programs.

TFC Program Guidelines on Employee Retention

The Foster Family-based Treatment Association (FFTA) produced a set of expert-based guidelines for Treatment Foster Care programs in the United States. Case supervisors bear much of the responsibility in the field for coordinating the TFC program for children and their foster families. The FFTA guidelines suggest that supervisors develop the goals related to the coordination and ongoing support of treatment services provided to foster children, foster children’s biological families, and persons/agencies that may be directly or indirectly affiliated with TFC programs as treatment team members (FFTA, 1995). However, the FFTA does not provide local agencies with guidance or resources to help them retain their supervisors. There are no guidelines regarding individual supervisors’ length of stay with foster families or the agency. Agencies are expected to provide individual supervisors with annual performance
reviews dealing with current and future job performance (FFTA, 1995). However, the FFTA has not provided guidance on developing methods or questionnaires that ascertain how to assess organizational characteristics (i.e. organization size and ownership status) at agencies that sponsor TFC programs that may impact employee retention and turnover.

**How this Analysis Addresses Gaps in Literature Review**

This quantitative analysis intends to fill in the gaps by beginning to explore what individual-level supervisor and organizational characteristics determine long-term employee retention at TFC agencies across North Carolina. The analysis is based on data from agency director and treatment parent interviews developed for use in North Carolina TFC settings. Specifically, the individual supervisor’s length of stay derived from the parent interviews is used as a variable, in addition to the individual supervisor’s age, gender, and racial characteristics, to develop a preliminary assessment of what determines an individual supervisor’s retention within a TFC program. In addition, data from the agency director interviews includes agency size and ownership status as potential organizational factors that may determine an individual supervisor’s retention at agencies that implement TFC programs.
CHAPTER 4: Conceptual Framework

The conceptual framework in Figure 1 depicts the relationship between individual supervisor characteristics, organization-level characteristics, and supervisor retention at TFC agencies. Supervisor and organizational characteristics are viewed as having a bidirectional relationship with each other because both individual supervisors and organizations have an impact on likelihood of recruitment and retention. Individual supervisor or agency characteristics are viewed as being directly related to employee retention in the TFC program. The reasoning behind these relationships is due to the evolving needs and wants of individuals and organizations to continually identify whether there is a proper fit between the agency, foster family, and supervisor. As the TFC program was being implemented, the parents were interviewed by researchers about their satisfaction with the individual supervisor and agency at 6-month intervals. The ability of the supervisor to address the child’s and parents’ needs over the course of the TFC program serves as a mediating variable in determining the retention of supervisors in the program (perceived ability to meet needs may both be affected by longer retention (as relationships have a chance to develop) and may affect retention (since poor ability to meet needs could be an indicator of poor role performance or fit and may encourage a supervisor to seek alternative employment options). Using the current data, an individual supervisor’s retention can be determined by the length of stay in the TFC program. If the supervisor’s length of stay with the child/family is 6 months or more, this was taken as a minimal level of tenure necessary to potentially enact the supervisory role (Saldana, Chamberlain, Wang, and Brown, 2011; Moore and Chamberlain, 1994). If the supervisor’s length of stay is less than 6 months, then the current definition suggests that this is insufficient to create the potential for adequate implementation.
Three factors explored in this thesis may be related to the retention of supervisors at TFC agencies. The first factor is a supervisor’s individual characteristics. Previous studies have explored the relationship between clinician characteristics (i.e. age, gender, and race) and workforce turnover in other intervention settings (Mor Barak, Nissly, and Levin, 2001, Sheidow et al., 2006). Race has also been viewed as a status characteristic that may be related to retention (Jones and Harter, 2005).

The second factor is the organizational characteristics. To the best of my knowledge, previous studies have not explored organizational size and ownership status in relation to employee retention in TFC settings. Size may be an indicator of organizational infrastructure and a proxy for a range of factors that may affect retention. An organization’s size may help determine staffing levels and employee turnover by the degree of centralized or decentralized decision-making within the agency (Sheidow et al., 2007). A TFC agency’s ownership status (i.e. for-profit or non-profit) may also determine employee retention.

