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Running head: ECE TEACHER RETENTION

Pepperdine University

Graduate School of Education and Psychology

A STUDY OF EARLY CHILDHOOD EDUCATION TEACHERS' LEVEL OF
EDUCATION, COMPENSATION, WORK ENVIRONMENT AND RETENTION

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Educational Leadership, Administration and Policy

by

M. Elida Garcia

November 2011

Doug Leigh, Ph.D. – Dissertation Chairperson

This dissertation, written by

M. Elida Garcia

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Doug Leigh, Ph.D., Chairperson

Robert Barner, Ph.D.

Nancy Harding, Ph.D.

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VITA

M. Elida Garcia

Education

Pepperdine University, Malibu, CA Ed.D. in Education, Leadership, Administration and Policy	2011
California State University, Northridge M.S. in Counseling Pupil Personnel Services/School Psychology Credential	1994
University of California, Los Angeles B.A. in Psychology	1990

Work Experience

Hawthorne School District, Hawthorne, CA Grants Project Facilitator	2010-present
Los Angeles County Office of Education, Downey, CA (on-loan assignment) Consultant/Facilitator – Family Literacy Support Network	2005-2010
Hawthorne School District, Hawthorne, CA School Psychologist & Project Facilitator	1995-2005

Related Experience

Licensed Educational Psychologist	1998-Present
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ABSTRACT

This study examined Early Childhood Education (ECE) teacher job retention in the context of educational level, compensation, and work environment ratings. The study surveyed ECE teachers online in the Southern California, especially in Los Angeles County.

Statistical analysis was conducted on survey responses from 76 ECE teachers and 55 ECE administrators. The majority of the ECE teachers (51%) possessed bachelor's degrees. Data findings revealed statistically non-significant relationships between anticipated job retention and teachers' level of education as well as for compensation earned. Study participants reported a mean monthly salary of \$3,268. The data for ECE administrators, however, did reveal a significant relationship between level of education and projected job retention. ECE administrators with associate's degrees had statistically significantly higher anticipated job retention than those administrators with bachelor's or master's degrees.

The work environment ratings were based on items from the Early Childhood Education Work Environment Survey. The analysis between work environment ratings and anticipated job retention revealed that there was not a significant relationship between the two variables. Ratings, however, did show that the highest rated factor as being evident in the work environment for both ECE teachers and administrators was daily communication between teachers and parents. The second rated work environment factor for ECE teachers was helpful feedback from supervisors. The least present factors in the work setting as perceived by ECE teachers were work promotions and shared decision making.

The study's inconclusive findings between the anticipated job retention and ECE teachers' educational level, compensation and perceived work environment factors calls for more research to examine the complexity of retaining ECE teachers. The study also outlined several recommendations that address greater direct access to ECE teachers for future research, more competitive compensation for ECE teachers based on skills and work experience, and administrator training for working with ECE programs. Finally, the last recommendation is to provide more teacher training and resources to assist ECE programs in engaging families as noted from the work environment factor on family partnerships.

Chapter 1

Introduction

This chapter presents an introduction to and overview of the dissertation. The chapter begins with the background of the problem, followed by the statement of the problem, purpose of the study, research questions, importance of the study, limitations, and assumptions. The chapter concludes with the definition of terms.

Background of the Problem

Early childhood education (ECE) programs in the United States have a long history of caring for and educating young children. Initially, ECE programs were considered a form of “extra help” for certain children or as a means to provide childcare for working parents. The main purpose of many of the country’s public ECE programs was to stop the poverty cycle by educating the children and influencing the families’ parenting style (Rose, 2009).

Government-funded early education programs, which by today’s standards would be considered kindergarten programs, date back to the late 1800s. These programs involved parents through providing services such as home visits and parenting support. The family-support component of these early education programs, however, decreased around 1910, when kindergarten became part of the standard school system.

In the 1930s, publicly funded early childhood education, then referred to as nursery schools, began to operate in the United States. The Works Progress Administration (WPA) Emergency Nursery School Program was established during the Great Depression to employ more teachers and served approximately 75,000 children. The WPA Program offered early education, food, parenting, and health services to

children. Government funding for the WPA Program was discontinued, however, in the early 1940s.

The history of publicly funded ECE continues in 1965 with the authorization of the Head Start Act. Head Start was designed to assist low-income families by providing preschool and other support services. Head Start differed from earlier public ECE services in that parents were offered opportunities for leadership roles, classroom volunteering, and community organizing (Rose, 2009).

ECE programs and practices in the United States have evolved over time and have influenced several other countries as well (Hinitz, 2009). Certain U.S. early childhood educators networked with educators in other countries such as Italy, the United Kingdom, Japan, and Russia. Worldwide teacher training opportunities have facilitated networking opportunities among ECE educators across continents. Additionally, although countries may vary culturally in terms of early education, ECE educators often face similar issues such as determining educational philosophies and obtaining funding. When designing their own ECE programs, policymakers across different nations often refer to the evolution of ECE services in the U.S. and its research on employer-based childcare and parent involvement (Hinitz, 2009).

The history of ECE services in the United States, along with the country's influence worldwide, is characterized primarily by the long-term benefits of early childhood education. On the other hand, there has also been criticism of ECE programs and their negative effects on young children. In a study using data from the Early Childhood Longitudinal Study-Kindergarten Class, children who participated in a center-based ECE program had lower behavioral adjustment ratings than children who were not

in center-based ECE (Loeb, Bridges, Bassok, Fuller, & Rumberger, 2007). The data included cognitive and behavioral ratings of 14,162 children entering kindergarten. Children's skills were rated by kindergarten teachers on the early reading, math, and the behavioral aspects of motivation of learning, self-control, interpersonal and externalization. Children who attended center-based ECE classes prior to kindergarten showed 1.1 point gain on reading and 1.2 point gain on math but a decrease of .089 of a standard deviation on behavioral ratings.

The majority of the research on ECE, however, has shown that children not only gain pre-academic skills but also enhance their social adjustment skills by participating in ECE. In the Chicago Longitudinal Study, close to 1,000 children who attended the Child-Parent Center preschool programs or full-day kindergarten programs during 1979-1980 served as participants. The children were assessed annually from age 5 (kindergarten) until 15 years old. The study data were analyzed to determine the longitudinal impact of ECE on cognitive and non-cognitive skills (Reynolds, Temple, & Ou, 2010). Cognitive skills were measured with the Iowa Tests of Basic Skills (ITBS), the rate of grade retention, and placement in special education programs. Non-cognitive skills, such as attitudes and social-emotional adjustment toward education, were determined by ratings from various sources. Data also were collected in the areas of educational attainment expectations, school commitment, classroom social adjustment, achievement motivation, school behavior problems, and juvenile arrests.

The Chicago Longitudinal Study found that children who attended preschool had higher test scores on the ITBS as well as fewer instances of grade retention and special education placements. The preschool group also had higher skill ratings for some of the

non-cognitive areas, including assertiveness, peer social skills, task orientation, classroom adjustment, and school commitment. Additionally, the preschool group scored lower in incidents of behavior problems and delinquency. Overall, there was an 8.7 percentage point gain for high school completion for the preschool group versus the comparison group. Furthermore, the preschool participants had a lower rate (by 5 percentage points) of adult incarceration by age 24 (Reynolds et al., 2010).

Overall, the Chicago Longitudinal Study had three major key findings. Specifically, ECE programs encourage child and adult welfare, influence cognitive and non-cognitive skills development, and underline the importance of combining ECE services with other intervention programs for a comprehensive approach (Reynolds et al., 2010).

An earlier study found positive effects of ECE similar to those found in the Chicago Longitudinal Study. The Abecedarian Project provided early childhood education services to children, for their first 5 years, born between 1972 and 1977 in North Carolina (Frank Porter Graham Child Development Center, 1999). Researchers followed up with these children at 12, 15, and 21 years of age.

The children who participated in the Abecedarian Project, as compared to those who did not, scored higher on cognitive and reading tests throughout their childhood. At the age of 21 years, approximately 85% of the children who had attended the ECE program were attending a 4-year college, compared to an estimated 13% of the control group. Moreover, Abecedarian Project participants were older when they had their first child as compared to the control group, with average age of approximately 19 years old, while the control group average was 17.5 years old. Overall, the results of the study

illustrated that the ECE group made higher gains on academic measures and had higher college attendance rates (Frank Porter Graham Child Development Center, 1999)

The positive long-term outcomes of ECE programs, such as academic achievement, college enrollment, and reduction in juvenile delinquency, can also translate into monetary benefits. A cost-benefit analysis of ECE services shows that they are an effective investment. As seen in studies of four ECE programs, the future benefits outweigh the present costs (Guernsey, 2010; Temple & Reynolds, 2005).

A study based on the Perry High Scope Program in Michigan found a monetary return of \$8.74 for every dollar spent. For the Chicago study's Child Parent Centers, the monetary return was \$10 for every dollar invested. The Abecedarian Program had a return of \$3.78 per dollar, while the Head Start Impact Study showed a return of a little over a dollar. These findings demonstrate the economic benefits of investing in ECE programs (Guernsey, 2010; Temple & Reynolds, 2005).

Early education's long track record in the United States, including evidence of higher pre-academic skills, positive social-emotional impact, and cost effective outcomes, has led to increasing demand for ECE programs. Currently, ECE is considered an essential educational experience for children entering kindergarten, and the number of children attending early education programs continues to increase in California as well as across the nation (Barnett & Yarosz, n.d.).

On the national level, parents reporting for the Current Population Survey (CPS) showed increases in 3- and 4-year-olds participating in educational programs (Barnett & Yarosz, n.d.). The number of 3-year-olds in 1965 who attended ECE was reportedly below 10% but rose to slightly above 30% in 2005. For 4-year-olds, the participation in

1965 was close to 20% but near 60% in 2005. The increase is believed to be a result of more two-parent-working households and single-parent households (Bowman, Donovan, & Burns, 2000). Approximately 40% of 4-year-old children in United States attend some type of publicly funded ECE program. The enrollment figure increases to 74% when both publicly and privately funded ECE programs are included (National Institute for Early Education Research, 2009).

In California alone, the number of children ages 3 to 5 years old who reside in the state and who were reported as attending ECE or childcare programs on the 2000 census was 550,234 children, which is 47% of the total reported for the 3- to 5-year age group (Lopez & de Cos, 2004). Several state initiatives have recently been passed, or are in process, to further increase the number of children attending ECE. The RAND Corporation released a report on ECE funding in California (Karoly, Reardon, & Cho, 2007). The report lists the recent enactment of Pre-Kindergarten and Family Literacy (PKFL) funding in 2006 to assist children with kindergarten preparation and to offer parenting support for a more smooth transition to the formal school system. Additionally, the report mentions funding efforts by the First 5 California and county commission initiatives, beginning in 2005, which support the expansion of ECE programs.

Greater precedence also has been given to ECE services by the federal government under the *No Child Left Behind Act* of 2001 (NCLB). NCLB includes funding for ECE programs under Title I regulations. NCLB also initiated a pre-reading program, Early Reading First, to increase the availability of ECE programs that provide

early language, literacy, and reading readiness instruction using scientifically based approaches (U.S. Department of Education, 2001).

The increase in the demand for ECE services also has increased the number of preschool teachers needed in the field. According to the Preschool Teacher Cost Estimate Tool, developed by Lee (n.d.) of the Center for the Study of Child Care Employment, approximately 6,032 ECE teachers will be needed by the year 2017 for the Southern California area alone. ECE staffing is needed for expansion purposes as well as to respond to constant teacher turnover. ECE programs, in general, have a much higher teacher turnover rate than does the K-12 system (Shellenbarger, 2006). The teacher turnover rate at the K-12 level is estimated to be 13.2% (Ingersoll, 2001).

Teacher retention research shows that three factors appear to influence decisions to remain at job sites. One factor is teacher qualifications. The qualifications to teach ECE vary from state to state and differ from the K-12 teacher requirements. Currently in California, the Child Development Permit Matrix (Appendix A) defines the specific educational requirements (Child Development Training Consortium, 2008). The matrix lists teacher status as requiring a minimum of 24 units of Early Childhood Education/Child Development (ECE/CD) plus 16 units of general education and 175 days of work experience. There is also an option of an associate's degree in ECE/CD or a related field plus three units of supervised field experience. Additionally, ECE teachers must also complete 105 hours of professional development every 5 years (Child Development Training Consortium, 2008). In contrast, the K-12 system requires teachers to have at least a bachelor's degree and credential coursework in designated subject areas (California Commission of Teacher Credentialing, 2009).

Another factor related to teacher job retention is compensation. Although the number of ECE programs and teachers has increased over the years, the wages earned by ECE teachers have remained the same. The average hourly rate during 2000-04 earned by ECE teachers and administrators in California was estimated to be \$11.29 (Herzenberg, Price, & Bradley, 2005). Further, teachers and administrators in ECE programs had incomes that were considered far below a “basic necessity income” (Herzenberg et al., 2005).

