

## RESEARCH ARTICLE

---

# Predictors of Head Start Teachers' Perceived Quality of Relationships with Families

Alison Hooper

*The University of Alabama*

Juana Gaviria-Loaiza

*University of Delaware*

The relationship between home and school is an important component of children's early educational experiences. However, little research has examined the home-school relationship from the perspective of teachers. This study examines whether teacher characteristics predict how Head Start teachers rate the quality of their relationships with families using data from the Head Start Family and Child Experiences Survey (FACES), 2014 cohort. Results suggest that teacher characteristics, including job satisfaction, caregiving beliefs, and depressive symptoms, predict how they perceive their relationships with families. Supporting teachers' psychological wellbeing may be one effective strategy for promoting positive relationships between teachers and families.

*Keywords:* home-school relationships, early childhood education, Head Start

## INTRODUCTION

The relationship between school and home is an important factor in young children's learning and development. Parents' engagement in their children's education is linked to improved academic and social-emotional outcomes (Christenson & Sheridan, 2001; Pomerantz, Moorman, & Litwack 2007). Specifically, although as many as 60% of families utilize some form of non-parental early care and education (ECE; Laughlin, 2013), research has found that parents play a greater role in supporting children's development than ECE teachers and programs (NICHD Early Child Care Research Network, 2002). Therefore, the potential for children's learning is greatest when teachers and parents have strong relationships (Epstein, 2001).

There is significant research considering the role of family engagement in children's learning in ECE (Daniel, Wang, & Berthelsen, 2016; Galindo & Sheldon, 2012; Hill & Taylor, 2004).

However, little of this work has focused on the role of the teacher in supporting family engagement through the quality of his or her relationship with families (Christenson & Carlson, 2005). This is increasingly important given the growing cultural and linguistic diversity found in ECE classrooms. Families from diverse background often face barriers to involvement in their child's education, including language barriers and cultural differences that may not be understood by the ECE program (Öztürk, 2013).

Head Start specifically includes family engagement as a central component of its program model. In fact, Head Start has a legislative mandate to include families in program decisions and to offer families support and opportunities for involvement (Parker et al., 1997). This mandate is reflected throughout the Head Start Performance Standards (US Department of Health and Human Services, 2016).

Most studies of teacher-family relationships in ECE and K-12 have focused on the family's perception of the relationship. However, it is also important to consider how teachers perceive their relationships with families. Teachers' characteristics, such as their psychological wellbeing, have been found to influence teachers' receptiveness towards children and their job-related stress (Jeon, Kwon, Walsh, Burnham & Choi, 2019). However, little is known about the ways in which teacher characteristics may influence how they perceive their relationships with families, and in turn how those perceptions influence the ways they interact with children and families. This study aims to address the first part of this question by using nationally representative data to examine the teacher characteristics that relate to how Head Start teachers in the United States perceive their relationships with families.

## LITERATURE REVIEW

### Teacher-Family Relationships

Family engagement is an important aspect of quality in ECE settings, and the relationship between teachers and families is one factor that can influence family engagement. When there are strong teacher-family relationships, it can affect children's adjustment and families' satisfaction with their ECE program (Weiss, Caspe, & Lopez, 2006). Previous research has identified that characteristics like trust, open communication, and collaboration all contribute to positive teacher-family relationships in ECE (Elicker, Noppe, Noppe, & Fortner-Wood, 1997; Elicker, Wen, Kwon, & Sprague, 2013; Shanti, 2017).

Specifically, three important components of the teacher-family relationship have emerged through prior research and serve as a foundation for defining family-provider relationship quality: family-specific knowledge, attitudes about families, and teacher practices with families (Bromer et al., 2011; Forry et al., 2012).

*Family-Specific Knowledge.* Family-specific knowledge is defined as the knowledge teachers have about families generally—such as knowledge of factors that promote healthy family functioning and effective parenting practices—as well as knowledge about the specific families they are serving. This includes teachers' knowledge about families' employment, their economic

situations, and their traditions and beliefs, as well as an awareness of families' needs and their strengths. When teachers and families engage in reciprocal information sharing, it encourages teachers to engage in more responsive care practices and to be more attentive to family needs (Bromer et al., 2011).

*Attitudes About Families.* Forry et al. (2012) identified five attitudes that are important in building positive teacher-family relationships: respect, commitment and caring, empowerment, openness to change, and having a contextual perspective. Respect includes valuing the child and families' cultural and linguistic preferences and being non-judgmental. Commitment and caring refers to the teacher's encouragement and accessibility with families, as well as willingness to be flexible and sensitive to needs of families. Empowerment refers to identifying family strengths and including families as equal partners. Teachers who are open to change show willingness to alter their typical practices in response to families. Finally, having a contextual perspective refers to appreciating that children's development occurs in context and is situated in a family and community (Forry et al., 2012).

Challenges can arise when teachers and families have cultural differences, especially related to child-rearing practices (Bernhard, Lefebvre, Kilbride, Chud, & Lange, 1998; Lang, Tolbert, Schoppe-Sullivan, & Bonomi, 2016). When parents perceive that teachers do not accept their culture or childrearing practices, this can act as a barrier to family engagement (Grace & Trudgett, 2012). Overall, teachers tend to perceive their level of respect for families more highly than it is perceived by families (Hadley & Rouse, 2018).

*Practices Related to Families.* Teacher practices that are hypothesized to facilitate teacher-family relationships emerge from both relational skills and goal-oriented skills. Teachers with strong relational skills engage in reciprocal communication that is responsive to families' goals and culturally responsive (Halgunseth, Peterson, Stark, & Moodie, 2009). Important goal-oriented skills include participating in advocacy and promoting families to advocate, connecting families to resources and information that is relevant to them, and engaging in joint decision-making (Bromer et al., 2011; Forry et al., 2012). Research suggests that a higher frequency of teacher-parent communication is correlated with higher classroom quality (Ghazvini & Readdick, 1994). Teachers use a wide range of strategies to communicate with families, including the use of technology. However, they still report facing barriers to reaching families, such as family distractions and disengagement and lack of time on the part of both teachers and families (Barnes, Guin, Allen, & Jolly, 2016).