The third factor in this model is the level of TFC parent satisfaction with the supervisor. This is a mediating variable in the conceptual framework because it can strengthen or weaken individual supervisor’s and/or agency’s characteristics and supervisor retention. Previous studies have not explored parent satisfaction in relation to employee retention in mental health service settings. If the supervisor is proactive and knowledgeable about how to cater to the child’s and parent’s needs, then the supervisor is more likely to be more engaged with the TFC program (Ellett et al., 2007). TFC agencies and supervisors may use parent feedback to determine the supervisor’s effectiveness in implementing the evidence-based model. Therefore, the parent satisfaction rating of the supervisor may contribute to individual supervisor retention at TFC agencies.
Figure 1: Conceptual Framework

Supervisor Characteristics
- Age
- Race
- Gender

Organizational Characteristics
- Size
- Ownership Status (Public/Private Non-Profit, Private For-Profit)

TFC Parent Satisfaction Rating of Supervisor
- How well supervisor understands the child’s needs?
- How well supervisor understands the parent’s needs?

Supervisor Retention at TFC Agency
- Minimum Length of Stay within TFC Program (6 months or longer)
CHAPTER 5: Data & Research Methods

Participants

This analysis uses quantitative interview data from a National Institute of Mental Health-funded study conducted between 1998-2002 from a sample of 45 mental health agency directors and 183 families in North Carolina (Farmer et al., 2003). Data included interview responses by agency directors and treatment parents who participated in the TFC programs during the study period. The sampling frame for the agency director and treatment parent interviews is based on the Willie M. class-action lawsuit. This case mandated the state of North Carolina to offer a suitable set of mental health services to children and adolescents with mental health disorders or severe aggressive behavior (Behar, 2003; Farmer et al., 2009). To capture the delivery and utilization of mental health services to the children and adolescents named in the lawsuit, the state developed an electronic mental health records database that contains more than 1,000 at-risk youth at any point in time (Farmer et al., 2009). The Willie M. legal precedent enabled researchers to conduct research on the variation of locally delivered mental health care within the context of statewide payment and administrative information systems (Farmer et al., 2009).

Procedures

A sample of 183 youth in the TFC program was selected from the Willie M. database that identified youth receiving TFC during the relevant years. Researchers conducted in-person interviews with 45 agency directors and 183 TFC families. The broader study was a longitudinal and included repeated data collection with a variety of respondents. For the purposes of the current analysis, all data come from the baseline interviews with agency directors and treatment parents. The agency director interview contained a wide range of topics, including the
organizational structure (i.e. size, for-profit/non-profit status). The TFC parent interview also consisted of a wide range of topics, including questions on the demographic characteristics of the child, parent, and supervisor. In addition, parents were asked to rate their satisfaction level in regards to working with the supervisor in terms of dealing with child’s and parent’s needs. Completed interview data was collected for 97% of the parents (n=177). There was a minimal amount of missing data in the included set of variables.

Protocols, consents, and measures were approved by the Institutional Review Board (IRB) at Duke University School of Medicine. Duke remains the IRB of Record for this study and an authorization agreement was signed between Duke’s IRB and Penn State’s IRB to cover use of these data for secondary data analysis at Penn State.

**Measures**

The data for the child, treatment parent, and individual supervisor characteristics is taken from the treatment parent interviews. The data for the organizational characteristics is taken from the agency director interviews. The treatment parent interviews included a variety of standardized and study-developed questions. The measures developed in the agency director interviews were based on FFTA standards (Farmer et al., 2009).

**Child and Treatment Parent Characteristics**

Child age is based on treatment parents’ responses. Based on the age range of 4-19, I decided to code child’s age into three categories (ages 4-12, 13-15, and 16-19). These categories were coded to reflect the childhood, early-adolescent, and late-adolescent stages of the life cycle (Wilder, 2003). Child race, a seven-category scale, asked whether the child was 1 (African-American), 2 (American Indian), 3 (Hispanic), 4 (Asian), 5 (White), 6 (Biracial), and 7 (Other).
The majority of the children in this sample were coded as African-American (n=75) or White (n=100). In addition, there were 1 Hispanic, 1 American Indian, 5 biracial, and 2 children of unidentified racial origins in the sample. It was important for me to identify the general racial diversity of the foster child population but there was insufficient sample size to examine this for each individual racial/ethnic category. Therefore, child’s race was coded as White and Non-White. Non-Whites are comprised of African-Americans, Hispanic-Americans, American Indians, Biracial, and children of other racial origins. The child’s gender has been coded as Male or Female. In addition, a variable was created to observe the child’s length of stay in the program by calculating the difference (in days) between the admitting and discharge dates. The range of the length of stay variable was a minimum of 35 days to 3,743 days. The mean length of stay was 518 days with a standard deviation of 552.5 days. The large standard deviation and variance in the sample suggest tremendous variation of the child’s length of stay. Previous research findings suggest that a minimum length of stay of 180 days or 6 months is needed to impact behavioral outcomes of a child that participates in the TFC program (Saldana, Chamberlain, Wang, and Brown, 2011; Moore and Chamberlain, 1994).