The final factor is the workplace conditions, which also affect teachers’ desire to remain at the same work setting. The Center for Comprehensive School Reform and Improvement (2007a) noted the work conditions that facilitated the retention of teachers as including built-in time for teachers to plan, assess, and conduct peer networking; supportive administrative leadership; shared decision-making; professional development; and available resources for instruction and curriculum. The relationships between ECE and the families of the children are also considered part of the work environment (Kilgallon, 2006).

Statement of the Problem

The increase in the demand for ECE services has also increased the number of early education teachers in the field. ECE teachers vary greatly in levels of education, with the majority of ECE educators possessing less than a bachelor’s degree (Herzenberg et al., 2005). ECE teachers, on the average, also receive less compensation than does the average California wage earner (Herzenberg et al., 2005). The ECE teacher turnover rate is also higher than that of other teachers in the K-12 system (Shellenbarger, 2006).

There has been a great deal of speculation about why the ECE teacher turnover rate remains high. Barnett (2003) cited low wages, while Hale-Jinks, Knopf, and Kemple (2006) propose that it is the stress of taking care of young children, having less educational training, or the lack of administrative and structural support. Other research also has identified several work environment factors (Center for Comprehensive School Reform and Improvement, 2007a).

Purpose of the Study

The purpose of this study is to identify to what extent differences exist in ECE teacher retention based on teachers' level of education, salary earned, and the work environment. This study also seeks to determine what work environment factors, as perceived by ECE teachers, are the most evident.

Research Questions

Based on the purpose of the study, two research questions guide this study.

Research Question 1. To what extent, if at all, is there a relationship among early childhood education teachers' retention, and their level of education?

Research Question 2. To what extent, if at all, is there a relationship among early childhood education teachers' retention and compensation earned?

Research Question 3. To what extent, if at all, is there a relationship among early childhood education teachers' retention and their perceptions of the work environment?

Research Question 4. What work environment factors do early childhood education teachers perceive as being the most present in the workplace?

Importance of the Study

This study provides those associated with ECE programs with more information about the factors that lead to higher teacher retention, including ECE teachers' level of education, compensation earned, and work environment. An understanding of such factors could potentially lead to changes both in how preservice teachers prepare to become ECE teachers and how they are compensated. ECE providers will have more data available to determine whether job offers should include higher compensation, more comprehensive benefits package, tuition stipends, increased availability of resources, more time allocated to supervision and coaching, and other factors.

This study, additionally, includes teacher perceptions of the work environment, it extends the understanding of workplace factors that improve teacher retention. The results of this study inform ECE administrator training so that supervisors have a better idea of the types of work conditions that have a positive influence on teacher retention. Most importantly, the examination of ECE teacher perceptions provides a unique contribution to the research.

Limitations

This study has several limitations. First, it is concerned only with ECE settings. Thus the findings concerning teacher educational levels, salary, work experience, and teacher perceptions, as related to retention, apply only to this teacher population.

Second, the study examines ECE teachers in the state of California, and Southern California in particular. As such, the average salaries earned and work experiences may differ from those in other parts of the country.

Third, the validity of the study may be affected by social desirability, in which participants may inflate their salaries or ratings of workplace conditions due to tendency to impress others or fear of the supervisor finding out the ratings even though the survey responses will be kept anonymous.

Assumptions

The study depends on the disclosure of personal information, such as educational achievement levels, salary, years of work experience, and work environment perceptions. Thus, the researcher needs to assume that participating teachers will be honest and objective in reporting this information.

Definition of Terms

Administrator support. Administrator support includes the communication, discussions, and relationships, via verbal and written means, with site administrators/supervisors, principals, and program directors. Administrative support is one of the dimensions on the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

Community-based agencies. Community-based agencies that provide preschool services have non-profit status, as defined by tax-exempt code 501c (4).

ECE programs. The National Center for Education Statistics (US Department of Education, 2008) defines early childhood education for children ages 3-5. This study refers to ECE programs as programs that consist of one or more classrooms that provide instruction to 3- and 4-year-olds in school districts and community-based agencies settings.

ECE teachers. ECE teachers are educational personnel who possess the appropriate state credentials for supervision and teaching young children prior to kindergarten entry. The National Association for the Education of Young Children (2008) defines a teacher as a designated adult responsible for a class or group of children.

Educational level. Educational level refers to the highest level completed in a formal schooling system, such as high school, college, or university. For the purpose of this study, educational level includes less than high school, high school diploma, some college, Child Development Permit, and associate's, bachelor's, and master's degrees.

Leadership capacity. Leadership capacity is defined by Lambert (2003) as "broad-based skillful participation in the work of leadership" (p. 4). Lambert (2003) further refers to leadership capacity as participation in shared vision, inquiry, collaboration, reflection, and focus on improving student achievement. For this study, leadership capacity entails preschool teachers' participation in various leadership roles. Leadership is one of the dimensions on the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

Peer collaboration. Peer collaboration is the time that ECE teachers spend in staff planning meetings, providing feedback to colleagues, lesson planning, and classroom observations and follow-up discussions (Center for Comprehensive School Reform and Improvement, 2007b). Collegiality is one of the dimensions on the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

Professional development. Professional development refers to training, workshops, conferences, and technical assistance that ECE teachers receive within and

outside of their agencies. Professional development is one of the dimensions on the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

School districts. School districts are Licensed Educational Agencies (LEAs) that provide public education and adhere to state and federal educational mandates.

Teacher perceptions. Teacher perceptions are the opinions and perspectives of ECE teachers. Teacher perceptions of work environment will be measured with the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

Teacher retention. Teacher retention is the length of time that an ECE teacher remains employed at the same work setting. In this study, teacher retention was determined from data on years at current work setting and desired duration at current work setting. The retention projections also factored in data on the teachers' plan to leave the work current job setting due to retirement, home relocation, or completion of a college degree program.

Wages/salary earned. This refers to salary currently earned for performing assigned teacher job duties in the present place of preschool employment. Wages/salary earned was measured from teacher-reported data on surveys. Salary rates were reported in hourly, monthly, or annual increments.

Work experience. Work experience refers to number of months or years working as an ECE teacher with an authorized teacher permit and was measured by teacher self-report data.

Workplace environment. The workplace environment comprises certain specified structures and systems that are in place to support preschool teacher practices, including opportunities for and participation in professional development, leadership capacity, peer

collaboration, administrator support, and instructional resources (Center for Comprehensive School Reform and Improvement, 2007a). The study measured workplace environment ratings with the Early Childhood Work Environment Survey (Jorde-Bloom, 1988).

Chapter 2

Review of Literature

Early childhood education has a long history in the United States, and, over time, the need for ECE services has increased. The greater demand for ECE programs has resulted in an increase in the number of teachers employed at the early education level. Despite this increase, there is a high teacher turnover rate at the ECE level (Shellenbarger, 2006). Research shows that certain factors play a major role in ECE teacher attrition, including teacher qualifications (Barnett, 2003), compensation (Herzenberg et al., 2005), and the workplace environment (Center for Comprehensive School Reform and Improvement, 2007a). This chapter presents a review of the literature relevant to the factors that influence ECE teacher retention. The chapter begins with the literature on teacher turnover, followed by teacher qualifications, compensation, and the workplace environment. The chapter concludes with a summary.

Teacher Turnover

Even as the demand for ECE services and staffing grows, the wages for ECE teachers have remained at the same low level, and the prevalence of teacher turnover in ECE classrooms continues to be a challenge. Shellenbarger (2006) estimated the ECE teacher turnover rate to be 20%-40%. The ECE teacher turnover rate is estimated to be even higher, around 50%, in National Association for the Education of Young Children (NAEYC)-accredited programs, during a 20-month timeframe (Whitebook, Sakai, & Howes, as cited in Machado, 2008). A survey conducted by the Maryland State Department of Education (2006) with licensed child care center staffing found that 59.4% of 581 respondents stated they had been with the current employer for the last 0-4 years.

Also, 90.2% out of 601 respondents indicated they planned to stay in the child care field but only 29.4% out of 550 respondents stated they would stay in their current position 5 years in the future. Respondents also stated plans to become an elementary teacher (12/5%) or center director (10%) as the top three responses.

Although there is little research on the costs of teacher turnover at the ECE level, in particular, one may assume that the cost is at or near that experienced in the K-12 system. Barnes, Crowe, and Schaefer (2007) studied five K-12 districts in terms of costs of teacher turnover and found that costs per teacher leaving ranged from \$4,366 in a small, rural district to \$17,872 in a large, urban district.

Teacher turnover not only affects program budgets but also has an impact on children's social-emotional development (Boyd, Barnett, Bodrova, Leong, & Gomby, 2005). The effect of teacher turnover in young children's lives is claimed to be more profound than for older children because their skills development, particularly in terms of emotional attachment and relationship building, is still in the early stages (Shellenbarger, 2006). The National Association for the Education of Young Children (NAEYC) developed a listing in 2009 of 12 principles for Developmentally Appropriate Practice in ECE. One of the principles highlights the importance of younger children establishing stable relationships with parents and other caregivers such as ECE teachers. These early bonding experiences help shape children's emotional development and later relationships (NAEYC, 2009a).

Children may feel discouraged when a teacher with whom they have bonded leaves their classroom. Howes and Hamilton (1993) examined children's behavior in reaction to teacher changes in several early education programs. The study included 72

children, starting at 1 year old through 4 years of age. Child observations and teacher surveys were collected every 6 months. The quality of the teacher and child relationships was measured using the Attachment Q-Set instrument, on which observers rated the interactions using three ratings: very characteristic, very uncharacteristic, and neutral. The instrument also included three categories for relationships: secure, avoidant, and ambivalent. In addition, the teachers rated children's gregariousness, hostile aggression, instrumental aggression, withdrawal, and frequency of complex play behaviors.

By the end of the study, 48 children, who remained as participants, had an average of 2.4 teacher changes within a 3-year time frame. Of the children in the study, 12% had only one teacher change during that period. Children who experienced more teacher changes also received lower ratings for "gregarious" behavior and higher ratings in social withdrawal and aggression. Thus, the children who experienced any type of teacher change tended to be more withdrawn than were children who did not have any teacher changes (Howes & Hamilton, 1993).

Teacher turnover also has been studied in the context of school personnel challenges and the traits of schools and "organizational conditions" that lend themselves to attrition (Ingersoll, 2001). Ingersoll examined the 1991-92 data from the Schools and Staffing Survey (SASS) and the Teacher Follow-up Survey (TFS) collected from 6,733 teachers by the U.S. Census Bureau. The results indicated that teacher turnover at the K-12 level is 13.2%, which is higher than turnover in other professions, such as nursing (12%), or the national employee turnover of 11%.

Ingersoll (2001) also analyzed demographic data and four *organizational conditions* as related to turnover. Organizational conditions included compensation, as

determined by salary schedules; administrative support, as based on the assistance given to novice teachers; the amount of conflict or rivalry, as measured by the number of student discipline incidents; and the amount of input by staff members regarding school policies, as determined by teacher classroom control and effect on policies. Ingersoll found that schools attended by students of families with high poverty rates had more teacher turnover than did schools with students from families with higher incomes. Additionally, teachers younger than 30 years and older than 50 years old were more likely to leave teaching than were those between 30 and 50 years old. Further, teachers who earned higher salaries, received more administrative support, experienced fewer incidences of student discipline difficulties, and participated more in decision-making and independent practices had lower turnover rates (Ingersoll, 2001).

As noted above, the high ECE teacher turnover rate may be explained by various factors, including education level, compensation, and work conditions. ECE teachers vary greatly in their levels of education, and the majority of ECE teachers in California do not possess a bachelor's degree (Herzenberg et al., 2005). This trend is unlike that of the K-12 system, in which a minimum of a bachelor's degree is required. ECE teachers, on average, earn lower wages as compared to the average California wages (Herzenberg et al., 2005). Some research posits low wages as the reason for higher turnover rates (Barnett, 2003). Other sources, however, suggest that the high turnover is due to the stress of taking care of young children, less educational training, or a lack of administrative and structural support (Hale-Jinks et al., 2006). Moreover, some of the teacher retention literature points to the workplace environment as being a significant factor in retention (Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009a).

Efforts to retain teachers, in general, have led to the identification of several desirable workplace characteristics, as summarized by the Center for Comprehensive School Reform and Improvement (2007a). The report identifies positive work conditions as time allocated for planning and teaching, guidance and support by site principals, participation in decision making at the school site, relevant professional development, and access to curriculum materials. Teacher experiences shaped by interactions with parents of students have also contributed to the perceptions of work environment (Kilgallon, 2006).

Research also has investigated what teachers consider to be motivators in their profession and for remaining in the profession (Shimkus & Banilower, 2004). What has not been sufficiently studied, however, is the effect of the workplace environment in terms of teacher attrition within the early education setting. Most of the workplace environment research has been conducted at the K-12 level, whose conditions differ from those of the early education system. Work conditions, in combination with teacher level of education and salary earned, provide a more comprehensive understanding of teacher retention in the early education system.