## Benefits of Teacher-Family Relationships

Research suggests that when teachers build strong relationships with families, these relationships can act as a buffer against risk factors like including poverty and family instability (Nalls et al., 2010). This is especially important for children attending Head Start. Most children enrolled in Head Start qualify for the program as a result of living in poverty, and many face multiple risk factors which can be detrimental to academic and social outcomes (Crosnoe & Cooper, 2010; Duncan & Magnuson, 2013). Positive teacher-family relationships are related to better social-emotional outcomes in young children. Some studies have identified that strong teacher-family

relationships relate to positive academic outcomes (Mendez, 2010; Rimm-Kaufman, Voorhees, Snell, & La Paro, 2003), social outcomes (Churchill, 2003; Dunst & Dempsey, 2007;), and health outcomes (Palfrey et al., 2005).

Strong parent-teacher relationships are related to increased family involvement (Knopf & Swick, 2007; Lang et al., 2016). When families feel comfortable with a teacher, they are more likely to share information and concerns, which can help teachers better individualize their instruction (Baker & Manfredi-Petitt, 2004). Another benefit of positive family-teacher relationships is that parents feel more empowered and competent in their childrearing abilities (Dunst & Dempsey, 2007; Knopf & Swick, 2007). When families have positive, close relationships with teachers, it can also influence their parenting practices and their home learning environment (Dunst & Dempsey, 2007; Dunst & Trivette, 2010).

### Measuring the Teacher-Family Relationships

Scholarship on family engagement has typically focused on the teacher or another service provider, such as a home visitor, rating the family's level of involvement or their commitment. Research focusing specifically on the teacher-family relationship has most often included collecting parents' perspectives through surveys or interviews or doing direct classroom observations (Galinsky, 1990; Ghazvini & Readdick, 1994; Swartz & Easterbrooks, 2014). Less research has attempted to understand the phenomenology of the relationship from the relationship from the teacher's perspective.

Until recently, there has not been a measure that comprehensively examined the quality of family and provider/teacher relationships in ECE. The Family and Provider/Teacher Relationship Quality (FPTRQ) suite of measures (Kim et al., 2014) was developed to address this need. The FPTRQ measures the quality of the relationship from the perspective of ECE directors, teachers, parents, and family services staff. It measures the constructs of Knowledge, Attitudes, Practices, and Environmental Features. A series of questionnaires was developed to incorporate three widely-used perspectives on family engagement: family support or family-centered care, family engagement or involvement, and family-sensitive caregiving (Forry et al., 2012). This new measure has the potential to capture the teacher-family relationship from multiple perspectives and comprehensively examine knowledge, practices, and attitudes using one reliable and valid questionnaire.

### Teacher Characteristics Related to Teacher-Family Relationships

Because how teachers perceive their relationships with families may be an important dimension of family-teacher relationship quality to understand, it is necessary to examine the ways in which teacher characteristics may relate to how they perceive these relationships.

*Teacher Depressive Symptoms.* Compared to the general population, Head Start teachers seem to have higher prevalence rates of depressive symptoms (Whitaker, Becker, Herman, & Gooze, 2013; Whitaker, Dearth-Wesley, & Gooze, 2015). For example, Whitaker et

al. (2015) found that in a sample of 1001 Head Start teachers, 25% of them reported depressive symptoms considered to be clinically significant by the CES-D measure. For the general population, an estimated 7% of American adults had at least one major depressive episode in 2016, with rates being higher among women (NIMH, 2018).

Early childhood teachers' depressive symptoms have been linked to distinct aspects of their job. Different studies have found a negative link between early childhood teachers' depressive symptoms and their teaching practices (e.g., Jeon, Buettner, & Snyder, 2014; Sandilos et al., 2015), as well as with their professional motivation and job-related stress (Jeon et al. 2019). Further, a study by Hindman and Bustamante (2018) found that Head Start teachers' depressive symptoms seemed to fluctuate throughout the year and to be linked to children's behavior problems and prosocial skills per teachers' ratings.

Depression has often been included as a component of psychological wellbeing along with other factors such as stress and anxiety. Recent research has considered the role teachers' psychological wellbeing plays in their relationships with children (Hamre & Pianta, 2004), their self-efficacy beliefs (Kim & Kim, 2010), their commitment to the field (Buettner, Jeon, Hur, & Garcia, 2016), classroom quality (Pianta et al., 2005), and student learning outcomes (McLean & Connor, 2015). However, there is a limited body of literature examining early childhood teachers' depressive symptoms and the quality of their relationship with families, and studies that examine these constructs have different findings. For instance, in a study that examined predictors associated with early childhood teachers' psychological wellbeing, Jeon et al. (2018) found that teachers' depressive symptoms were negatively associated with teachers' level of job competence and perceived working conditions, and were positively related to chaotic environments. However, authors did not find a significant association between teacher-perceived support from families and teachers' depressive symptoms, whereas a previous study by Curbow et al. (2000) found that teachers' psychological wellbeing was indeed influenced by the social support from families.

*Job Satisfaction.* Head Start teachers' job satisfaction seems to be influenced by a variety of factors, primarily their relationships with coworkers and program leadership (Cumming, 2017). Teachers have reported higher satisfaction when they have autonomy and opportunities for decision-making at work (Leana, Appelbaum, & Shevchuk, 2009). Although research has not specifically considered the relationship between job satisfaction and the quality of teacher-family relationships, a study by Baker et al. (2010) found that teachers with higher levels of job satisfaction had greater levels of participation in implementing a classroom intervention to promote school readiness.

*Teacher Beliefs.* Teachers' beliefs about early childhood teaching are often classified as teacher-directed and didactic or as progressive and child-centered. These beliefs are shaped by many factors, including their early experiences and culture (Schreiber, Moss, & Staab, 2007). Teacher beliefs are associated with classroom quality (Charlesworth et al., 1993; Clarke-Stewart et al., 2002). Previous research has found that although Head Start teachers across levels of classroom quality tend to report high child-centered beliefs, they vary more in their didactic beliefs, with teachers in lower-quality classrooms having higher didactic beliefs (McCarty, Abbott-Shim, & Lambert, 2001).

*Teacher Education.* Teachers' level of education and years of experience have both been found to be related to the quality of teacher-child relationships (Kontos & Wilcox-Herzog, 2001). However, little research has examined the role teacher education and experience play in teachers' perceptions of teacher-family relationships. Knoche, Sheridan, Edwards, and Osborn (2009) found that years of experience in ECE was related to how successfully teachers implemented an intervention designed to support positive parenting. Additionally, teachers with more experience had more parent involvement in their classroom (Castro, Bryant, Peisner-Feinberg, & Skinner, 2004). Sumison (1999) conducted a case study of a beginning teacher and found that the teacher's perspective of relationships with families shifted from one of self-preservation to one of collaboration over the course of two years. These findings suggest that years of experience may relate to how teachers view their relationships with families.