Parent age, which is measured as a continuous variable, ranges from 21-77 years in the treatment parent interview data set. TFC parent age has not been examined in previous studies. However, I felt it was important to categorize the age differences based on whether children resided with younger or older parents. For this reason, the parent’s age has been coded into two categories (ages 21-45 and 46-80). Parent race, a seven-category scale, looked at whether the parent was 1 (African-American), 2 (American Indian), 3 (Hispanic), 4 (Asian), 5 (White), 6 (Biracial), and 7 (Other). As with the children, the majority of the parents in this sample were African-American (n=93) and White (n=83). In addition, there were 2 Hispanic, 1 American
Indian, 3 Biracial, and 1 parent of unidentified racial origins in the sample. As was the case for children, it was important to me to identify the general racial diversity of the foster parent population rather than specific effects for each race/ethnicity. Therefore, the parent’s race has been coded as White and Non-White. The parent’s gender has been coded as Male or Female.

To measure how well the supervisor understood the child and parent needs, a three-category response scale was used to determine if the parent felt that the supervisor 2 (Very well understood), 1 (Somewhat understood), or 0 (Not at all understood) the parent’s and child’s needs. The majority of parents in this sample perceived that supervisors very well understood the parent needs (n=137) and child needs (n=141). There were some parents who perceived that supervisors somewhat understood the parent needs (n=39) and child needs (n=33). Only a few parents perceived that supervisors did not understand the parent needs (n=5) and child needs (n=4). However, I felt it was important to categorize the ratings based on whether parents rated supervisors in a positive or negative manner. Therefore, I decided to create two dichotomous variables for the parent perception of the supervisor’s ability to meet the parent and child needs, respectively. If the supervisors very well understood the parent and child needs, this was rated as 1. If the supervisors somewhat understood or did not understand the parent and child needs, this was rated as 0.

**Individual Supervisor Demographic Characteristics**

Supervisor age was gathered with less specificity and asked foster parents to indicate whether the supervisor was 1 (less than 30 years of age), 2 (between 30-50 years of age), and 3 (over 50 years of age). The majority of the supervisors in this sample (n=176) were under the age of 30 or between the ages of 30-50 years. There were a few supervisors (n=5) that were over the age of 50. It was important to me to reduce the number of categories of the supervisor
population because of the small number of supervisors over the age of 50. I also reasoned that supervisors in the age categories of 30-50 and over 50 could both be categorized as more experienced supervisors. Those under 30 would be more likely to be categorized as less experienced supervisors. Therefore, I coded the supervisor’s age into two categories (less than 30 and greater than or equal to 30). Supervisor race, a six-category scale, looked at whether the parent was 1 (African-American), 2 (non-Hispanic White), 3 (Hispanic-American), 4 (Asian American), 5 (American Indian), and 6 (Other). The majority of the supervisors in this sample were coded as African-American (n=69) or White (n=104). There was only one Hispanic supervisor in this study. Therefore, the supervisor’s race has been coded as White and Non-White. The supervisor’s gender has been coded as Male or Female.

Because this analysis is concerned with individual supervisor retention, it is important to determine how long the supervisor stayed in the TFC program. If the supervisor spent more than 6 months with the child and parent in the TFC program, then it is likely that the supervisor had time to develop a relationship (Saldana, Chamberlain, Wang, and Brown, 2011; Moore and Chamberlain, 1994). If the supervisor had not stayed with the foster family for the duration, then amount of weeks spent can be calculated from the parents’ report of when the supervisor first started working with them. Weeks were converted into days in order to make the units of measurement consistent with the child’s length of stay variable. Given the 6-month threshold that has been posited for adequate time, a dichotomous variable was created for the supervisor’s retention in the program by taking the data from the treatment parent interview and linking it to the child’s length of stay in the program. If the supervisor had not stayed with the foster family for the duration, then amount of weeks spent can be calculated from the parents’ data. Weeks were converted into days in order to make the units of measurement consistent with the child’s
length of stay variable. Therefore, a dichotomous variable was created for the supervisor’s retention in the program by taking the data from the treatment parent interview and linking it to the child’s length of stay in the program.