Unlike the higher teacher turnover rate in the United States, some countries have low attrition rates. In France, for instance, the formal school system, which includes ECE for 3-5 years, has an overall “insignificant” teacher attrition rate (Cooper & Alvarado, 2006). Germany’s teacher turnover rate is reported to be less than 5%. These low attrition rate countries have also had decreases in student enrollment which may aid the retention rate to some degree (Cooper & Alvarado, 2006).

Teacher Qualifications

The preschool system is responsible for caring for and educating young children before entrance into formal education. Early education, however, is unlike the K-12 educational system, as it lacks the public infrastructure support (Whitebook et al., 2009a). The notion of early education stems from two different philosophies, one that early education programs care for young children while their parents are employed, and the other that such programs serve to support children's overall development. As a result, there is great variance in the types of early education programs available, funding sources, and teacher qualifications (Whitebook et al., 2009a).

Preschool teachers are usually not required to possess a college degree. In the majority of the states, including California, a majority of ECE teachers possess less education than a bachelor's degree (Herzenberg et al., 2005). In fact, only 18 states mandate the same educational requirements for ECE teachers as for kindergarten teachers (Bueno, Darling-Hammond, & Gonzalez, 2010).

Recent legislation has brought reforms to ECE teacher education by requiring certification to increase to the bachelor's degree level (Barnett, 2004). The Head Start program, in its last reauthorization, contained language about increasing the educational levels of Head Start teachers. In an effort to assist teachers to earn bachelor's degrees, Head Start mandated that half of all of the teachers obtain an associate's degree by 2003. The Head Start legislation aimed to create educational pathways for teachers by mandating that, after earning an associate's degree, they would eventually earn a bachelor's degree (Barnett, 2004). In California, two state legislation bills addressing higher ECE teacher qualifications were proposed in 2003 but were unsuccessful in

passage. AB 56 required ECE teachers to have a bachelor's degree within 5 years of the opening of an ECE center under a universal preschool program. An additional 24 units of ECE-related training were required within 9 years of an ECE center opening its doors. The second bill that did not pass legislation was AB 712, which aimed for the establishment of Workforce Development Blue Ribbon Committee to create a state-wide staffing plan for ECE centers (Calderon, 2005).

In other parts of the world, the ECE teacher qualifications differ from that of the United States. The European countries of France, Sweden and Italy have ECE teachers with bachelor's degrees. (Sacks & Ruzzi, 2005). France, in particular, requires that the ECE teachers possess bachelor's degrees with additional training in ECE. Universal early education is also offered in both France and Italy. ECE is considered part of their government-funded educational system (Sacks & Ruzzi, 2005).

Access to ECE teacher education programs. The growing number of teachers entering the ECE workforce or returning to school to earn college degrees means that they need access to teacher education programs. Research shows, however, that teacher education programs are challenged to effectively train the ECE teachers needed in the field. Early and Winton (2001) studied teacher accessibility to Institutions of Higher Education (IHE) across the United States by surveying 438 IHE department chairs or leads across 47 states via a telephone interview. They found 1,244 IHEs that offered ECE teacher-training programs, which represented 29% of IHEs. These IHEs consisted of 2-year institutions (53%, $n = 233$), and 4-year institutions (47%, $n = 205$), both public and private. Bachelor's degree programs were offered at 40.4% of the IHEs surveyed. Survey participants were asked to estimate the educational level that their ECE program

graduates would teach, either ECE or kindergarten/elementary level. IHEs with bachelor's degree programs estimated that 57% of their graduates would teach at the kindergarten/elementary level and that 37.2% would teach at the ECE level. IHEs that offered associate's degree programs, in comparison, estimated that 76% of their graduates would teach at the ECE level, with 14.2% at the kindergarten/elementary level.

The IHE study further found that IHEs employed more part-time faculty than full-time faculty in early education programs, especially at the 2-year institutions. An analysis of ECE faculty at IHEs estimated that approximately 8,169 more ECE faculty, part-time and full-time, will be needed to prepare for higher education requirements for the nation's ECE workforce. This figure represents an approximate 76% increase over the present ECE faculty population (Early & Winton, 2001). Overall, the results of Early and Winton's (2001) study revealed significant implications for the recruitment, training, and retention of faculty in ECE teacher preparation programs across the nation. IHEs will need federal and state financial and technical support to expand current ECE degree programs as well as help those IHEs without current ECE training programs to create ECE departments.

Lobman, Ryan, and McLaughlin (2005) examined the availability of ECE teacher education programs in New Jersey. A New Jersey Supreme Court ruling in 1999 ordered 30 low-income districts, referred to as the Abbott districts, to establish high-quality preschool systems. The court ruling defined one of the characteristics of high-quality programs is ECE teachers holding a bachelor's degree as well as specialized early childhood education training. The reform order required ECE teachers to obtain a 4-year college degree, within an approximate 4-year time frame, by September 2004.

In their study, Lobman et al. (2005) conducted a survey of 12 representatives of teacher education institutions, representing 85% of these institutions. In telephone surveys, the researchers inquired about program delivery, course content, faculty demographics, and financial resources. The findings revealed that the newly created systems were able to meet the required staffing due to New Jersey's long-established infrastructure of college faculty for training ECE teachers. Further, sufficient financial resources had been allocated to sustain enough faculty to work in ECE teacher education programs.

The pathway to ECE credential or certificate programs also includes the admissions process. One criticism of ECE training programs is that there exists a lower level of admission requirements. Some IHEs do not have a restrictive admissions policy in place (Bornfreund, 2011). The lower admission requirements may attract less prepared teaching candidates and affect teacher retention.

ECE teacher education models. To understand and address ECE teacher preparation and qualifications, it is important to look at current teacher education models. Due to vast differences in service settings and funding sources, ECE teacher education models lack common standards or theoretical bases (Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009b). In contrast, the K-12 system, teacher education models can be categorized into 4-year bachelor's degree programs, 5-year integrated programs, graduate level programs, and alternative programs (Scannell, 1992).

Another distinction between the K-12 and ECE teacher training programs is that the practice of teacher support or mentorship seen in the K-12 system is often lacking in the ECE field. Early education teacher programs offer few, if any, opportunities to

participate in teacher support practices (Whitebook et al., 2009b). Induction programs in the K-12 system have become a common practice to train and support new teachers. More than half of the larger school districts in the country operate some type of induction program. Induction programs usually involve an orientation and ongoing support for the first few years in the teaching profession. The use of induction programs for reducing teacher turnover, however, has not been empirically studied (Laurence et al, 2002). The inclusion of induction and mentorship in ECE teacher preparation programs, moreover, may help classroom instruction, cooperative planning, and ECE program quality (Whitebook et al., 2009b).

A snapshot of teacher preparation programs across the United States reveals several different state models for teacher education (Bueno et al., 2010). In Wisconsin, the state offers an ECE program for 4-year-olds based out of school districts and staffed by credentialed teachers. New ECE teachers receive support through a school district-designated mentor and professional development team for the first 3 to 5 years of each teacher's career. Wisconsin's pre-kindergarten programs are funded by the school districts. Teacher preparation programs in New Jersey developed a specific certificate for teachers of preschool through third grade, the P-3 credential. Teachers receive full tuition scholarships to finish college degree programs and are able to have classroom substitute coverage to attend professional development courses. New Jersey also established a state-wide professional development agency and leveraged resources with funds from private foundations.

Other states have relied mainly on monetary incentives for increasing teacher education (Bueno et al., 2010). ECE programs in Georgia receive state funding partly

based on teacher educational levels. ECE teachers in Georgia are also eligible to receive financial assistance for attending college courses. In North Carolina, there is a *tiered advancement* system to motivate teachers to attend teacher education courses. The CARES program in California provides stipends to teachers as they complete college coursework that can be taken through distance learning, evening, and weekend class options.

Whitebook et al. (2009b) additionally noted that ECE teacher training is cumbersome from the onset of teacher recruitment because the higher education system lacks uniformity in credit transfer policies. Additionally, ECE teachers returning to college campuses find themselves in an unfamiliar setting. One policy recommendation has been to incorporate support services to students in ECE teacher education programs for students to be better informed when returning to and navigating the college system (Whitebook et al., 2009b). This policy suggestion is especially important as more early education legislation and funding mandates require ECE teachers to obtain higher education degrees.

Teacher education program content. Several recommendations have been made to ensure that teacher training promotes effective instruction resulting in high-quality early education classrooms (Bueno et al., 2010). Four major categories of recommendations addressing teacher education include mentoring and technical support, access systems, collaboration with colleges, and additional research that includes the quality of teaching in relation to higher education. Under the area of access systems or pathways, for example, one suggestion is to implement a tiered system to gradually mandate teacher requirements. Bueno et al. (2010) also reported several difficulties that

the higher education system faces in teaching future ECE educators in regard to coursework selections and the offering of early childhood education degrees at college campuses. The researchers further noted that securing full-time faculty for specialized child development programs, hiring diverse faculty, and collaborating between community colleges and universities were also needed.

Some of the recommendations made for teacher education programs are related to teachers' being knowledgeable about instructional process and content. In reviewing recent teacher education models, De Leon (2001) found that subject matter knowledge, the theory of learning referred to as pedagogy, and knowledge of how subject matter should be specifically taught are considered essential to teacher preparation programs. Further, teacher education should also impart knowledge about the students being taught and the use of metaphors to connect context with student understanding as well as set teaching objectives, mentoring after certification, and teach the use of technology (De Leon, 2001). One educational theory suggests that high-quality ECE programs need to have teachers who have an extensive level of general knowledge, an expansive vocabulary, and competency in child development content (Guernsey, 2010).

A review of early education literature in teacher preparation revealed that there is little reference to field work or student teaching as part of the coursework (Whitebook & Ryan, 2011). In actuality, many of the ECE teachers often continue their higher education coursework while already fully employed as classroom teachers (Whitebook & Ryan, 2011).

ECE teacher education also should prepare teachers to work with the children and families representative of the early education centers' communities. The National

Council of La Raza presents examples of strategies that promote linguistically and culturally diverse staff in ECE teacher preparation programs (Calderon, 2005). Cabrillo Community College in California offers ECE certificate coursework in both English and Spanish, along with internships, tutoring, and self-paced coursework. The Teacher Education and Compensation Helps (TEACH) Early Childhood Project, based in North Carolina, includes criteria for ensuring diversity in teacher training programs. Oregon's Head Start-Higher Education Hispanic/Latino Service Partnerships program helps ECE teachers obtain an associate's degree (Calderon, 2005).

Some programs strive to recruit potential teachers by educating ethnically diverse high school and college students about the ECE profession, such as the Early Care and Education (ECE) High School Recruitment (HSR) Program in Los Angeles (First 5 LA, 2011). The HSR program works through five agencies comprised of non-profit organizations and community colleges to educate high school and college students about ECE careers. Support is given to the high school and college students by providing them with career counseling, visits to early education centers, job-shadowing, internships, and enrollment in child development courses. In the K-12 system, the Institute for Recruitment of Teachers is an outreach program that targets ethnically diverse college and graduate students to learn more about the profession of education. Students are offered summer internships and guidance for applying to graduate schools. This recruitment program has helped 364 minority students complete graduate degrees in education, and close to one-third are working in schools (Laurence et al., 2002). In San Francisco, California, ECE teachers are able to earn a dual-language credential to address the various linguistic needs of the student population. The cohort class model has been

used throughout California to support teachers who may be unfamiliar with the traditional college classroom setting, especially first-generation college students (Bueno et al., 2010).

The National Council of La Raza makes various recommendations to support diverse ECE teachers in workforce development. Some of the policy recommendations include awarding IHE grants to expand ECE degree programs and to hire diverse faculty members. Other policy recommendations including having more ECE bachelor's degree programs that incorporate bilingual education and establishing partnerships with Regional Occupational Programs (ROP) in school districts to offer ECE coursework, beginning at the high school level (Calderon, 2005).

ECE teacher education and quality of classroom instruction. Teacher education is instrumental in equipping teachers with knowledge and skills for the ECE classroom that not only help improve the quality of the instruction but also support teacher retention. Burchinal, Cryer, Clifford, and Howes (2002) examined teacher education and program quality in a study that included 553 childcare classrooms in four regions of United States: Los Angeles, California; Frontal Range, Colorado; Hartford-New Haven, Connecticut; and Piedmont, North Carolina. Both infant/toddler and preschool classrooms were included in the study; however, more classrooms (418) were of the preschool level.

Burchinal et al. (2002) measured teacher education, formal and informal training, classroom quality, and children's language skills by administering teacher surveys as well as conducting classroom observations and child assessments. The quality of classroom environment was measured using the Early Childhood Environment Rating Scale

(ECERS) and Infant Toddler Environment Rating Scale (ITERS), which, taken together, assess the classroom in terms of safety, literacy-rich features, and teacher-child interactions. The Caregiver Interaction Scale (CIS) was also used for measuring teacher interactions with children in regard to sensitivity, harshness, and detachment. Children's receptive language skills were measured by the Peabody Picture Vocabulary Test-Revised (PPVT-R), which involves children's pointing to pictures of vocabulary words stated by the examiner.