Swartz and Easterbrooks (2014) found that in infant and toddler classrooms, teachers with the most education and who were the most knowledgeable about child development viewed relationships with parents less positively than other teachers. This corresponds to older literature that found that teachers may avoid getting too close to parents because they want to maintain professional boundaries (Powell & Stremmel, 1987).

## THEORETICAL FRAMEWORK

The current study draws on the Family Provider Relationship Quality Conceptual Model (Forry et al., 2012). Children attending Head Start are influenced by both their family and home environment and that of their teacher and classroom. Teachers play an important role in ensuring this interaction of family and classroom positively affects children's development. For example, teachers can influence their relationships with families through their abilities to successfully coordinate opportunities for meaningful family engagement (Hoover-Dempsey & Sandler, 1997). The Family Provider Relationship Quality Conceptual Model (Forry et al., 2012) proposes that effective provider facilitation of family-provider relationships is influenced by a number of teacher and program characteristics. These include the personal and professional characteristics of the teacher, specifically their mental health, values, stressors, and resources. This conceptual model suggests that family-provider relationships are related to immediate outcomes, including higher-quality teaching, more positive provider attitudes towards families and their work, and more family engagement and empowerment. Positive family-provider relationships also contribute to longer-term impacts. These include child outcomes, such as increased academic and social-emotional skills; family outcomes, such as family well-being and positive parent-child relationships; and provider outcomes, including decreased job turnover (Forry et al., 2012). The model also highlights that there are three distinct but related constructs that make up teachers' relationships with families: attitudes towards families, knowledge about families and building relationships with families, and practices used with families (Ajzen & Fishbein, 2005).

The existing literature on the teachers' personal and professional characteristics that facilitate family-provider relationships is limited. Although studies have linked teachers' beliefs to their practices (McCarty et al., 2001; Trivette, Dunst, Hamby, & Meter, 2012), little is known about how teacher beliefs, practices, and personal characteristics such as years of experience, level of education, job satisfaction, and psychological wellbeing influence how they perceive their

relationships with families. The purpose of the present study was therefore to explore teacher characteristics that may influence the way teachers perceive the quality of their relationships with families. The study explores these research questions: 1) How do Head Start teachers perceive the quality of their relationships with families?, and 2) What teacher characteristics predict the perceived quality of Head Start teachers' relationships with families?

## METHODS

Data for this study come from the Head Start Family and Child Experiences Survey, 2014 cohort (FACES 2014; Tarullo et al., 2017). Head Start FACES is a nationally representative descriptive study of Head Start programs, teachers, children, and families funded by the Office of Planning, Research and Evaluation, an office of the Administration for Children and Families in the U.S. Department of Health and Human Services. FACES 2014 is the sixth cohort of the study, preceded by cohorts in 1997, 2000, 2003, 2006, and 2009. Different from previous cohorts, the FACES 2014 sample is representative of all Head Start children and families rather than only new entrants to Head Start. The current study utilized the data from the teacher survey within FACES.

### Sample

FACES 2014 used a multistage sampling approach, sampling programs, centers, classrooms, and children (Tarullo et al., 2017). A total of 667 Head Start classrooms from 346 centers provided data for the FACES 2014 dataset. The outcome measure of interest, how teachers perceived relationships with families, was collected for teachers as an addition to the survey in Spring 2015, which 422 teachers completed. These additional survey questions were one piece of the Family Engagement Plus study that accompanied the FACES 2014 core data collection. A total of 229 teachers responded to FPTRQ questions. Therefore, the analytic sample for this study is 229 teachers. Almost half of the teachers (49%) had a bachelors' degree. The majority of teachers were White (41%), followed by Hispanic (29%) and black (25%). On average teachers were 49 years old and reported low depressive symptoms ( $M=3.5(SD=4.1)$ ) and high levels of job satisfaction ( $M=4.4(SD=0.8)$ ). Characteristics of the teachers in the sample are presented in Table 1.

Table 1

*Descriptive Statistics for Teacher Characteristics and Perceived Relationship Quality*

	<i>n</i>	<i>%</i>	<i>M (SD)</i>	<i>Min-Max</i>
Gender	229			
Male	10	4.4		
Female	219	95.6		
Education	230			
Associate's degree or less	64	27.8		
Bachelor's degree	112	48.7		
Graduate credits or graduate degree	54	23.4		
Race/Ethnicity	227			
Non-Hispanic White	94	41.4		
Non-Hispanic Black	57	25.1		
Hispanic	65	28.6		
Other	11	4.8		
Age	226		44.9 (11.4)	25-60
Depressive symptoms	225		3.5 (4.1)	0-22
Job satisfaction	230		4.4 (0.8)	1-5
Years of teaching	230		14 (9)	0-30
Beliefs	230			
Child-initiated			4.4 (0.5)	2.4-5
Didactic			2.5 (0.7)	1-5
FPTRQ total score	203		73.2 (7.5)	50-89
Family-specific knowledge	229		12.2 (3.0)	5-20
Attitudes	203		30.0 (2.8)	18-36
Practices	229		30.6 (3.9)	18-36



## Measures

*Family and Provider/Teacher Relationship Quality.* The quality of the teachers' perceived relationships with the families of the children in their classroom was measured by the Family and Provider/Teacher Relationship Quality (FPTRQ) Provider/Teacher Measure Short Form (Kim et al., 2014). This tool was designed to be used by early childhood education providers and teachers in a broad range of ECE settings, including Head Start. It has been field-tested with racially and ethnically diverse populations across socioeconomic status (Kim et al., 2014). Teachers respond to 23 items about their work with parents, specifically focused on their knowledge about families, practices with families, and attitudes towards families. These items are aggregated to obtain a total score, as well as construct scores in family-specific knowledge, practices, and attitudes. Most items are scored on a four-point Likert scale, with some additional items scored yes or no. An example item from the family-specific knowledge construct is "I know how parents discipline their child," one item from the practices construct is "How often are you able to set goals with parents for their child?", and an item from the attitudes construct is "Sometimes it is hard for me to support the way parents raise their children."

Construct and total scores are calculated by adding individual items after reverse-scoring negatively worded items as indicated in the scoring manual. The measure has high item response rates, and Cronbach's alphas for each construct were at the acceptable level (0.6) or higher in the field test of the short form of the measure (Ramos et al., 2014).