If the supervisor retention variable equals 1, then the supervisor has spent at least 6 months (180 days) or more with the foster family. If the supervisor retention variable equals 0, then the supervisor has spent less than 6 months with the family. This new supervisor retention variable provides information on whether or not the supervisor was not only present during the child’s entire stay in the TFC program, but also whether the minimal time was spent by the supervisor with the child for the program to have a potentially positive treatment effect (Saldana, Chamberlain, Wang, and Brown, 2011; Moore and Chamberlain, 1994).

**Agency Organization Characteristics**

Ownership status, a three-level variable, looked at whether the organization was 1 (public), 2 (private non-profit), or 3 (private for-profit). Organization size (the number of homes each agency’s TFC program currently has licensed) is measured as a continuous variable in the agency director interview data set. The number of homes each agency’s TFC program currently has licensed is rated as 1 (1-5 homes), 2 (6-10 homes), and 3 (more than 10 homes).

**Data Analysis**

First, descriptive statistics on all study variables are presented. Next, bivariate models are used to evaluate the strength of the association of all factors displayed in the conceptual framework and individual supervisor retention in the TFC program. In the bivariate analysis, each explanatory variable related to the individual supervisor, organization, and treatment parent satisfaction rating of the supervisor is cross-tabulated with the supervisor retention variable. For
the organizational characteristics, each explanatory variable related to the size and ownership status of each agency is cross-tabulated with the supervisor retention variable. For the bivariate model, the chi-square with alpha at 0.05 represents statistically significant results. All data analysis was conducted using SAS version 9.2.
CHAPTER 6: Results

Individual Characteristics

Descriptive statistics of the individual characteristics are furnished in Table 1. The youngest age of a child enrolled in a TFC program in this sample was 4 years old. The oldest participant was 19 years old. The mean child age is 14.1 years with a standard deviation of 2.7 years. Approximately 40% of the children are between the ages of 13-15. Thirty-seven percent of the children are between 16-19 years of age. About 24% of the children were between the ages of 4-12. This indicates that most of the children in the TFC program can be classified as early- or late-adolescents. In terms of the children’s racial/ethnic diversity, there were 75 African-American and 100 White children in the sample. In addition, there was one Hispanic and American Indian in the sample. Furthermore, there were 7 biracial and other children of various racial compositions. In terms of children’s gender diversity, approximately 75% of the sample was male and 25% female.
### Table 1: Descriptive Statistics of Demographic Variables

<table>
<thead>
<tr>
<th>Child Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>4-12</td>
<td>23.5%</td>
</tr>
<tr>
<td>13-15</td>
<td>39%</td>
</tr>
<tr>
<td>16-19</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>74%</td>
</tr>
<tr>
<td>Female</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>59%</td>
</tr>
<tr>
<td>Non-White</td>
<td>41%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>21-45</td>
<td>44%</td>
</tr>
<tr>
<td>46-80</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>14.1%</td>
</tr>
<tr>
<td>Female</td>
<td>85.9%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>49%</td>
</tr>
<tr>
<td>Non-White</td>
<td>51%</td>
</tr>
</tbody>
</table>

**Parent Satisfaction Scores In Relation to Supervisor Performance**

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good Understanding of Child’s Needs</td>
<td>80%</td>
</tr>
<tr>
<td>Very Good Understanding of Parent’s Needs</td>
<td>75%</td>
</tr>
<tr>
<td>Satisfied with Parent-Supervisor Relationship</td>
<td>87.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Supervisor Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>27.6%</td>
</tr>
<tr>
<td>≥30</td>
<td>72.4%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26%</td>
</tr>
<tr>
<td>Female</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>57.8%</td>
</tr>
<tr>
<td>Non-White</td>
<td>42.2%</td>
</tr>
</tbody>
</table>
The minimum and maximum parent age ranges in the treatment parent interview data set was 21 and 77 years old, respectively. The mean parent age is 46.4 years with a standard deviation of 9.8 years. In terms of parent racial/ethnic diversity, there were 93 African-American and 83 White parents. However, there were a combined 7 Hispanic, American Indian, biracial, and other parents of undetermined race in this study. In terms of treatment parent gender diversity, approximately 86% of the sample was female and 14% male.