The study found that having a higher education level, such as bachelor's or master's degree, correlated with higher ratings for classroom quality, teacher sensitivity, and children's receptive vocabulary skills (Burchinal et al., 2002). The findings also indicated that teachers who participated in formal and informal training received higher ratings for classroom environments and sensitive interactions but with ratings lower than those found among teachers with a bachelor's or master's degree (Burchinal et al., 2002).

Gormley, Gayer, Phillips, and Dawson (2005) studied Oklahoma's universal preschool programs, which require that teachers possess college degrees and early childhood education certificates. The study examined the impact of a universal preschool program on children's readiness skills in terms of student gains on the Woodcock-Johnson Achievement Test (WJAT). WJAT is a standardized battery of academic skills tests in the general areas of reading, writing, and math. The results indicated that students who attended the universal preschool programs made significant gains in the school readiness areas of letter-word identification, spelling, and applied problems than those students who had just begun the preschool program.

Another study found that intensive professional development for teachers can improve teaching practices and readiness skills for young children, regardless of the teacher's formal educational background (Landry, Anthony, Swank, and Monseque-Bailey, 2009). Three types of early education settings, childcare, Head Start, and school district pre-kindergarten programs, were the focus of the study. All teachers in the study participated in an online course focused on language and literacy instruction and received the same literacy curricular materials, consisting of the Center for Improving the Readiness of Children for Learning and Education (CIRCLE) manual and related materials.

Teachers were randomly selected for five participant groups. One group received the most intensive level of professional development, which included mentoring and detailed computerized child progress monitoring feedback. Another group received the detailed computerized child progress monitoring data without mentoring. The third group received mentoring along with self-calculated child progress monitoring information, which required more time and expertise than did the computer-generated data. The fourth group received the self-calculated child progress monitoring data but no mentoring. The fifth group served as a control and did not receive any interventions. The small-group, 2-hour online training took place twice a month, and mentoring for those eligible participants was approximately 4 hours per month. The study also used teacher observations and pre- and post-language and literacy assessment of the children. The study was conducted in four states: Florida, Maryland, Ohio, and Texas (Landry et al., 2009).

The teachers possessed various levels of teaching credentials and were rated using the Teacher Behavior Rating Scale and the CIRCLE Glow and Grow Mentoring Tool, along with videotapes of teacher strategies during book reading, learning centers, and small groups. Children's progress monitoring utilized the CIRCLE-Phonological Awareness, Language, and Literacy Screener (C-PALLS; Landry et al., 2009).

The results demonstrated that the most intense professional development approach, mentoring and detailed progress data, had the highest ratings for instructional strategies and child outcomes across all four states. Additionally, all four groups had higher ratings than did the control group, even with great variance by ECE teachers' level of college education (Landry et al., 2009).

A review of the empirical research on teacher preparation and ECE program quality revealed that higher levels of education and specialized training in ECE teachers correlated with higher program quality (Whitebook, 2003). The literature reviewed included studies conducted at center-based programs across the nation, with studies differing in sample size, instrumentation, and research methods. The studies demonstrated, more specifically, that, in ECE programs that were rated as high quality, teachers had a bachelor's degree and specific college-type training. Two additional findings are of note. First, the advantages of earning a bachelor's degree over an associate's degree still need to be identified. Second, some of the studies did not examine the course content for child development training at the college level or for "specialized" training. Whitebook (2003) concluded that more research needs to focus on the types of specialized training that lead to better program and child outcomes.

ECE teacher preparation in California. California is in the middle of responding to several initiatives to align community colleges' and state universities' instructional content in ECE coursework (Brown, 2007). The California Community College Early Childhood Curriculum Alignment Project (CCCECCAP), in particular, is a joint effort by faculty from community colleges and state universities to develop a standard 24-unit curriculum framework to be used across the state's community colleges in ECE teacher training programs (Brown, 2007). The alignment is known as the EC/CD Lower-Division 8, as the coursework consists of eight classes, each 3 units, that have uniform content and outcomes. The eight classes include child development; family and community; principles and practices; introduction to curriculum; observation and assessment; health, safety, and nutrition; teaching in a diverse society; and a practicum (Brown, 2007).

CCCECCAP has made it easier for ECE student teachers from community colleges to transfer EC/CD Lower-Division 8 units to the California State University system for future attainment of a bachelor's degree (Brown, 2007). At the university level, ECE coursework alignment was determined by faculty from the California State University system who participated in the Project for Integrated Preparation for Early Development, Care and Education (IPEDCE). IPEDCE's goals entail facilitating the transfer of ECE units from community college students, such as those participating in EC/CD Lower-Division 8, and the development of standard upper-division coursework in ECE across the different state university systems (Seidman, 2007).

Faculty from California community colleges and universities also have been in partnership with the California Department of Education, Child Development Division as

part of the CDE/ECE Faculty Initiative. The purpose of this collaborative initiative is to incorporate curricular materials developed by the state into course content at the college level. The widely used curricular materials include the Desired Results Developmental Profile-Revised (DRDP-R), the Pre-Kindergarten Learning and Development Guidelines, and the Preschool English Learners: Principles and Practices to Promote Language, Literacy and Learning: Resource Guide (Center for the Study of Child Care Employment, 2008).

Another major undertaking in the ECE field in California is the development of Early Childhood Educator Competencies. The California Department of Education and First 5 California developed the document with input from the ECE field. There are 12 competency areas within four early learning contexts; supporting, planning and guiding, creating and maintaining, and advancing. ECE practitioners were asked to provide feedback on the competency areas in which the following 12 competency areas emerged; (a) child development and learning; (b) culture, diversity, and equity; (c) relationships, interactions, and guidance; (d) family and community engagement; (e) dual-language development; (f) observations, screening, assessment, and documentation; (g) special needs and inclusion; (h) learning environments and curriculum; (i) health, safety, and nutrition; (j) leadership in ECE, (k) professionalism; and (l) administration and supervision. It is anticipated that these ECE teacher competencies will further shape teacher preparation and the monitoring of classroom quality in California's early education system.

Compensation

Another factor that research often cites as influencing teacher retention is compensation. Compensation is even more relevant in the early childhood education system given that ECE teachers across the nation have significantly lower salaries and fewer benefits than do those in other occupations (Barnett, 2003). The average national annual salary for ECE teachers is estimated to be \$26,610, much lower than a parking enforcement officer, who earns \$34,020. The salary comparison is even more dramatic when viewed against the average annual salary of a kindergarten teacher of \$49,770 (Bueno et al., 2010). Another wage analysis by the U.S. Bureau of Labor Statistics from 2000 (as cited in Laurence et al., 2002) showed that the mean hourly rate for ECE teachers was \$9.66, as to a kindergarten teacher's hourly rate of \$26.82 or a bus driver's of \$13.10.

There have been different theories to explain why the ECE profession has had lower wages historically. One rationale is that few careers were deemed appropriate and accessible to female workers over time, referred to as *crowding* in economic terms (Nelson, 2001). Arguments, however, against the *crowding* reasoning for low early care personnel wages fail to account for the fact that the demand for ECE services continues to grow and female employees now have more job opportunities than before (Nelson, 2001).

Another theory for lower compensation pertains to the skills set required for the job meaning that the positions with less skills required would have lower wages, often referred to as *compensation for wage differentials*. Nelson (2001) argues against wage differentials since early education is a skilled career, and the entire ECE field, not certain

individuals, receives lower wages. Additional theories include ensuring that the early care system is still affordable, but on the other hand, other countries have found ways to finance early care systems with adequate teacher compensation (Nelson, 2001).

The Insight Center for Community Economic Development (2008) in California recommends two methods to increase the compensation of ECE teachers. Presently, eligibility for professional development stipends for ECE teachers are dependent on the ECE agency's funding source. The Insight Center suggests that all ECE teachers be eligible for the stipend program without consideration of the agency's funding stream. The Insight Center also recommends that the state increase the daily reimbursement rate for the care of young children. California's present daily reimbursement rate is \$32, but should be within the range of \$39 to \$42 to afford higher wage compensation.

North Carolina is another state that aligns wage increases in early education to professional development activities. The TEACH Early Childhood Project rewarded over 5,000 ECE teachers during 2008-09 with a 12% increase in salary for the completion of scholarship programs. The TEACH Early Childhood Project was credited with helping with teacher retention, as seen in the 5% teacher turnover rate for this group, which is significantly less than the estimated national turnover rate of 33% (Bueno et al., 2010).

The educational system, in general, has set teacher compensation based on years of seniority and college units earned. The present compensation model is referred to as a single-salary schedule, and the system is often criticized due to a lack of evidence connecting this type of teacher pay with better teaching or student outcomes (Odden, 2000). The *knowledge-and-skills-based* teacher compensation model is believed to lead

to better student achievement and more effective teaching practices. According to Odden (2000), there should be three skills sets, one each for beginning, midcareer, and experienced teachers, along with specific assessments to measure teacher knowledge at each level. Assessments could include the PRAXIS II/III, Interstate New Teacher Assessment and Support Consortium (INTASC), National Board for Professional Teaching Standards, and the Danielson Framework. Odden (2000) further recommends that salary incentive increases average 10% to maintain teacher motivation, and for a small portion of the teacher salary based on school performance.

Performance-based bonuses were given at a high school district to help increase math scores (Holcombe, 2009). Math teachers with students whose math scores increased more than one standard deviation above the mean growth were awarded a one-time-only \$2,500 bonus. The bonus was larger, \$4,000, if the math scores were 1.5 standard deviations above the mean growth. The majority of the math teachers, 74%, earned a performance incentive the first year of implementation. The district paid approximately \$123,500 in earned bonuses (Holcombe, 2009).

Klostermann, White, and Presley's (2006) study of 3,402 ECE teachers in an Illinois reserve pool found that teachers, regardless of the work setting, preschool or the traditional K-12 school setting, were the most motivated by salary. Teachers were asked to rate the top three incentives for deciding to work in an ECE classroom. Of the teachers, 72% rated higher salaries as one of top incentives. The other top incentives included working on a school year calendar (23%), better health care coverage (22%), and better pension and retirement benefits (19%).

Some of the challenges faced by early education centers in offering competitive wages were seen in individual and focus group interviews conducted by the Insight Center for Community Economic Development (2008). Interviews were conducted with 45 ECE personnel and teachers in training in the Los Angeles area. Some of the study participants raised the issue that early education centers must adhere to strict staffing ratios for facility licensing purposes; and, as such, enrolling more children to increase profits and raise wages is not a feasible option. Another point made in relation to raising revenues was that public ECE programs are often reliant on state funds to offer subsidized early education for low-income families and are reimbursed per child at specific amounts. Private preschools, in comparison, tend to rely on tuition fees paid by parents, and, thus, these programs are better able to raise tuition fees to pay higher wages.

Some of the interview participants added that the ECE centers often hire part-time staff for staffing coverage rather than increase overall employee salaries. Another topic that emerged was the inclusion of health benefits when addressing compensation. Not only are the wages too low for ECE personnel, but, often, the availability of affordable health benefits is an even more pressing issue. Some of the ECE staff surveyed stated that the health benefits were still too expensive to buy, even when health benefit packages were offered by the ECE employers (Insight Center for Community Economic Development, 2008).

The issue of low wages in the ECE setting affects teacher recruitment as much as the job retention of ECE teachers. IHE faculty rated salary and work conditions in the ECE field as important factors in retaining ECE students in teacher preparation programs across the nation. Early and Winton (2001) surveyed 438 ECE department chairs in IHEs

and found that low wages and few benefits were rated as a *major challenge* in recruiting and sustaining students in their ECE training programs. This finding was more evident with 2-year IHE institutions than with the 4-year institutions. The study speculated that 2-year IHE institutions may perceive the limitations of future compensation as more detrimental for recruiting potential ECE teachers because they may have more students already working in the ECE settings and who receive low wages, than do 4-year IHE institutions (Early & Winton, 2001).

Granger and Marx (1990) found that salary alone was the determining factor in retaining teachers in the education field. Compensation and educational background were examined in Granger and Marx's study of 559 teachers in three different unionized ECE systems, school districts, center-based day care, and Head Start in New York City. The study investigated the variables of teacher education, teacher salary, and employee benefits.

The study's results indicated that the ECE centers in the public school system had a higher percentage of teachers with a bachelor's or master's degree (94.3%) and that teachers in school districts earned a higher income, with an average hourly rate of \$27.99 versus the Head Start and day care teachers, who earned an average of \$11.74 to \$11.81 per hour. Additionally, public school district ECE teachers predicted that they would stay longer in their present work setting and in the teaching profession than the day care and Head Start teachers. Further, Granger and Marx (1990) found that the teacher turnover rate was higher in the Head Start and day care programs, with the majority of the survey respondents rating low salaries as the main reason for changing jobs. Also, low salaries were also one of the main reasons that 748 teachers, 58% of whom were

national board certified, in North Carolina gave for leaving the teaching profession (Dagenhart, O'Connor, Petty, & Day, 2005).