*Depressive symptoms.* Teachers' depressive symptoms were measured using the short (12-item) version of the Center for Epidemiologic Studies-Depression scale (CES-D). Teachers provided information on their mood by reporting the presence of certain feelings about life and themselves within the last week. Some sample items include "I felt everything I did was an effort" and "I felt depressed". Responses consisted of a four-point scale ranging from "rarely or never" to "most of the time." Higher scores indicate higher levels of depressive symptoms. This measure has obtained high internal consistency across different studies, with Cronbach's alpha coefficients between .84 and .90 (Radloff, 1977). Particularly, in FACES 2006 and 2009 coefficients ranged from 0.8 to 0.88. The analytic sample for this study had an internal consistency of .829.

*Job satisfaction.* Teachers' job satisfaction was measured by three items in the teacher survey: how much they enjoyed their present job, how much they felt they were making a difference in the lives of the children they are teaching, and whether they would choose teaching as a career again. They rated these items on a five-point scale. A sample item is "If I could start over, I would choose teaching again as my career." Teachers' satisfaction score was calculated by taking a mean of these three items, with higher scores indicating higher levels of satisfaction. The internal consistency for this sample was .880.

*Teacher Beliefs.* Beliefs were measured using 15 items from the Teachers Beliefs Scale (Burts, Hart, Charlesworth, & Kirk, 1990). Teachers rated the degree to which they agreed or disagreed with a series of statements about practices generally accepted to be developmentally appropriate for Head Start children using a five-point Likert scale. The child-initiated subscale (five items) and didactic subscale (six items) scores were used in FACES 2014. These subscales were identified based on a previous principal components factor analysis (West et al., 2010). An

example of an item from the child-initiated subscale is “Children in Head Start classrooms should learn through active explorations.” An example of an item from the didactic subscale is “Head Start teachers should use punishments or reprimands to encourage appropriate behavior.” Higher scores indicate stronger agreement with the construct. In FACES 2009, Cronbach’s alpha coefficients ranged from 0.66 to 0.69 for the child-initiated subscale and from 0.70 to 0.78 for the didactic subscale indicating an acceptable internal consistency for this measure. For this sample, the internal consistency was 0.765 for the child-initiated subscale and from 0.756 for the didactic subscale.

*Other Teacher Characteristics.* Four variables representing teacher demographic characteristics were also included in this analysis. Teachers’ years of experience, age, highest level of education, and race and ethnicity were selected because previous findings have suggested differences in results due to these characteristics. For example, some studies have reported differences among teachers of different race/ethnic groups and years of experience in the perceptions of children’s behaviors and relationships (e.g., Mashburn, Hamre, Downer & Pianta, 2006) and that years of experience are related to self-efficacy (Klassen & Chiu, 2010) and relationships with children (Whitaker et al., 2015). Additionally, there is some evidence that teachers’ level of education relates to the quality of their instruction (Early et al., 2006).

Teachers reported on their years of experience in the teaching field, which is a continuous variable. Teacher age in years was included as a continuous variable. Highest level of education was recoded into a categorical variable with the following categories: 1) associate’s degree or less, 2) bachelor’s degree, and 3) graduate credits or graduate degree. The race/ethnicity of the teacher was included as a categorical variable with the following categories: 1) White, non-Hispanic, 2) Black, non-Hispanic, 3) Hispanic or Latino, and 4) other race.

## Analysis

Descriptive statistics were used to examine the means and frequencies of the variables of interest for the analytic sample. Multiple regression models were then run for four outcome variables: the FPTRQ total score, the attitudes construct score, the knowledge of families construct score, and the practices with families construct score. Teacher depressive symptoms, job satisfaction, child-centered and didactic beliefs, years of experience, and highest level of education were included in the models as predictors. Teacher race/ethnicity and age were included as control variables. Analyses were conducted in Stata (Version 13), and all analyses included sampling weights to provide nationally representative estimates. The percentage of missing data on predictor variables ranged from 0% to 1.6%. Missing data was handled using listwise deletion.

## RESULTS

Teachers had a mean score of 73.2 on the FPTRQ ( $SD = 7.5$ ), 12.2 on the family-specific knowledge construct ( $SD = 3.0$ ), 30.0 on the attitudes construct ( $SD = 2.8$ ), and 30.6 on the practices construct ( $SD = 3.9$ ). The FPTRQ authors have not defined thresholds for high and low scores on the measure. Therefore, we converted these mean construct scores into percentages of

the points possible to assist with interpretation. The most frequently and least frequently endorsed items for each construct are also listed. However, even the least frequently endorsed items had means above 2, meaning that teachers report doing the practices or holding the beliefs asked about at least some of the time.

The maximum possible score on the family-specific knowledge construct is a 20.0; therefore, teachers on average earned 61% of the possible points on this construct. Of the five items, teachers most frequently agreed that they knew about families' culture and values. They least often agreed that they knew how families disciplined their children. The maximum score possible for the attitudes construct is a 36.0. Teachers earned an average of 83.3% of the possible points on this construct. Of the nine items, teachers most often said that they teach and care for children because they enjoy it. They earned the lowest score for the item about supporting how parents raise their children. For the practices construct, the maximum possible score is 36.0 points, and teachers in the sample earned an average of 85.0% of points possible. They most often reported frequently talking to parents about children's progress. Teachers least often reported that they believed it was part of their job to respond to issues or questions outside of normal care hours.

Table 2 shows correlations between the constructs of the FPTRQ and with the teacher characteristics examined. The constructs of the FPTRQ are moderately correlated with one another ( $r = .286$  to  $r = .530$ ). The significance of correlations between the predictors and FPTRQ constructs varied; for example, provider depressive symptoms were negatively correlated with attitudes about families ( $r = -.246$ ,  $p < .001$ ) and with practices with families ( $r = -.128$ ,  $p = .045$ ) but were not significantly correlated with knowledge about families ( $r = -.080$ ,  $p = .21$ ). Table 3 displays the results of the multiple regression models. Models were significant for the total scores and the construct scales. These models along and their significant predictors are described below.