In terms of the treatment parent rating of how well the supervisors understood the child’s needs, the majority of parents provided positive ratings. Almost 80% of parents (n=141) perceived that supervisors understood the child’s needs very well. More than 18% of parents (n=33) felt supervisors partially understood their children’s needs. Approximately 2% of parents (n=4) felt supervisors did not understand their children’s needs at all. In terms of the treatment parent rating of how well the supervisors understood the parent’s needs, more than 75% of parents (n=137) perceived that supervisors understood their needs very well. More than 21% of parents (n=39) felt supervisors partially understood their needs. Almost 3% of parents (n=5) felt supervisors did not understand their needs at all.

The majority of the supervisors in this sample were under the age of 30 (n=50) or between the ages of 30-50 years (n=126). However, there were a few supervisors (n=5) that were over the age of 50. In terms of supervisor racial/ethnic diversity, there were 69 African-American and 104 White supervisors in the sample. In addition, there was one Hispanic and six supervisors of other ethnic origins in this study. In terms of gender diversity, almost 75% of TFC supervisors were female. The range and mean of the supervisor length of stay (to date) is mapped to the child’s length of stay in the program. Supervisor length of stay variable ranged from 35 to 3,743 days. The mean supervisor length of stay was 518 days with a standard
deviation of 552.5 days. Based on the standard deviation and variance values, a non-normal distribution exists for the supervisor’s length of stay.

Table 2 shows the bivariate relationship of the individual supervisor, organization, and parent satisfaction rating of the supervisor characteristic variables cross-tabulated with the individual supervisor retention variable. Based on findings from the sample, TFC supervisors in 67% of the homes stayed for the entire length of the youth’s stay.

Table 2: Bivariate Models: Explanatory Individual Supervisor Characteristics and Satisfaction Scores Cross-Tabulated With Individual Supervisor Retention Variable (N=183)

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>Chi-Square Value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor’s Age</td>
<td>14.76</td>
<td>0.0001</td>
</tr>
<tr>
<td>Supervisor’s Gender</td>
<td>1.10</td>
<td>0.2941</td>
</tr>
<tr>
<td>Supervisor’s Race</td>
<td>1.61</td>
<td>0.2041</td>
</tr>
<tr>
<td>Parent’s Age</td>
<td>3.92</td>
<td>0.0478</td>
</tr>
<tr>
<td>Parent’s Gender</td>
<td>4.01</td>
<td>0.0451</td>
</tr>
<tr>
<td>Parent’s Race</td>
<td>0.46</td>
<td>0.4955</td>
</tr>
<tr>
<td>Parent’s Rating of Supervisor to meet Child’s Needs</td>
<td>4.30</td>
<td>0.0381</td>
</tr>
<tr>
<td>Parent’s Rating of Supervisor to meet Parent’s Needs</td>
<td>0.28</td>
<td>0.5940</td>
</tr>
<tr>
<td>Parent’s Rating of Supervisor in terms of parent-supervisor relationship</td>
<td>1.28</td>
<td>0.2577</td>
</tr>
</tbody>
</table>

The analysis revealed that there was a statistically significant relationship between supervisor retention and supervisor’s age (p≤0.0001). From the treatment parent interviews, approximately 84% of supervisors at least 30 years or older (n=100) had spent at least 6 months with the treatment foster family. On the other hand, about 49% of supervisors under the age of 30 (n=19) had spent at least 6 months with the treatment foster family.
In addition, there was a statistically significant relationship between supervisor retention and parent’s age (p≤0.05). Out of the 159 treatment parent interview responses, about 55% of the parents (n=87) were between the ages of 46-80. Over 80% of these older foster parents (n=70) worked with supervisors who stayed with the foster family for at least 6 months. Although 45% of parents were ages 21-45 (n=72), 67% of those (n=48) whose supervisors stayed at least 6 months were in this age range. This suggests that supervisors who work with middle-aged or elderly foster parents may be more likely to be retained in TFC programs.

Also, there was a statistically significant relationship between supervisor retention and parent’s gender (p≤0.05). From the 122 supervisors who stayed with the foster family for at least 6 months or more, approximately 90% of the parents were female (n=110), compared to 10% of parents that were male (n=12). This suggests that supervisors who work with female foster parents are more likely to be retained in TFC programs. Moreover, there was a statistically significant relationship between supervisor retention and the supervisor understanding the child’s needs (p≤0.05).