Teacher intentions for continuing to work in the early education field were investigated in a study, and found that related factors, not only salary, are major influences in teacher decisions to leave their teaching jobs (Holochwost, DeMott, Buell, Yannetta & Amsden, 2009). The study surveyed 846 early education workers and found that 60% planned to continue in early education for at least 5 more years. They also found a significant difference by marital status and age. Married teachers had longer rates of desired job longevity, and longer job longevity also was evident with the 41-to-55 age group. The researchers also found longer retention to be significantly associated with having health insurance, disability insurance, and pension coverage. The researchers concluded that salary levels alone were not a significant factor in the retention of these teachers (Holochwost et al., 2009).

Benefits, in the form of incentives, have been utilized by school districts across the nation as a means to recruit and retain teachers. Notable incentives include bonuses based on merit, such as the stipends for being national board certified (Laurence et al., 2002). The Guilford County School District in North Carolina offered an incentive of \$10,000 as a means to recruit high school math teachers for their lowest-performing schools (Holcombe, 2009). Other bonuses offered included housing loans to attract teachers to work in certain geographic areas. Additionally, districts and government officials have made an effort to retain teachers through loan forgiveness programs, in which student loans are repaid over time as long as teacher remain working in schools (Laurence et al., 2002).

Workplace Environment

Teacher perceptions of the workplace environment are important to understanding teacher retention (Johnson, 2006; Whitebook et al., 2009a). The understanding of what constitutes a workplace environment varies greatly in the ECE field as well as in education, in general. Whitebook et al. (2009a) studied the workplace environment in terms of external factors such as classroom size, compensation, unionization, job retention, and administrative support. The Center for Comprehensive School Reform and Improvement (2007a), in comparison, looks at the workplace in terms of its being participatory or having supportive structures in place. Activities such as planning time, peer collaboration, shared responsibilities, professional development, curricular resources, and administrative leadership have been described as supportive work conditions.

Another perspective considers the dimensions of the workplace environment based on Moos' Work Environment Survey (WES; Fisher, Docker, & Fraser, 1986). In this perspective, the workplace environment is studied in relation to the organizational structure, personal characteristics of the workers, and organizational climate. Organizational climate refers to the interaction between the worker and the environment. The WES measures how these three aspects are demonstrated in relationships, personal development, and systems changes.

The WES was used in Goddard and O'Brien's (2003) study, conducted in Australia, which examined the role that the general workplace environment plays in teacher attrition for both new and experienced teachers. Specifically, Goddard and O'Brien studied how teacher perceptions of the workplace environment influence first-

year teacher retention. Participants included 123 new teachers who took the WES, which was modified for the educational work setting, and the Maslach Burnout Inventory (MBI) at two time periods, at 7 weeks of employment and 6 months later.

The results of the study indicated that teacher ratings of work climate significantly decreased from Time 1 to Time 2, on the WES scales of autonomy, co-worker cohesion, task orientation, and role clarity. The findings also showed that teacher burnout increased from Time 1 to Time 2, the desire to leave the work setting was high at Time 1 for one-third of the participants, and the high ratings were maintained at Time 2 (Goddard & O'Brien, 2003). The study showed the significant role the work environment plays in teacher attrition.

The National Education Association (NEA, as cited in Johnson, 2006) conducted a review of the literature on teacher quality and retention as related to workplace conditions. The review showed that 10 workplace conditions affect teacher retention, including teaching assignments, peer collaboration, and additional assistance for new teachers as well as student support, curricular resources, adequate materials, accountability systems, professional development, shared decision making, and facilities.

Collaboration. One of the desirable work conditions related to teacher longevity is peer collaboration (Johnson, 2006). Peer collegiality was one of the important factor in job satisfaction as reported by ECE teachers in Australia (Kilgallon, 2006). The study surveyed Australian ECE teachers and 73.7% (42) out of 57 participants indicated that working with their colleagues contributed to their satisfaction on the job. Research has also shown that the collaborative process requires time to develop as well as time allocated for regular interactions with colleagues. Additionally, because teacher

education programs are now taught in cohort format, teachers may develop a preference for collaboration (Johnson, 2006). In a study of middle school teachers participating in the Professional Development School (PDS) network, Thornton (2004) found that teachers who participated in PDS (versus those who did not participate) were more likely to view collective work with colleagues as a means of school improvement. The PDS teachers also stated that involvement with the PDS network was a motivating factor to remain in teaching (Thornton, 2004).

Class size. Having an appropriate class size influences teacher retention (Johnson, 2006). Within the ECE system, class size translates to a staff-child ratio. Staff-child ratios differ across early education centers, depending on state licensing and funding requirements. In California, the mandated staff-child ratio is further determined by the type of certification that ECE teachers possess. In childcare funding, Title 22 currently allows up to 12 children for every ECE teacher, whereas, under Title 5 funding, 8 children per teacher are allowed (California Department of Education, 2011). Teachers rated smaller class size as one of the more important improvements needed in the learning environment (Dagenhart et al., 2005).

Teacher support and mentoring. Teacher mentoring, sometimes referred to in the context of teacher support, is one of the workplace environment factors often cited in research on promoting teacher engagement and longevity. Districts usually provide higher levels of support for new, as compared to experienced teachers, as evident in the number of induction programs offered by school districts (Laurence et al., 2002). Some ECE programs, however, strive to provide mentoring opportunities to experienced teachers as well as beginning teachers. Head Start implemented a mentoring program as

part of an early literacy initiative, the Strategic Teacher Education Program (STEP; Onchwari & Keengwe, 2008). Head Start's STEP initiative called for the training of teachers in the literacy strategies of CIRCLE to enable them to become mentor-coaches. The mentor-coaches were responsible for supporting a minimum of two teachers in using STEP at their respective Head Start sites. The mentor-coaches were supported in their mentoring roles by specialists from Head Start regional centers.

Approximately 2 years after STEP was initiated, Onchwari and Keengwe (2008) interviewed 44 teachers, finding that approximately 77% of the teachers reported that the mentoring process had continued at their preschool sites. Approximately 52% of the teachers found the STEP initiative *very helpful*, 34% found it *somewhat helpful*, and 13% found it *not helpful*. Some of the challenges of using mentor-coaches in doing STEP were identified by the teachers. Several teachers indicated that more time was needed to meet with the mentor and that more individualized training was needed. They also stated that it would have been more beneficial to offer mentoring that addressed the teacher's needs instead of using a preset sequential format.

Onchwari and Keengwe (2008) found that some of the mentor-coaches also had some supervision duties over the teachers. They cautioned that the impact of mentoring could be hindered when the mentoring role is not kept strictly as a supportive one. Although the study did not directly measure the relationship between mentoring and teacher retention, the study was able to show the influence of mentoring on the application of instructional strategies in the classroom as well as on the teachers' commitment to continuous learning and support, which are part of a positive workplace environment.

The Head Start mentor-coach study highlighted the possible conflict between the role of supervisor and mentor, noting that mentoring should be used exclusively for teacher support (Onchwari & Keengwe, 2008). The Cumulative Effect program in Greensboro, North Carolina, is an example of a comprehensive support model for high school math teachers. The program addresses recruitment, professional development, mentoring, technology, and caseload. For the mentoring aspect, a mentor teacher was assigned to every math teacher. The mentors were former administrators, master teachers, or university faculty. The nature of the relationship between the mentor and teacher was strictly supportive, not evaluative. The program was designed to reduce a teacher turnover rate of approximately 50% that, at times, had also reached 70%. The Guilford County Schools partnered with the University of North Carolina to recruit and retain math teachers at ten of the lowest-ranking high schools (Holcombe, 2009).

The Cumulative Effect program showed promising results, with significant increases in the number of math teacher applications filed at the district office and the number of math teachers eligible for incentive bonuses. The Guilford County Schools' teacher retention rate also improved, and there were no vacancies at the beginning of the school year for 2 years. Prior to implementation of the program, some of the high school math classes had substitute teachers for the entire school year (Holcombe, 2009).

The need to provide mentoring for new workers is also apparent in fields other than education, such as healthcare. Zinn (2004) studied a support system for healthcare aides that was designed to reduce staff turnover. About a third of healthcare aides, especially those at long-term care facilities, do not have a high school diploma or a GED certification. Long-term care aides also receive lower wages (an hourly average of

\$8.59) than other healthcare staff. Long-term care aides are viewed as being in entry-level positions, and the cost of turnover is approximately \$3,000 per employee (Zinn, 2004). The situation of these health care aides is similar to that of ECE teachers given the educational qualifications and earned salary.

The Achieve program of Ohio provides a comprehensive system for retention of long-term care aides through the use of job coaches and social service workers. The Achieve program offers support and training at the work site that includes consultation hours, training for supervisors, social services support, and on-site presentations called *lunch and learn*. These presentations focus on personal wellness, work skills, finances, and continuing education. Employees who attend ten sessions are awarded a certificate and a topic-related prize. The Achieve program staff also provides social service assistance, such as transportation, childcare, and referrals, as needed. Long-term care facilities that work with the Achieve program have demonstrated an employee retention rate of 82% after a 90-day period compared to a retention target of 50% at other long-term care facilities. After finding that some health care aides avoided consultation services based on fear of being stigmatized as having difficulties, the Achieve program staff used goal setting as a means to eliminate the potential for stigmatization (Zinn, 2004). Many aspects of the Achieve program are applicable to ECE teachers in providing a supportive work environment.

Professional development. Another factor related to teacher retention is professional development, which is related to and overlaps with mentoring. Professional development can be considered a means to build teachers' curricular knowledge and skills, and, thus, aids in the retention of teachers (Johnson, 2006). An important aspect

professional development is teachers' learning new information on an ongoing basis rather than through one-time training. Early education teachers in Vermont are encouraged to write individual professional development plans, and the Vermont Early Childhood Work Group (2001) developed guidelines for teachers to follow in writing these plans. The first step is for teachers to explore and identify their future career plans. The second is for teachers to find mentors to help them develop and complete the professional development plan. The third step is for teachers to conduct a self-assessment of their skills.

The Vermont Early Childhood Work Group (2001) recommends aligning the self-assessment process with the skill standards from the Vermont Early Childhood Framework, Standards for Vermont Educators, or Child Development Association. These skill standards cover child development, classroom environment, teacher-child relationships, home-school partnerships, ethical behavior, and program management. The self-assessment process requires teachers to reflect on their present skills in each of the skills areas and to identify areas for future growth. Teachers then prioritize their areas of need. Teachers complete a professional development plan that includes goals for each skills area, strategies to complete each goal, resources needed, a timeline, and follow-up activities (Vermont Early Childhood Work Group, 2001).

The importance of continuous professional development for teachers is also seen in the Cumulative Effect program (Holcombe, 2009). In this program, high school math teachers participated in professional development and received related support services. Math teachers attended a 40-hour math institute over the summer, which concentrated on teaching Algebra II and Geometry courses, receiving a \$4,000 stipend for completion of

the institute. The same math teachers also participated in monthly seminars to learn pedagogy from content experts. After a couple of years of conducting monthly seminars, the district changed the focus of the seminars from external presenters to teacher-led inquiry, as the math teachers became more skilled. The district found that the Algebra I and II math scores improved and that the math teacher turnover was significantly lower than prior to the program. Additionally, student math scores and teacher retention increased in low-performing schools (Holcombe, 2009).

A policy recommendation by the NIEER consisted of the work environment providing continuous, on-site professional development to ensure program quality (Whitebook & Ryan, 2011). Some of the strategies noted included; paid collaborative planning time, peer observations, and coaching opportunities.

An interesting point was revealed in the research conducted by Kauffman (2004) that studied second-year teachers' experiences with curriculum materials. The study found that 20% of beginning teachers in low-income schools rated the curriculum as *overprescribed* as compared to 7% of beginning teachers working in high-income schools. *Curriculum overprescription* means that instruction is dictated by a preset curriculum (Kauffman, 2004). Given that new accountability measures are being implemented, *curriculum overprescription* is an area to monitor in ECE. The California Preschool Learning Foundations, for example, were recently adopted which are similar to the idea of learning standards in the K-12 school system. Teacher training in the preschool foundations, including online courses, have been conducted across the state by the California Preschool Instructional Network (CPIN). The application of instructional

planning tools such as those of the Preschool Learning Foundations rely heavily on the support that teachers receive from administration and colleagues.