Table 2

*Pearson Correlations between FPTRQ Scores and Teacher Characteristics*

Variables	1	2	3	4	5	6	7	8	9	10	11
1. FPTRQ Attitudes	–										
2. FPTRQ Knowledge	.29***	–									
3. FPTRQ Practices	.53***	.42***	–								
4. FPTRQ Total Score	.76***	.71***	.86***	–							
5. Teacher age	.12	-.01	.13*	.15*	–						
6. Highest education	.09	.00	.09	.07	-.06	–					
7. Years of experience	.11	.06	.12	.17*	.73***	-.06	–				
8. Job satisfaction	.20**	-.01	.15*	.15*	.10*	.02	.12**	–			
9. Depressive symptoms	-.25***	-.08	-.13*	-.19**	-.08	-.02	-.07	-.13**	–		
10. Didactic beliefs	-.14*	-.02	-.02	-.10	-.18***	-.02	-.22***	-.04	.20***	–	
11. Child-initiated beliefs	.25***	.20**	.12	.24***	.05	.06	.15***	.21***	-.08*	-.28***	–

\* $p < .05$ , \*\*  $p < .01$ , \*\*\* $p < .001$

Table 3

*Multiple Regression Results for FPTRQ Total Scores and Construct Scores*

	FPTRQ Total		Family-specific knowledge		Attitudes		Practices	
	<i>b</i> (se)	<i>B</i>	<i>b</i> (se)	<i>B</i>	<i>b</i> (se)	<i>B</i>	<i>b</i> (se)	<i>B</i>
Black	1.64(1.36)	0.09	-1.12(0.52)*	-0.16	1.15(0.51)*	0.17	1.52(0.65)*	0.17
Hispanic	-1.08(1.29)	-0.07	-0.58(0.52)	-0.08	-0.16(0.49)	-0.02	-0.62(0.64)	-0.07
Other	1.07(2.85)	0.03	-1.20(1.03)	-0.08	0.42(1.07)	0.03	0.04(1.36)	0.00
Age	-0.01(0.06)	-0.02	-0.05(0.02)*	-0.18	0.01(0.02)	0.06	-0.00(0.03)	0.00
BA degree	1.3(1.21)	0.09	-0.16(0.48)	-0.3	0.75(0.46)	0.13	0.75(0.6)	0.1
Graduate credits or degree	3.29(1.57)*	0.18	0.54(0.6)	0.07	0.63(0.59)	0.09	1.48(0.74)*	0.16
Years of teaching	0.08(0.08)	0.1	0.07(0.03)*	0.21	-0.01(0.03)	-0.05	0.03(0.04)	0.06
Depression	-0.16(0.15)	-0.09	-0.04(0.05)	-0.55	-0.15(0.06)*	-0.2	-0.10(0.07)	-1.1
Satisfaction	1.06(0.6)	0.12	-0.17(0.24)	-0.05	0.62(0.23)**	0.19	0.59(0.3)*	0.13
Child-initiated	2.98(1.09)**	0.21	1.10(0.41)**	0.19	1.15(0.41)**	0.21	0.94(0.52)	0.13
Didactic	0.40(0.77)	0.04	0.72(0.3)*	0.18	0.07(0.29)	0.02	0.04(0.37)	0.00
Observations	198		221		198		221	
R-squared	0.151		0.123		0.182		0.138	
F-stat	3.01		2.66		3.77		3.03	
prob > F	0.00		0.00		0.00		0.00	

\*\*\* p<0.001, \*\*p<0.01, \* p<0.05

### Family Provider/Teacher Relationship Quality

The regression model explained 15.1% of the variance of the teachers' FPTRQ total scores ( $R^2 = .151$ ,  $F(11, 186) = 3.01$ ,  $p < 0.001$ ). Having some graduate school credits or a graduate degree compared to an associate's degree was positively related with relationship quality ( $b = 3.29$ ,  $p < 0.05$ ). Teachers who have had some experience with graduate education scored 3.29 points higher on the FPTRQ than teachers who only had completed an associate's degree. Likewise, having more child-centered beliefs positively predicted the FPTRQ total score ( $b = 2.98$ ,  $p < 0.01$ ). For each unit increase in the child-centered beliefs measure, teachers scored 2.98 points higher on the FPTRQ.

### Family-Specific Knowledge

The regression model explained 12.3% of variance of teachers' family-specific knowledge ( $R^2 = .123$ ,  $F(11, 209) = 2.66$ ,  $p < 0.01$ ). Compared to White teachers, Black teachers scored 1.12 points lower in the family-specific knowledge construct ( $b = -1.12$ ,  $p < .05$ ). Teachers' age ( $b = -.05$ ,  $p < 0.05$ ) negatively predicted teachers' family-specific knowledge. Further, having more child-centered beliefs ( $b = 1.10$ ,  $p < .01$ ) and didactic beliefs ( $b = .72$ ,  $p < .05$ ), as well as years of teaching ( $b = -.07$ ,  $p < .05$ ) positively predicted teachers' family-specific knowledge.

### Attitudes

The regression model explained 18.2% of variance for teachers' attitudes about families ( $R^2 = .182$ ,  $F(11, 186) = 3.77$ ,  $p < 0.01$ ). Compared to White teachers, Black teachers scored 1.15 points higher in the attitudes construct ( $b = 1.15$ ,  $p < .05$ ). Teacher depressive symptoms were negatively related to teachers' attitudes about families ( $b = -.15$ ,  $p < 0.05$ ). Teachers' job satisfaction ( $b = .62$ ,  $p < 0.01$ ) and child-centered beliefs ( $b = 0.07$ ,  $p < 0.01$ ) positively predicted their attitudes about families.

### Practices

The regression model explained 13.8% of variance of teachers' practices ( $R^2 = .138$ ,  $F(11, 209) = 3.03$ ,  $p < 0.001$ ) that measures the quality and frequency of teachers' engagement with families. Having some graduate school credits or a graduate degree compared to an associate's degree was positively related with the practices construct score ( $b = 1.48$ ,  $p < 0.5$ ). Compared to White teachers, Black teachers scored 1.52 points higher in the practice construct ( $b = 1.52$ ,  $p < .05$ ). Teachers' job satisfaction was positively related with their practices ( $b = .59$ ,  $p < 0.01$ ).

## DISCUSSION

This study examined whether Head Start teacher characteristics predicted their perceptions of their relationships with families. Overall, teachers reported close and positive relationships with the families of children in their classroom, especially in terms of their attitudes about families and their practices with families. These analyses are a first step in learning about the teacher

characteristics that predict positive relationships with families of young children. Teachers play an important role in family engagement through their practices in communicating with and engaging families, their attitudes towards families, and their family-specific knowledge. One contribution of this research is considering each of these constructs separately, as well as the overall quality of teachers' relationships with families.

Results of the regression analyses suggest that family-teacher relationships, at least from the perspective of the teacher, are multi-faceted. Teachers' level of education, years of experience, psychological wellbeing, job satisfaction, and beliefs about teaching all significantly related to the quality of teacher-family relationships from the perspective of the teacher. However, predictors varied for the different constructs of the teacher-family relationship.