From the 118 supervisors who stayed with the foster family for at least 6 months, almost 87% of the parents (n=102) felt that the supervisors very well understood the child’s needs; 13% of parents (n=16) felt that the supervisors partially understood or did not understand the child’s needs. This suggests that supervisors who were viewed as having a very good understanding of the child’s needs were more likely to be retained in TFC programs.

**Organizational Characteristics**

Descriptive statistics of the organizational characteristics are furnished in Table 3. In terms of the agency size, the smallest number of homes an agency’s TFC program currently has
licensed in this sample was 1 home. The largest number of homes an agency had licensed was 235 homes. The mean TFC licensed homes per agency is 35.6 homes with a standard deviation of 50.8 homes. The large standard deviation and variance in the sample suggests a non-normal distribution of TFC licensed homes per agency. Twenty-five agencies (60%) have more than 20 TFC licensed homes. Eight agencies have between 6-10 licensed homes; 8 agencies have between 1-5 licensed homes. From an ownership status perspective, there were 21 public, 11 private for-profit, and 10 private non-profit foster care agencies. Furthermore, the majority of agencies (97%) that provide TFC services also provide other children’s services.

Table 3: Agency Characteristics (n=42)

<table>
<thead>
<tr>
<th>Agency Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (# of TFC homes agency currently has licensed)</td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>20%</td>
</tr>
<tr>
<td>6-10</td>
<td>20%</td>
</tr>
<tr>
<td>&gt;10</td>
<td>60%</td>
</tr>
<tr>
<td>Ownership Status</td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>50%</td>
</tr>
<tr>
<td>Private, non-profit</td>
<td>24%</td>
</tr>
<tr>
<td>Private, for-profit</td>
<td>26%</td>
</tr>
<tr>
<td>Do agencies provide services beyond TFC?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>97%</td>
</tr>
<tr>
<td>No</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 4 shows the bivariate relationship of the organizational characteristic variables cross-tabulated with the individual supervisor retention variable. In general, TFC supervisors stayed for the entire length of the youth’s stay in program. The data showed that there were no statistically significant relationships between supervisor retention and organization size. In addition, there were no statistically significant relationship between supervisor retention and the
organizational ownership status. Publicly-owned agencies that had 1-5 TFC licensed homes showed that 80% of the agencies had supervisors that stayed on for at least 6 months or greater. Publicly-owned agencies that had 6-10 TFC licensed homes showed that 83% of the agencies had supervisors that stayed on for at least 6 months or greater. Publicly-owned agencies that had more than 10 TFC licensed homes showed that 67% of the agencies had supervisors that stayed on for at least 6 months or greater. Private non-profit agencies that had 10 or more TFC licensed homes showed that approximately 85% of the agencies had supervisors that stayed on for at least 6 months or greater. There were not enough observations to report any meaningful results for private non-profit agencies that had 1-5 and 6-10 TFC licensed homes. Private for-profit agencies that had more than 10 TFC licensed homes showed that approximately 65% of the agencies had supervisors that stayed on for at least 6 months or greater. There were not enough observations to report any meaningful results for private for-profit agencies that had 1-5 and 6-10 TFC licensed homes.

Table 4: Bivariate models: Explanatory organizational characteristic variables cross-tabulated with individual supervisor retention variable (n=42)

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>Chi-Square Value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization Size</td>
<td>2.63</td>
<td>0.4125</td>
</tr>
<tr>
<td>Organization Ownership</td>
<td>2.46</td>
<td>0.2922</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 7: Discussion

Discussion

This thesis sheds new light on the relationship between children enrolled in the TFC program, their foster parents, and respective case supervisors. Moreover, it begins to address the limited evidence of the role of individual supervisor characteristics and parent satisfaction ratings on individual supervisor retention within the TFC program. The findings of this analysis suggest that there is a significant relationship between a supervisor’s age and retention in the TFC program. This finding differs from previous studies that found individual supervisor characteristics do not play a role in employee retention (Sheidow et al., 2006). In addition, a significant relationship was found between the parent’s age and gender in relation to individual supervisor retention in the TFC program. Moreover, a significant relationship was seen between the parent’s satisfaction rating of the supervisor to meet the child’s needs and the individual supervisor’s retention in the TFC program. Both of these significant findings suggest that the quality of the relationship between the parent and supervisor may be an important building block in developing the foundation of the TFC program. Hiring experienced supervisors to work with mature parents to help children cope with various mental health issues may improve the quality of the working relationship between parents and supervisors in TFC programs.