Administration and leadership. Teachers often base their decision to remain at or to leave a school site on the school's leadership (Hirsch, Emerick, Church, & Fuller, 2006). The study surveyed 8,500 teachers in Clark County, Nevada, in regard to teaching and learning conditions and their relationship to retention. The study's results indicated that 63% of the teachers rated *support from school administrators* as the top reason for decisions related to retention. Specifically, leadership was cited by 41% of teachers in regard to their decision to remain working at their school site. The other work conditions related to their decision included empowerment (19%), facilities/resources (17%), time for planning (17%), and professional development (3%). Moreover, Hirsch et al. (2006) found that teacher perceptions of work environment conditions were significantly different than those of the school administrators. The largest discrepancies were noted in teacher involvement in decision making, with teachers rating their involvement at 34.6% versus administrators rating it at 82.1%. Additionally, discrepancies were found in ratings of the use of professional development to assist with instructional practices, with 55% for teachers versus 97.5% for administrators, as well as for problem solving actions, with 62.5% for teachers versus 97.4% for administrators.

Administrative support was also one of the highest rated needs by teachers for job satisfaction of teachers in North Carolina; other needs included allocating time for planning, having sufficient resources, and having paid professional development and support for teachers as professionals (Dagenhart et al., 2005).

Citing several studies, Whitebook et al. (2009b) found that the educational background and stability of the administrators in ECE centers affects teacher retention and program quality. Some policy recommendations included, more opportunities for administrator support, as well as teacher support, such as administrator mentorships, administrator peer groups, and specific training at the administrator's level (Whitebook et al., 2009b).

The role of the administrator in providing a supportive work environment has been analyzed in several studies. Marvin, LaCost, Grady, and Mooney (2003) surveyed 176 ECE teachers in Nebraska schools, with the majority of the teachers serving children with special needs. The results indicated that 72% of the teachers felt that their administrator depended on them for early childhood knowledge and that their administrators advocated for the ECE program. Marvin et al. (2003) also found that 70% of the ECE teachers recognized that their administrator helped them with the identification of areas for improvement. Additionally, 74% of these teachers stated that administrators used the same evaluation instrument as was used for the elementary-level teachers, and 96% stated that more time was needed for professional development.

Teachers who did not have school principals as their direct supervisors were more likely to rate their supervisors as being more informed of early childhood education as well as more flexible of work schedules and budgetary decisions than did those teachers who had school site principals as supervisors (Marvin et al., 2003). Overall, the study showed the importance of administrators' having an early childhood education background to better support early education teachers and to make more informed programming decisions.

The essential role school principals play in supporting ECE programs prompted the National Association of Elementary School Principals (NAESP) to develop a guide for the elementary administrators (NAESP, 2005). The guide outlines six standards comprised of (a) enhance early childhood learning, (b) engage families and communities, (c) promote appropriate learning environments for young children, (d) ensure high quality teaching, (e) use multiple assessment to strengthen learning, and (f) advocate for high quality, universal ECE.

The issue of school-based administration and ECE programs was further examined in a study in Georgia by Shore, Shue, & Lambert (2010). The school administrators surveyed were found to be very supportive of ECE programs located on their school campuses. A large percentage of principals, 88%, however, reported they never received any training in ECE administration. Furthermore, 62% of the administrators reported not having content training in early childhood development. Additionally, 61% of the school principals were unfamiliar with the state's ECE standards. The study found that 88% of the principals believed that ECE should be part of administrator training programs (Shore et al., 2010).

The role of the ECE administrator or principal may be viewed as indirectly affecting children's education (Jorde-Bloom, 1988). The ECE administrator is often credited as the leader in establishing a work environment that enables teachers to instruct children effectively. The Early Childhood Work Environment Survey (ECWES) was developed on the notion that ECE administrators should have their program staff evaluate the work environment and then to make programmatic changes as needed (Jorde-Bloom, 1988).

The ECWES instrument was used in a study of workplace perceptions of 94 administrators and 535 teachers (Jorde-Bloom, 1988). The results indicated that administrators consistently rated the work environment more favorably than did the teachers. Overall, the professional development scale of the ECWES had the lowest scores from both administrators and teachers, while the innovativeness subscale had the highest scores (Jorde-Bloom, 1988).

Administrators as having an influential role in employee retention is evident not only in education but in the larger workforce as well. Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades (2002) studied the relationship between supervisor support and staff turnover. The study, which had 493 participants, focused on a labor pool from a large electronics company, where employees averaged 60 months of work with the company. Employees were asked to rate *perceived supervisor support* and *perceived organizational support*, and their employment status was reviewed 6 months later to determine retention. The results show that when employees viewed supervisor support as positive, their perceptions of organizational support were higher, and they had lower rates of turnover. The degree of support that employees receive from their supervisors influences how employees perceive the company as well as their allegiance to it. The findings from this study have relevance to the field of education in terms of preschool teachers and their perceptions of administrative support.

Family partnerships. Certain external work environment factors, such as the relationship between the teacher and the families of students influences job satisfaction, and helps teachers be more effective educators. The importance of family partnerships is illustrated by The National Association for the Education of Young Children (NAEYC)

in the development of six standards for preparation programs of ECE teachers (NAEYC, 2009b). One of the standards addresses building family and community relationships which consists of understanding the diversity of families, developing *respectful* partnerships, and supporting parents in helping their children.

ECE teacher training programs often require coursework in family engagement. The depth or extent of the content, however, is not often known. In Georgia, as an example, family engagement content is frequently incorporated into other teacher preparation courses (Bornfreund, 2011).

When working with families of children, the cultural context should also be addressed. The differences between culture and ECE are further examined by Tobin, Wu & Davidson (1989) in the three countries of Japan, China and the United States. The culture played a role in the types of partnerships the teachers had with families. In China, limited conversations were observed between the parents and staff with the majority of interactions happening during the health check-ins at the beginning of school days. The cultural differences were also evident in the relationships between ECE teachers and children which then affected the classroom management strategies implemented. The ECE classroom observed in the United States tended to have more teacher facilitated play and conversations than the peer focused interactions in Japan. These cultural examples reveal the vast differences in teacher interaction styles that affect the degree of family involvement in ECE programs.

Previous relationships with parents also impact teacher decisions to remain at work settings. A study on ECE teacher retention in Australia found that 17.5% (10) out of

57 ECE teachers indicated that positive interactions with parents increased their retention rate (Kilgallon, 2006).

Summary

Early childhood education teacher retention is a pressing issue due to the high turnover rate among these teachers. In response to this issue, the literature presented considered the factors related to retention, including teacher qualifications and overall program quality in ECE programs (Burchinal et al., 2002; Gormley et al., 2005; Whitebook, 2003). The research has shown that the majority of ECE teachers currently employed do not possess college degrees, and most states do not require college degrees to teach young children (Barnett, 2004; Bueno et al., 2010; Herzenberg et al., 2005). Recent legislative efforts, at both state and federal levels, propose that ECE teacher hold a bachelor's degree (Barnett, 2004). The college system, however, lacks clear educational pathways and sufficient faculty to educate the current or future early education teaching pool (Early & Winton, 2001; Lobman et al., 2005; Whitebook et al., 2009b). Federal and state efforts to prepare potential ECE educators often include financial assistance, mentorships, and alternative education pathways (Bueno et al., 2010; Calderon, 2005). Additionally, teacher qualifications have implications for workforce development issues in terms of teacher education program content (Bueno et al., 2010; Calderon, 2005; DeLeon, 2001; Guernsey, 2010). California has made several changes to ECE teacher education programs that result in the recruitment of more ECE teachers and an increase in the attainment rate of college degrees for these teachers (Brown, 2007; Early & Winton, 2001).

The issue of teacher retention in ECE is further hindered by lower compensation for these teachers. The ECE field has a long history of lower wages and benefits as well as under-funding by state and federal agencies (Nelson, 2001). Several ECE funding initiatives have proposed higher pay in alignment with higher educational achievements (Barnett, 2003; Calderon, 2005). This literature viewed compensation more comprehensively, including health insurance benefits and bonuses (Holochwost et al., 2009; Laurence et al., 2002). There are mixed findings, however, in regard to whether salary alone will help retain ECE staff (Granger & Marx, 1990; Holochwost et al., 2009; Klostermann et al., 2006).

In addition to compensation and teacher training, retention in the early education setting is also positively affected by a supportive workplace environment. Some of the aspects of what constitutes a positive workplace environment include collaboration, teaching assignments, and professional development (Dagenhart et al., 2005; Holcombe, 2009; Johnson, 2006; Onchwari & Keengwe, 2008; Thornton, 2004). Mentoring services are also proven strategies for teacher retention in education and other fields (Zinn, 2004). The role of a supportive supervisor is also related to teacher retention and in other professions as well (Eisenberger et al., 2002; Hirsch et al., 2006; Jorde-Bloom, 1988; Marvin et al., 2003; Whitebook et al., 2009b; Zinn, 2004). The presence of family partnerships affect teachers' job satisfaction and may influence job retention as well (Kilgallon, 2006).

Further research is needed on ECE teacher qualifications, compensation, and work environment to understand their relationship to retention. As the demand for early

childhood education services and teachers continues to grow, the need to train and retain high quality ECE teachers becomes even more important.

Chapter 3

Methods

This chapter presents the methods used in the study. The chapter begins with the research design, followed by a presentation of the setting, participants, protection of human subjects, data collection, and instrumentation. The chapter concludes with a discussion of the data analysis.

Research Design

The study uses a correlation and comparative design, with a survey methodology, to determine the relationship between teacher education, compensation, and perceptions of the workplace environment with teacher retention. As discussed in more detail below, a teacher questionnaire that asks for demographic information and teacher perceptions of work environment was distributed to the participants (Appendix B). The teacher perceptions portion of the questionnaire was drawn primarily from the Early Childhood Center Work Environment Survey (Jorde-Bloom, 1988). Data collection was accomplished in spring 2011 which allowed participants who were new teachers to become familiar with their workplace environment and to able reflect more accurately on their work environment.

Setting

The study participants were ECE teachers in Los Angeles County and a few from surrounding counties located in Southern California. Estimates based on the number of licensed childcare facilities in the county show over 3,500 ECE programs, both state- and local grant-funded, in Los Angeles County (Los Angeles County Child Care Planning Committee, 2002). This estimation includes ECE teachers work in various job settings,

including programs in child development centers, private childcare facilities, school districts, and community-based agencies. Some ECE programs are state-licensed facilities, authorized by county officials. Other ECE programs may be license-exempt because parents are on campus or the program is under school district regulations of NCLB/Title I Act or special education services under the Individuals with Disabilities Educational Act (IDEA).

Participants

This study considers eligible participants to be teachers who work in any ECE setting, with the exception of private preschool centers, and the study did involve any sampling in terms of Los Angeles County. The Insight Center for Community Economic Development (2008) estimated approximately 17,380 ECE teachers but this estimation is not considered necessarily part of a single population of ECE teachers. The Insight Center used the labor codes from the Standard Occupational Classification and the North American Industry Classification System, with data from the California Employment Development Department and Economic Modeling Specialists Inc., to estimate the number of ECE teachers in 2007 working at licensed childcare centers in the Los Angeles County. Additionally, the number of licensed childcare facilities is estimated to be 3,154 by the Los Angeles County Child Care Planning Committee (2002).

Targeting the population of ECE programs in Los Angeles County, an online survey hyperlink was distributed to teachers in all state-funded ECE programs, which are licensed as well. ECE teachers who completed the online survey were considered the participants.

Protection of Human Subjects

The survey included an explanation of the nature and purpose of the study, and the procedures included informed consent. Participants were informed that the names of individuals or ECE programs would not be solicited on the questionnaire. The completed questionnaires were kept confidential, and the data was analyzed and reported in aggregate without identification of individuals, agencies, or ECE programs. Participation was voluntary; refusal to participate involved no penalty or loss of benefits to which respondents were entitled. The overall study findings will be presented to the committee members of the Los Angeles County Office of Child Care to inform local policy.

Latino ECE teachers comprise 39% of the teacher population in Los Angeles County, and some may have language dominance in Spanish (Los Angeles County Child Care Planning Committee, 2002). Thus, the survey was in both English and Spanish.

Participation in the study entailed only minimal risk to respondents. Such risk included fatigue, disinterest while completing the survey, or time taken to complete the survey. Participants completed questionnaires online independently to minimize the opportunities for colleagues or supervisors determining their responses.

Data Collection

Permission to conduct the study was secured from Pepperdine University's Institutional Review Board (IRB) before any data collection occurred. Upon receiving IRB approval, an introduction letter, which included a hyperlink to the online questionnaire, was emailed to the Los Angeles County Office of Child Care and other county-wide ECE listserv systems as a means to contact program directors and teachers of state-funded preschool programs in Los Angeles County. The email message also

included the purpose of the study and the criteria for participation. The researcher sent this email in Spring 2011. Finally, the email message contained contact information in case teachers or administrators have any questions or concerns regarding the study.

Neither the state nor the county compiles contact information for ECE teachers, so access to these teachers was sought from the county-wide ECE listserv systems. Additionally, the majority of ECE teachers belong to particular ECE listserv systems and professional organizations to which access could be obtained. The study participation invitation was sent to California Preschool Instructional Network (CPIN) Region 11, First 5 LA early education programs, local CAEYC chapters, and some school districts which have ECE programs.