The difference between a having a bachelor's degree and associate's degree did not emerge as statistically significant. However, having graduate credits compared to an associate's degree predicted both the FPTRQ total score and the Attitudes construct. This differs from previous research, such as the study of infant and toddler teachers by Swartz and Easterbrooks (2014), which found a negative relationship between teacher level of education and attitudes toward families.

Years of experience predicted only higher family-specific knowledge, although this represented a very small effect size. Teachers' level of depressive symptoms negatively predicted only their attitudes about families and not their practices with families, which could have been expected, as depressive symptoms were negatively linked to teaching practices in other studies (Jeon, Buettner, & Snyder, 2014; Sandilos et al., 2015). Their job satisfaction positively predicted both attitudes and practices. Child-initiated beliefs predicted the FPTRQ total score, as well as family-specific knowledge and attitudes. Unexpectedly, didactic beliefs were also associated with higher family-specific knowledge. This highlights the complexity of teachers' beliefs. This complexity can be masked when using one total score to measure beliefs, rather than considering didactic and child-initiated beliefs as separate constructs (McCarty et al., 2001).

Additionally, the variance explained through the models predicting construct scores was higher than for the model predicting the total score. This highlights the importance of considering constructs of the teacher-family relationship separately, as well as the total overall quality of the relationship. These findings align with the Family Provider Relationship Quality Conceptual Model (Forry et al., 2012), which identifies that the three constructs of family-teacher relationships, although having some overlap, are unique dimensions of teachers' practices (Ajzen & Fishbein, 2005).

## Limitations

A primary limitation of this study is that Head Start teachers' relationships with families, as well as the other teacher characteristics examined, were measured solely through self-report. Additionally, relationships were measured in aggregate, how the teacher perceives his or her relationships with all of the families in the classroom rather than with each family individually. This analysis considers only the teachers' perceptions of the teacher-family relationship, which represents only one side of this important relationship. Finally, this analysis does not include child-

level data or measures of classroom quality. Therefore, it is not known whether the teachers' perceptions of the relationship relate to children's academic and social-emotional outcomes or to the quality of teacher-child interactions.

## Implications and Future Directions

This research builds on the understanding of how teachers' psychological wellbeing contributes to their work with children and families (Hamre & Pianta, 2004; McLean & Connor, 2015). Therefore, it is important to continue to find ways to support teacher wellbeing, especially in Head Start settings where teachers report higher levels of psychological distress and depressive symptoms (Whitaker et al., 2015). Teachers' reported psychological wellbeing seems to be malleable (Hindmin & Bustamante, 2018) and may be related to children's behavior. Given additional support related to challenging behavior, teachers may increase in psychological wellbeing, which may in turn be related to improvements in perceptions of relationships with families.

A next step in this research is to consider how teacher-family relationship quality relates to children's social and academic outcomes. Additionally, it is important to consider how families perceive their relationships with teachers, because it is possible that they may view the relationship quality differently. Finally, future research should include consider additional aspects of the Family Provider Relationship Quality Conceptual Model (Forry et al., 2012), such as classroom and program-level characteristics that relate to teacher-family relationship quality.

Teacher-family relationships play an important role in children's development (Christenson & Sheridan, 2001; Pomerantz et al., 2007). This work sheds light on the role that teacher characteristics play in shaping how teachers perceive their relationships with families. The opportunity for children's rich learning is best when teachers and families have positive relationships (Epstein, 2001). This is especially important for children attending Head Start who often face a range of risk factors. Supporting teachers to have positive relationships with families may be one strategy that can contribute to closing the achievement gap.

## REFERENCES

- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracin, B. T. Johnson & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-222). Mahwah, NJ: Lawrence Erlbaum.
- Baker, A., & Manfredi-Petitt, L. (2004). *Relationships, the heart of quality care: Creating community among adults in early care settings*. Washington, DC: National Association for the Education of Young Children.
- Baker, C. N., Kupersmidt, J. B., Voegler-Lee, M. E., Arnold, D. H., & Willoughby, M. T. (2010). Predicting teacher participation in a classroom-based, integrated preventive intervention for preschoolers. *Early Childhood Research Quarterly, 25*(3), 270-283.
- Barnes, J. K., Guin, A., Allen, K., & Jolly, C. (2016). Engaging parents in early childhood education: Perspectives of childcare providers. *Family and Consumer Sciences Research Journal, 44*(4), 360-374.
- Bernhard, J. K., Lefebvre, M. L., Kilbride, K. M., Chud, G., & Lange, R. (1998). Troubled relationships in early childhood education: Parent-teacher interactions in ethnoculturally diverse child care settings. *Early Education and Development, 9*(1), 5-28.