There were a number of weak relationships between individual supervisor characteristics, parent satisfaction ratings, and individual supervisor retention. A supervisor’s gender and race seem to be possible correlates of individual supervisor retention, but this study might be underpowered in terms of sample size to reach that conclusion. Parent satisfaction scores that rated the relationship between the parent and supervisor seem to be moderately correlated with individual supervisor retention. Regardless, these findings taken together suggest that
interpersonal characteristics and dynamics may play a key role in determining individual supervisor retention in the TFC program.

There were several statistically insignificant relationships between organizational characteristics and individual supervisor retention. Organizational size and individual supervisor retention are not statistically correlated with each other. In addition, organizational ownership status and individual supervisor retention were not correlated with each other.

A major strength of this analysis is that is afforded a glimpse into the individual and organizational level factors from a supervisor’s perspective that drives employee retention in the TFC program. It provides constructs, measures, and statistically significant findings for employee retention in a therapeutic foster care setting. Data were available on a demographically diverse sample of children, supervisors, and treatment parents in various programs across the state of North Carolina. Due to these factors, it builds the groundwork for future research on employee retention in evidence-based mental health care settings, specifically home-based settings.

**Limitations**

**Generalization**

The population of this study is TFC agencies within the state of North Carolina. The results of the study may not apply to other TFC agencies in different states or urban hospitals. The level of parent-supervisor relationships and agency engagement may also differ between states. Likely differences may exist in how each state defines these events, even if their laws appear the same. Each state may modify the TFC program standards in their own way.
similar analysis may be conducted if more TFC program standards are consistently implemented in other states.

**Measurement**

In the proposed study, there may be variation in the definition of agency caseworker recruitment/retention measures by agency within North Carolina. Variations in quality/safety within agencies in North Carolina may or may not be related to each agency’s caseworker’s recruitment/retention rates. Two different agencies might be starting from two different points, or have other policies in place that influence these issues. Differences may not be related to the recruitment/retention policies themselves. Further investigation is needed to understand differences outside the recruitment/retention policies within North Carolina. In addition, moderate to significant reporting bias may exist in the treatment parent interviews. Parents that self-report may provide incorrect answers on individual-level characteristics of children and supervisors, producing variation in the sample data.

**Organization Characteristics**

One of the primary limitations in this analysis is that organization characteristics could not be clearly defined and analyzed. This is because the agency director interviews were not designed to evaluate organization characteristics pertaining to individual supervisor retention. This makes it difficult to establish correlation between agency characteristics and individual supervisor retention in TFC settings. As a result, the findings from this analysis are not as comprehensive as originally envisioned.

**Outcome Variable**

The individual supervisor retention variable was newly created for the purposes of this thesis. This outcome variable is based on incomplete data because the original study was not
designed to measure individual supervisor’s actual tenure in the TFC program. Linking the outcome variable to the supervisor’s length of stay in the TFC program may not be the most practical way to measure this variable, but it allows for an introduction to this field of study.

**Sample Size**

This study consisted of only 45 agency directors and 183 families in North Carolina. This small sample size may have led to some of the findings being underpowered and not being statistically significant. Hopefully, longitudinal research will permit a larger sample size for future studies.

**Conclusion**

This analysis represents a positive step in a critical field. Mental health services represent a growing sector of the health care industry. As mental health agencies struggle to recruit and retain qualified mental health supervisors and case workers, a deeper understanding should develop among agencies about what individual and organizational characteristics influence employee retention. This is especially true in highly specialized evidence-based practice models. A supervisor’s years of experience in the TFC program is potentially vital in the long-term implementation of the program. Newly hired supervisors in a therapeutic foster care setting should be provided with resources on how to manage the stress of the job and employer so that the delivery of focused mental health services does not become negatively affected. Federal or state policymakers should draft legislation that proposes to enforce that TFC agencies maintain a safe working environment and provide equitable pay for newly employed and experienced mental health supervisors. How a supervisor caters to the child’s needs is significantly more important to parents than how the parents are catered to. Organizations may be able to better retain their inexperienced and experienced employees by providing tools to improve supervisor-family relationships. Future research should investigate the retention
strategies that high-performing TFC agencies employ to retain high-performing supervisors. Also, the interpersonal dynamics between TFC parents and supervisors should be explored in terms of helping a child develop long-term emotional and social skills to cope with life’s challenges.
References