Email reminders were sent two weeks after the initial email about the study was sent. The reminder included a telephone number and email address to use to contact the researcher with any questions or to provide reasons for non-participation.

Instrumentation

The teacher questionnaire consisted of two parts but was administered as one comprehensive questionnaire. The questionnaire initially asked participants for job title so that non-teachers will be removed from data analysis. The questionnaire also consisted of demographics questions, including gender, ages of children taught, ethnicity, marital status, age, zip code of work setting, educational level, years of work experience, years at current job setting, benefits, and salary. The demographics section included a question regarding the participant's desire to continue working at his or her current job setting, signifying their desired longevity.

The second part, which is drawn from the Early Childhood Work Environment Survey (ECWE), concerns teacher perceptions of the work environment. Permission was received from the publishers of the ECWE survey to use the survey. The ECWE was developed in 1998 by the National College of Education as part of the Early Childhood Professional Development Project (Jorde-Bloom, 1988). The ECWE organizes workplace environment questions in ten various areas: collegiality, professional growth, administrative support and feedback, understanding of policies and procedures, salary and benefits, decision-making capacity, goal agreement, task efficiency, physical setting, and innovation (Jorde-Bloom, 1988). The ECWE was standardized and norm-referenced on 739 early childhood education personnel. A Q-sort data procedure was used to establish content validity. The ECWE demonstrated overall internal consistency of .93, and subscales ranged from .65 for physical setting to .84 for supervisor support. Test-retest reliability was found to be *acceptable*, ranging from .60 on clarity to .93 on decision making. An examination of subscale interrelations found them to “measure different though related characteristics” (Jorde-Bloom, 1987, p.6), of the work environment.

Two statements were added to the teacher perceptions section of the questionnaire in order to examine perceptions of family partnerships in respective ECE work settings. The two statements were reviewed by ECE administrators as part of the pilot process.

The demographics section of the teacher questionnaire was pilot tested with a group of 20 ECE administrators, who were not part of the actual study. The pilot group completed the demographics questions and commented on any questions or instructions

that needed further clarifications. Pilot group comments were compiled and analyzed for common patterns. As needed, revisions were made to the questionnaire items.

Data Analysis

Questionnaire responses were compiled by SurveyMonkey, and entered into an Excel database. The data was organized by categories of variables. The different categories of variables include educational level, years of work experience, years at present work location, desired longevity at workplace, benefits, and earned wages. Responses on the ECWE were organized by the ten dimensions. Two types of analyses will be conducted to investigate the relationships between ECE teachers' educational level, years of work experience, compensation, indications of remaining at present workplace, and workplace environment perceptions. Analysis of variance (ANOVA) was used to determine the relationship between teacher qualifications, teacher perceptions of the workplace environment, and retention. Regression analysis was used to determine the relationship between compensation and job retention. The statistical analyses determined the level of significance between the variables in order to address the study's research questions.

Chapter 4

Findings

Overview

This study investigated the relationships between job retention and three work-related variables of early education teachers. The study involved ECE teachers in Southern California, mostly in the Los Angeles County. Teachers' level of education, salary earned, and work environment perceptions were examined in relation to anticipated length of job retention. The study was conducted via an online survey by distributing the study's hyperlink through various county-based early childhood education listserv and agencies.

The study focused on four research questions using a correlative and comparative research design.

Research Question 1. To what extent, if at all, is there a relationship among early childhood education teachers' retention, and their level of education?

Research Question 2. To what extent, if at all, is there a relationship among early childhood education teachers' retention and compensation earned?

Research Question 3. To what extent, if at all, is there a relationship among early childhood education teachers' retention and their perceptions of the work environment?

Research Question 4. What work environment factors do early childhood education teachers perceive as being the most present in the workplace?

The ECE teacher retention survey asked 39 questions of teachers, including their age, ethnicity, work experience, salary, and education level. The survey also included 20 questions from the Early Childhood Center Work Environment Survey (Jorde-Bloom, 1988). Two additional questions regarding communication with parents and family

involvement activities were added to the work environment section of the online survey. Survey respondents were asked to rate each work environment question using a 5-point Likert scale. The ratings consisted of 0-*never*, 1-*seldom*, 2-*sometimes*, 3-*somewhat regularly*, 4-*frequently*, and 5-*always*.

Participant Characteristics

There were 76 survey respondents who were ECE teachers (n=76). Fourteen survey respondents were initially eliminated from any job retention analysis since they answered *don't know* or a left blank response to the projected job retention question. Out of 75 respondents who answered the gender question, 99% (n=74) were female and 1% (n=1) was male. In regards to ethnicity, 50% (n=38) of the survey respondents were Hispanic/Latino descent, 31% (n=24) were Caucasian/White, 8% (n=6) were African-American/Black, 7% (n=5) were Asian/Pacific Islander, and 4% (n=3) stated "Other" that included two Armenians, and one Tanzanian.

The demographics section of the survey asked about marital status and 61% (n=45) of the study participants reported being married, and 39% (n=29) reported being unmarried, divorced or widowed. Furthermore, 45% (n=34) of the survey respondents disclosed that they worked in school districts as their current job setting, as shown in Table 1.

Table 1

Characteristics of Respondents

Characteristic	<i>n</i>	%
Gender		
Male	1	1
Female	74	99

(continued)

Characteristic	<i>n</i>	%
Ethnicity		
African-American	6	8
Asian/Pacific Islander	5	7
Caucasian/White	24	31
Hispanic/Latino	38	50
Other	3	4
Marital Status		
Married	45	61
Unmarried/Divorced/Widowed	29	39
Work in School District	34	45
Age Group of Children (Respondents often listed working with more than one age group)		
3-5 year olds	68	
0-3 year olds	21	

In the area of work experience, Table 2 summarizes the data findings. The average age for the ECE teacher participants was 41.3 years with standard deviation of 12.09 years. The average number of years working as an ECE teacher with permit authorization was 10.6 years, and standard deviation of 8.68 years. Survey respondents averaged 7.48 years working in their present job setting with standard deviation of 7.08 years.

Table 2

Work Experience

	<i>n</i>	Mean	Median	Standard Deviation	Standard Error	Minimum	Maximum
Age	73	41.30	41	12.10	1.42	23	65
Years as ECE Teacher	72	10.62	8	8.69	1.02	1	34
Years in Present Job	75	7.49	5	7.09	0.82	1	41

Table 3 lists the overall retention as anticipated by ECE teacher study participants. ECE teachers anticipated an average of 9.68 years in remaining in their current job setting with standard deviation of 10.34 years. The exclusion of six teachers who stated retirement as reason for leaving with retention projection of less than 5 years revealed a mean of 10.43 years and standard deviation of 10.60 years for the rest of the 56 study participants.

Table 3

General Anticipated Job Retention Data

<i>N</i>	Mean	Median	Standard Deviation	Standard Error	Minimum	Maximum
62	9.68	5	10.34	1.31	0	40

There were 27 ECE teachers who anticipated remaining in their present job setting less than 5 years. These 27 respondents stated the various reasons for leaving their current job, as shown in Table 4. Three of the respondents chose more than one reason for leaving. Six stated leaving due to retirement, 7 stated home relocation, 5 stated completion of college degree, 8 stated promotion, 3 stated family obligations, and 2 stated commute reasons. There were also 9 survey respondents who stated they did not know how long they wish to remain in their present job setting but gave the following reasons for thinking of leaving: 1 for retirement, 3 for completion of college degree, and 5 for promotion.

Table 4

Reasons for Leaving for Teachers With Less than Five Years of Retention

Reason (n=27)	Frequency
Retirement	6
Home Relocation	7
Completion of college degree	5
Promotion	8
Family obligations	3
Commute	2

One of the questions on the survey inquired about job-provided health benefits. The majority of the survey participants, 87% (65), disclosed that their jobs included health benefits. The remaining 13% (10) answered that their jobs did not provide health benefits.

The survey asked for the zip code of work location and 72 survey participants provided location information. The majority of the respondents listed work settings in various parts of the Los Angeles County (67); 3 respondents reported working in Orange County, 1 respondent in Ventura County, and one in San Bernardino County. Figure 1 shows the representation of survey respondents from Los Angeles County and the other surrounding counties. The survey responses resulted in 54 different zip codes for work locations. The regions and cities corresponding to the reported zip codes are listed on Table 5.

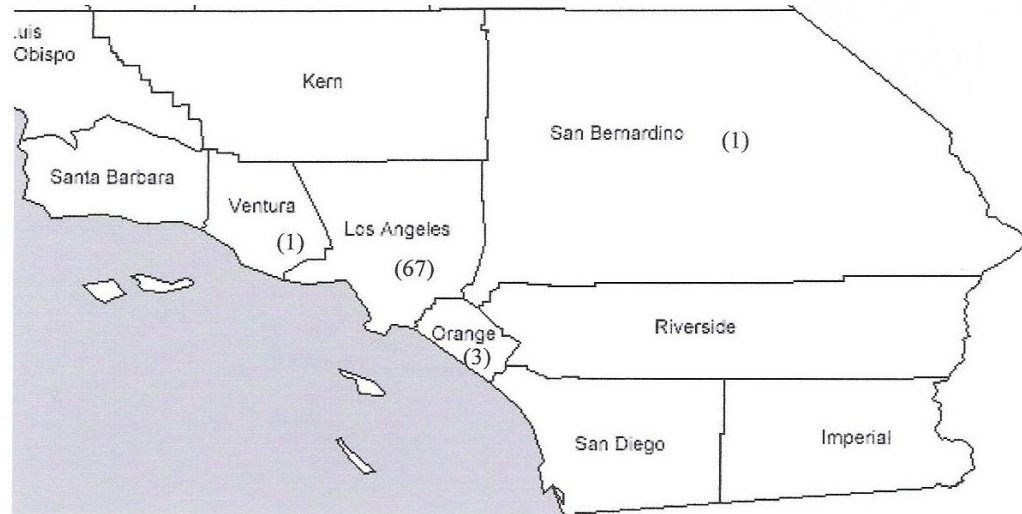


Figure 1. County map of survey respondents. Map showing representation of survey respondents in the Southern California counties.

Table 5

Zip Code Regions and Cities

<i>N=</i>	<u>City of Los Angeles:</u>	
1	Downtown Los Angeles/Pico	
2	South Los Angeles	
3	East Los Angeles	
	<u>Regions in Los Angeles County:</u>	<u>Cities Represented:</u>
3	Compton/Lynwood/South Gate	
7	East County	La Mirada, Norwalk, Rowland Heights, Santa Fe Springs
7	Glendale/Pasadena	
5	Hawthorne/Inglewood/Lennox	
7	North County	Castaic, Lancaster, Palmdale, Newhall, Santa Clarita, Valencia
4	Northeast County	Baldwin Park, El Monte, La Puente, Pomona
7	San Fernando Valley	Canoga Park, Northridge, North Hills, Van Nuys
8	South County	Long Beach, Lakewood, Paramount, Wilmington
2	Southwest County	Manhattan Beach, Torrance
11	West County	West Los Angeles, Palms, Westwood, Santa Monica, Culver City
	<u>Other Counties:</u>	
3	Orange County	Aliso Viejo, Anaheim, Fullerton
1	San Bernardino County	Ontario
1	Ventura County	Thousand Oaks

Level of Education and Job Retention Data Findings

Research Question 1. To what extent, if at all, is there a relationship among early childhood education teachers' retention and their level of education?

In the area of highest educational levels of the survey respondents, five categories emerged. The majority of the participants, 51% (n=38), listed bachelor's degrees. As shown in Figure 2, there were also 19% (n=14) who possessed master's degrees, 16% (n=12) had Child Development Permits, 13% (n=10) had associate's degrees, and 1% (n=1) possessed only "some college" as the highest educational level.

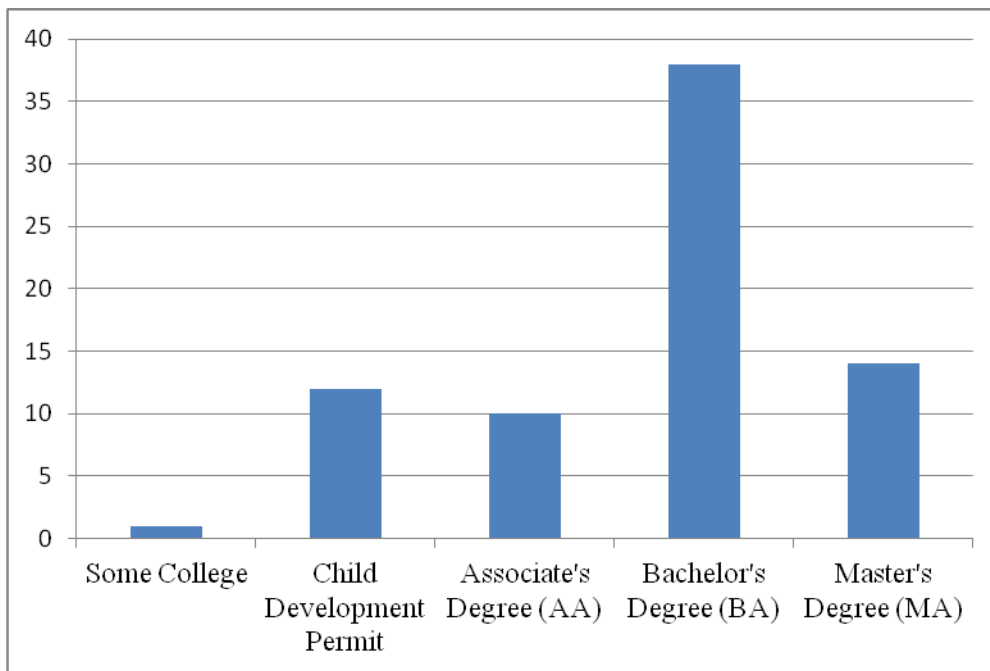


Figure 2. ECE teacher highest educational level. The number of ECE teachers who possess each educational level as their highest level.