- Bromer, J., Paulsell, D., Porter, T., Henly, J., Ramsburg, D. (2011). Family-sensitive caregiving: A Key component of quality in early care and education arrangements. In M. Zaslow, K. Tout, T. Halle & I. Martinez-Beck (Eds.), *Quality measurement in early childhood settings*. Baltimore, MD: Brookes Publishing.
- Buettner, C. K., Jeon, L., Hur, E., & Garcia, R. E. (2016). Teachers' social-emotional capacity: Factors associated with teachers' responsiveness and professional commitment. *Early Education and Development, 27*(7), 1018-1039.
- Burts, D. C., Hart, C. H., Charlesworth, R., & Kirk, L. (1990). A comparison of frequencies of stress behaviors observed in kindergarten children in classrooms with developmentally appropriate versus developmentally inappropriate instructional practices. *Early Childhood Research Quarterly, 5*(3), 407-423.
- Castro, D. C., Bryant, D. M., Peisner-Feinberg, E. S., & Skinner, M. L. (2004). Parent involvement in Head Start programs: The role of parent, teacher and classroom characteristics. *Early Childhood Research Quarterly, 19*(3), 413-430.
- Charlesworth, R., Hart, C. H., Burts, D. C., Thomasson, R. H., Mosley, J., & Fleege, P. O. (1993). Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices. *Early Childhood Research Quarterly, 8*(3), 255-276.
- Christenson, S. L., & Carlson, C. (2005). Evidence-based parent and family interventions in school psychology: State of scientifically based practice. *School Psychology Quarterly, 20*(4), 525-528.
- Christenson, S., & Sheridan, S. M. (Eds.). (2001). *Schools and families: Creating essential connections for learning*. Guilford Press.
- Churchill, S. L. (2003). Goodness-of-fit in early childhood settings. *Early Childhood Education Journal, 31*(2), 113-118.
- Clarke-Stewart, K. A., Vandell, D. L., Burchinal, M., O'Brien, M., & McCartney, K. (2002). Do regulable features of child-care homes affect children's development? *Early Childhood Research Quarterly, 17*(1), 52-56.
- Crosnoe, R., & Cooper, C. E. (2010). Economically disadvantaged children's transitions into elementary school: Linking family processes, school contexts, and educational policy. *American Educational Research Journal, 47*(2), 258-291.
- Cumming, T. (2017). Early childhood educators' well-being: An updated review of the literature. *Early Childhood Education Journal, 45*(5), 583-593.
- Curbow, B., Spratt, K., Ungaretti, A., McDonnell, K., & Breckler, S. (2000). Development of the child care worker job stress inventory. *Early Childhood Research Quarterly, 15*(4), 515-536.
- Daniel, G. R., Wang, C., & Berthelsen, D. (2016). Early school-based parent involvement, children's self-regulated learning and academic achievement: An Australian longitudinal study. *Early Childhood Research Quarterly, 36*, 168-177.
- Duncan, G. J., & Magnuson, K. (2013). Investing in preschool programs. *Journal of Economic Perspectives, 27*(2), 109-32.
- Dunst, C. J., & Dempsey, I. (2007). Family-professional partnerships and parenting competence, confidence, and enjoyment. *International Journal of Disability, Development and Education, 54*(3), 305-318.
- Dunst, C. J., & Trivette, C. M. (2010). Family-centered helping practices, parent-professional partnerships, and parent, family and child outcomes. *Handbook of School-Family Partnerships, 362-379*.
- Early, D. M., Bryant, D. M., Pianta, R. C., Clifford, R. M., Burchinal, M. R., Ritchie, S., ... & Barbarin, O. (2006). Are teachers' education, major, and credentials related to classroom quality and children's academic gains in pre-kindergarten?. *Early Childhood Research Quarterly, 21*(2), 174-195.
- Elicker, J., Noppe, I. C., Noppe, L. D., & Fortner-Wood, C. (1997). The parent-caregiver relationships scale: Rounding out the relationship system in infant child care. *Early Education and Development, 8*(1), 83-100.
- Elicker, J., Wen, X., Kwon, K., & Sprague, J. B. (2013). Early Head Start relationships: Association with program outcomes. *Early Education and Development, 24*(4), 491-516.
- Epstein, J.L. (2001). *School, family and community partnerships*. Boulder, CO: Westview Press.
- Forry, N., Bromer, J., Chrisler, A., Rothenberg, L., Simkin, S., & Daneri, P. (2012). Family-provider relationship quality: Review of conceptual and empirical literature of family-provider relationships, OPRE Report #2012-46. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Galindo, C., & Sheldon, S. B. (2012). School and home connections and children's kindergarten achievement gains: The mediating role of family involvement. *Early Childhood Research Quarterly, 27*(1), 90-103.
- Galinsky, E. (1990). Why are some parent/teacher partnerships clouded with difficulties? *Young Children, 45*(5), 2-3, 38-39.

- Ghazvini, A. S., & Readdick, C. (1994). Parent-caregiver communication and quality of care. *Early Childhood Research Quarterly*, 9(2), 207-222.
- Grace, R., & Trudgett, M. (2012). It's not rocket science: The perspectives of Indigenous early childhood workers on supporting the engagement of Indigenous families in early childhood settings. *Australasian Journal of Early Childhood*, 37(2), 10-18.
- Hadley, F., & Rouse, E. (2018). The family-centre partnership disconnect: Creating reciprocity. *Contemporary Issues in Early Childhood*, 19(1), 48-62.
- Halgunseth, L., Peterson, A., Stark, D. R., & Moodie, S. (2009). Family engagement, diverse families, and early childhood programs: An integrated review of the literature. Washington, DC: The National Association for the Education of Young Children.
- Hamre, B. K., & Pianta, R. C. (2004). Self-reported depression in nonfamilial caregivers: Prevalence and associations with caregiver behavior in child-care settings. *Early Childhood Research Quarterly*, 19, 297-318.
- Hill, N. E., & Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*, 13(4), 161-164.
- Hindman, A. H., & Bustamante, A. S. (2018). Teacher depression as a dynamic variable: Exploring the nature and predictors of change over the head start year. *Journal of Applied Developmental Psychology*, 61, 43-55.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education?. *Review of Educational Research*, 67(1), 3-42.
- Jeon, S., Choi, J. Y., Horm, D. M., & Castle, S. (2018). Early Head Start dosage: The role of parent-caregiver relationships and family involvement. *Children and Youth Services Review*, 93, 291-300.
- Jeon, L., Buettner, C. K., & Snyder, A. R. (2014). Pathways from teacher depression and child-care quality to child behavioral problems. *Journal of Consulting and Clinical Psychology*, 82, 225-235. doi:10.1037/a0035720
- Jeon, H. J., Kwon, K. A., Walsh, B., Burnham, M. M., & Choi, Y. J. (2019). Relations of early childhood education teachers' depressive symptoms, job-related stress, and professional motivation to beliefs about children and teaching practices. *Early Education and Development*, 30(1), 131-144.
- Kim K., Porter T., Atkinson V., Rui N., Ramos M., Brown E., . . . Nord C. (2014). Family and provider/teacher relationship quality measures: User's manual. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Kim, Y. H., & Kim, Y. E. (2010). Korean early childhood educators' multi-dimensional teacher self-efficacy and ECE center climate and depression severity in teachers as contributing factors. *Teaching and Teacher Education*, 26(5), 1117-1123.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756.
- Kontos, S., & Wilcox-Herzog, A. (2001). How Do Education and Experience Affect Teachers of Young Children? *Research in Review. Young Children*, 56(4), 85-91.
- Knoche, L. L., Sheridan, S. M., Edwards, C. P., & Osborn, A. Q. (2010). Implementation of a relationship-based school readiness intervention: A multidimensional approach to fidelity measurement for early childhood. *Early Childhood Research Quarterly*, 25(3), 299-313.
- Knopf, H. T., & Swick, K. J. (2007). How parents feel about their child's teacher/school: Implications for early childhood professionals. *Early Childhood Education Journal*, 34(4), 291-296.
- Lang, S. N., Tolbert, A. R., Schoppe-Sullivan, S., & Bonomi, A. E. (2016). A cocaring framework for infants and toddlers: Applying a model of coparenting to parent-teacher relationships. *Early Childhood Research Quarterly*, 34, 40-52.
- Laughlin, L. (2013). Who's minding the kids? Child care arrangements: Spring 2011. *Household Economic Studies*. Washington, DC: United States Census Bureau.
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52(6), 1169-1192.
- Mashburn, A. J., Hamre, B. K., Downer, J. T., & Pianta, R. C. (2006). Teacher and classroom characteristics associated with teachers' ratings of prekindergartners' relationships and behaviors. *Journal of Psychoeducational Assessment*, 24(4), 367-380. doi: 10.1177/0734282906290594
- McCarty, F., Abbott-Shim, M., & Lambert, R. (2001). The relationship between teacher beliefs and practices, and Head Start classroom quality. *Early Education and Development*, 12(2), 225-238.
- McLean, L., & Connor, C. M. (2015). Depressive symptoms in third-grade teachers: Relations to classroom quality and student achievement. *Child Development*, 86(3), 945-954.

- Mendez, J. L. (2010). How can parents get involved in preschool? Barriers and engagement in education by ethnic minority parents of children attending Head Start. *Cultural Diversity and Ethnic Minority Psychology*, 16(1), 23-36.
- Nalls, A. M., Mullis, R. L., Cornille, T. A., Mullis, A. K., & Jeter, N. (2010). How can we reach reluctant parents in childcare programmes?. *Early Child Development and Care*, 180(8), 1053-1064.
- NICHD Early Child Care Research Network. (2002). Child-care structure → process → outcome: Direct and indirect effects of child-care quality on young children's development. *Psychological Science*, 13 (2002), pp. 199-206
- NIMH (2018). Major depression. Retrieved from <https://www.nimh.nih.gov/health/statistics/major-depression.shtml>.
- Öztürk, M. (2013). Barriers to parental involvement for diverse families in early childhood education. *Journal of Educational and Social Research*, 3(7), 13-16.
- Palfrey, J. S., Hauser-Cram, P., Bronson, M. B., Warfield, M. E., Sirin, S., & Chan, E. (2005). The Brookline Early Education Project: a 25-year follow-up study of a family-centered early health and development intervention. *Pediatrics*, 116(1), 144-152.
- Parker, F. L., Piotrkowski, C. S., Kessler-Sklar, S., Baker, A. J. L., Peay, L., & Clark, B. (1997). The impact of parent involvement in Head Start on parents and children. Final report (and) executive summary.
- Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions?. *Applied Developmental Science*, 9(3), 144-159.
- Pomerantz, E. M., Moonman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77(3), 373-410.
- Powell, D. R., & Stremmel, A. J. (1987). Managing relations with parents: Research notes on the teacher's role. *Advances in Applied Developmental Psychology*, 2, 115-127.
- Radloff, L.S. (1977) 'The CES-D scale: A self report depression scale for research in the general population'. *Applied Psychological Measurement*, 1(3), 385-401. doi: 10.1177/014662167700100306
- Ramos, M., Kim, K., Atkinson, K., Li, W., Guzman, L., Madill, R., Porter, T., Forry N. (2014). Family and Provider/Teacher Relationship Quality Measures Short Forms: Amendment to the User's Manual. OPRE Report 2014-86. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Rimm-Kaufman, S. E., Voorhees, M. D., Snell, M. E., & La Paro, K. M. (2003). Improving the sensitivity and responsibility of preservice teachers toward young children with disabilities. *Topics in Early Childhood Special Education*, 23(3), 151-163.
- Sandilos, L. E., Czyck, L. M., Hammer, C. S., Sawyer, B. E., Lopéz, L., & Blair, C. (2015). Depression, control, and climate: An examination of factors impacting teaching quality in preschool classrooms. *Early Education and Development*, 26(8), 1111–1127. doi:10.1080/10409289.2015.1027624
- Schreiber, J. B., Moss, C. M., & Staab, J. M. (2007). A preliminary examination of a theoretical model for researching educator beliefs. *Semiotica*, 2007(164), 153-172.
- Shanti, C. (2017). Engaging parents in Early Head Start home-based programs: How do home visitors do this?. *Journal of Evidence-Informed Social Work*, 14(5), 311-328.
- StataCorp. (2013). *Stata Statistical Software: Release 13*. College Station, TX: StataCorp LP.
- Sumison, J. (1999). A neophyte early childhood teacher's developing relationships with parents: An ecological perspective. *Early Childhood Research & Practice*, 1(1). Retrieved from ERIC at [ecrp.uiuc.edu/v1n1/sumison.html](http://ecrp.uiuc.edu/v1n1/sumison.html).
- Swartz, M. I., & Easterbrooks, M. A. (2014). The role of parent, provider, and child characteristics in parent-provider relationships in infant and toddler classrooms. *Early Education & Development*, 25(4), 573-598.
- Tarullo, L., Knas, E., Klein, A. K., Aikens, N., Malone, L., & Harding, J. F. (2017). A National Portrait of Head Start Children and Families: FACES 2014. OPRE Report 2017-98. Administration for Children & Families.
- Trivette, C. M., Dunst, C. J., Hamby, D. W., & Meter, D. (2012). Relationship between early childhood practitioner beliefs and the adoption of innovative and recommended practices. *Research Brief*, 6(1), 1-12.
- U.S. Department of Health and Human Services. (2016). Subchapter B: The Administration for Children and Families, Head Start Program. Washington, DC: Administration for Children and Families, Office of Planning, Research and Evaluation. Retrieved from: <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii>
- U.S. Department of Health and Human Services, Administration on Children, Youth, and Families/Head Start Bureau. (2016). *Head Start Performance Standards and Other Regulations*. Washington, DC: Author. Retrieved from: <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii>

- Weiss, H.B., Caspe, M., & Lopez, M. E. (2006). Family involvement in early childhood education. Cambridge, MA: Harvard Family Research Project, Harvard Graduate School of Education.
- West, J., Tarullo, L., Aikens, N., Sprachman, S., Ross, C., Carlson, B., Mathematica Policy Research. (2010). FACES 2006: Study design. Retrieved from [https://www.acf.hhs.gov/sites/default/files/opre/faces\\_studydesign.pdf](https://www.acf.hhs.gov/sites/default/files/opre/faces_studydesign.pdf)
- Whitaker, R. C., Becker, B. D., Herman, A. N., & Gooze, R. A. (2013). The physical and mental health of Head Start staff: The Pennsylvania Head Start staff wellness survey, 2012. *Preventing Chronic Disease*, 10.
- Whitaker, R. C., Dearth-Wesley, T., & Gooze, R. A. (2015). Workplace stress and the quality of teacher–children relationships in Head Start. *Early Childhood Research Quarterly*, 30, 57-69.