Further examination of the participants' educational background included examining the ages of participants, see Table 6. For respondents with a master's degree, the average age was 39 years. For bachelor's degree, the average age was 40 years. Participants with associate's degrees had an average of 46 years of age. Participants with

the highest educational level being a Child Development Permit had average age of 45 years, and only one participant, 36 years, responded with “some college.”

Table 6

Highest Educational Level and Age

Degree	<i>n</i>	Average Age (years)
Some College	1	36
Child Development Permit	12	44.5
Associate’s Degree	9	45.8
Bachelor’s Degree	37	40
Master’s Degree	13	38.6

The relationship between educational level and job retention was examined with the ANOVA as the statistical method. ANOVA is used to compare the difference between mean scores of two or more groups (Pyrzczak, 2010). In order for the difference to be considered statistically significant, a probability level less than .05 was deemed appropriate. In this data analysis, the ANOVA performed was not found to be significant. The ANOVA revealed probability level of .44 ($df=3$), which is higher than .05 and indicates that there is not significant enough relationship between ECE teachers’ highest educational level and retention, see Table 7.

Table 7

Highest Educational Level and Job Retention, ANOVA results

<i>df</i>	Sum of Squares	Mean Square	F-Ratio	Probability Level	Power (Alpha=0.05)	Interpretation
3	111.6509	37.21698	0.90	0.444543	0.236005	Not significant

It should be noted, however, that descriptive statistics showed a data pattern in ECE teachers with master's degree expressing lower job retention than ECE teachers with associate's degree or child development permit, as illustrated in Figure 3. The mean score of job retention for ECE teachers with Child Development Permit was 9.3 years, with associate's degrees was 9.1 years, with bachelor's degree was 7.8 years, and with master's degree was 5.2 years.

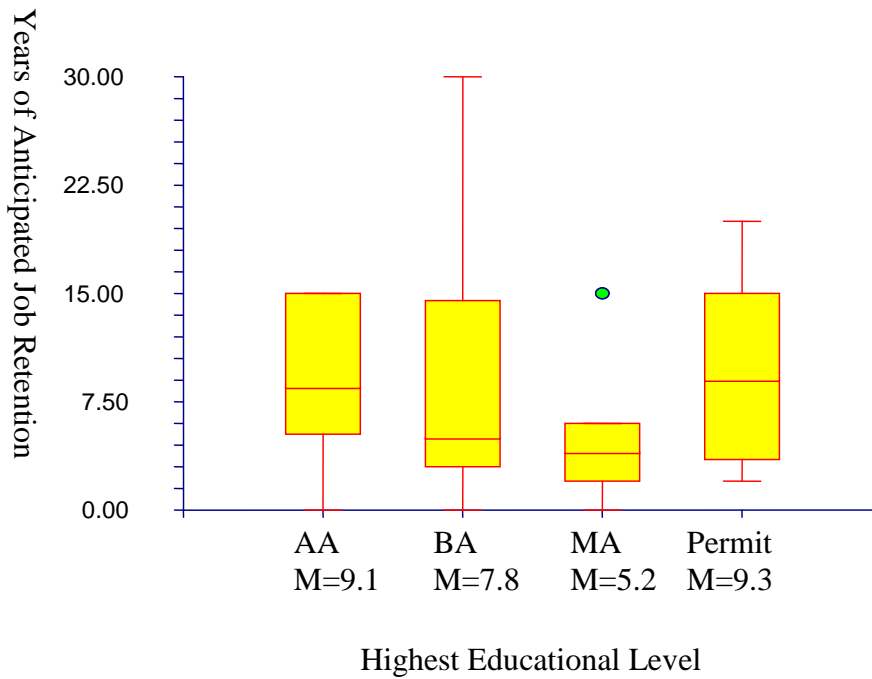


Figure 3. Educational level and job retention. The box plot showing the mean and range for educational levels and years of anticipated job retention.

Compensation Earned and Job Retention Data Results

Research Question 2. To what extent, if at all, is there a relationship among early childhood education teachers' retention and compensation earned?

The second research question addresses the relationship between the compensation earned by ECE teachers and job retention. The survey asked respondents to report salary either hourly, monthly or annually. Compensation reported in hourly

amounts was converted to 40-hour work week to obtain an estimated monthly rate. For responses given in annual salaries, the figures were divided by 12 to obtain a monthly rate. Seven respondents reported working part-time, and those figures were doubled to pro-rate a monthly rate. The salary data for the survey participants (n=69) showed a mean of \$3,268 per month with a standard deviation of 1183.044. The minimum monthly salary stated was \$1,200 and a maximum salary of \$6,667 with a median of \$3,083, as shown in Table 8.

Table 8

Compensation Earned for ECE Teachers

	<i>n</i>	Mean	Standard Deviation	Minimum	Maximum	Median
Monthly Salary	69	\$3,268	1183.044	\$1,200	\$6,667	\$3,083

Compensation data was further analyzed in Table 9 in terms of the ECE teachers' educational levels. One study participant stated "some college" as the highest educational level with a monthly salary of \$3,333, whereas, teachers with a Child Development Permit (n=12) had an average of \$2,358. ECE teachers with an associate's degree (n=9) earned an average of \$2,974 per month. Bachelor's degree ECE teachers disclosed an average salary of \$3,113 (n=33), and those with master's degrees (n=13) earned an average of \$4,674 per month.

Table 9

Teacher Highest Educational Level and Salary

Degree	<i>n</i>	Average
Some College	1	\$3,333
Child Development Permit	12	\$2,358

(continued)

Degree	<i>n</i>	Average
Bachelor's Degree	33	\$3,113
Master's Degree	13	\$4,674

The relationship between ECE teachers' salary and job retention was investigated using linear regression analysis. Regression analysis looks at the percentage of variance in how much one variable is predicted by another variable (Pyrzczak, 2010). The degree of variance is represented by R^2 , and R^2 values of 1.00 signify that 100% positive correlation while 0.00 values signify no correlation. In this study, regression analysis was conducted in order to investigate how much salary earned predicts job retention. The linear regression analysis showed the R^2 to be .0112, with a correlation of -0.1058, and slope of -0.0009 at $p > .05$ value which indicated that compensation earned is not a significant predictor of job retention, see Figure 4.

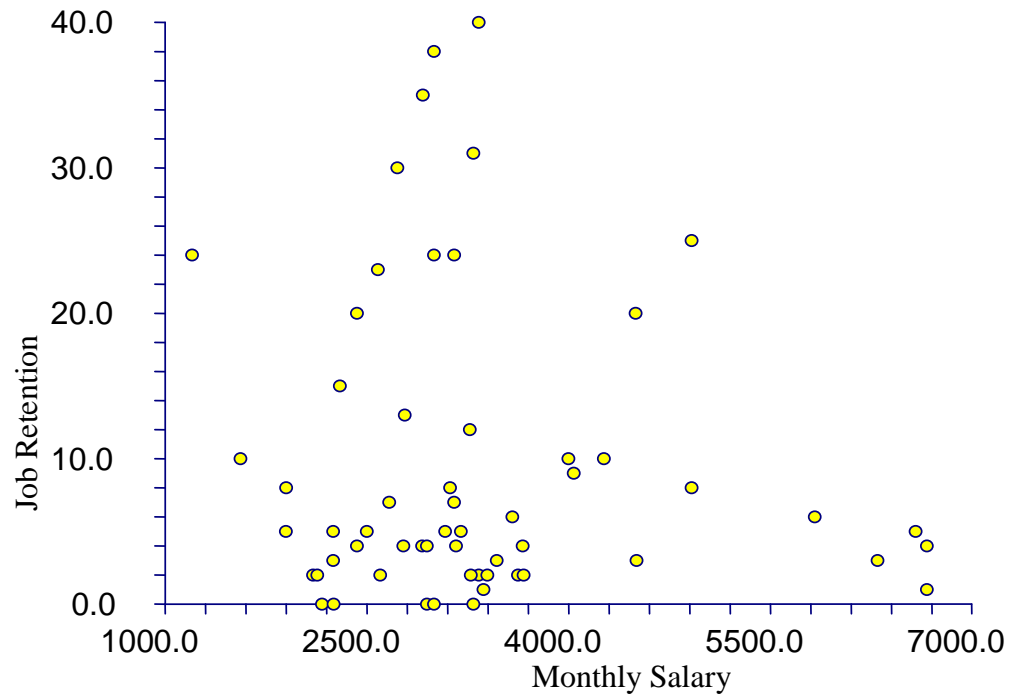


Figure 4. Job retention versus compensation earned. Linear regression plot section of compensation earned and anticipated job retention.

Perceptions of Work Environment Data Findings

Research Question 3. To what extent, if at all, is there a relationship among early childhood education teachers' retention and their perceptions of work environment?

The third research question involves the relationship between perceptions of work environment and job retention for ECE teachers. All 22 items of the work environment ratings were analyzed using a multiple linear regression analysis. The data findings revealed $R^2 = 0.30$, and a coefficient of variation of 1.18, as shown in Table 10.

Table 10

Work Environment Multiple Regression Analysis

	<i>n</i>	R^2	Coefficient of variation
Work Environment Items (22)	55	0.30	1.18

The ANOVA was also used to examine work environment ratings and job retention. The ANOVA found a probability level of 0.87 ($df=1$) as shown on Table 11. The analysis indicates that there is not a significant relationship between the work environment ratings by ECE teachers and their job retention. Furthermore, Table 12 lists the probability levels for each work environment items.

Table 11

Work Environment Ratings and Job Retention, ANOVA results

<i>df</i>	Sum of Squares	Mean Square	F-Ratio	Probability Level	Power (Alpha=0.05)	Interpretation
1	4618.47	4618.47	0.63	0.87	.034	Not significant relationship

Table 12

Individual Work Environment Items, ANOVA Results

Item	<i>df</i>	F-Ratio	Probability Level	Power (Alpha=0.05)	Statistically Significant
Agreement on philosophy	1	0.80	0.38	0.14	No
Attractive environment	1	0.01	0.94	0.05	No
Changes implemented	1	1.16	0.29	0.18	No
Common vision	1	0.27	0.61	0.08	No
Communication about policies	1	0.11	0.74	0.06	No
Equitable salaries	1	0.71	0.41	0.13	No
Family involvement	1	0.01	0.91	0.05	No
Feel free to express opinions	1	0.02	0.89	0.05	No
Friendly staff	1	0.10	0.75	0.06	No
Guidance for professional advancement	1	0.03	0.86	0.05	No
Helpful feedback	1	0.21	0.64	0.07	No
High morale	1	0.01	0.93	0.05	No
Innovation encouraged	1	2.93	0.10	0.38	No
Jobs well defined	1	1.92	0.18	0.27	No
Knowledgeable supervisor	1	0.00	0.98	0.05	No
Learn new skills	1	0.02	0.89	0.05	No
Parent communication	1	0.71	0.41	0.13	No
Productive meetings	1	0.55	0.46	0.11	No
Promotions are fair	1	0.00	0.96	0.05	No
Sufficient supplies	1	0.27	0.61	0.08	No
Teachers help make decisions	1	1.72	0.20	0.25	No
Well planned program	1	1.32	0.26	0.20	No

Research Question 4. What work environment factors do early childhood education teachers perceive as being the most present in the workplace?

The fourth research question relates to the work environment factors perceived as most evident by the ECE teachers. Table 13 lists these work environment ratings. The highest rated work environment factor was “Staff communicate with parents on daily basis” with a mean of 4.45 out of a 5-point Likert scale ranging from 0 *–never* to 5-*always*. The second highest rated work environment factor was “Supervisor(s) provide helpful feedback” with a mean of 3.72. The next rated work environment factor, third ranked, was “Job responsibilities are well defined” with a mean of 3.67. The fourth ranked factor was “The work environment is attractive and well organized” with a mean of 3.53. There were two work environment factors with mean of 3.5, “Staff are friendly and trust one another” and “Staff are encouraged to be creative and innovative in their work.”

The two lowest rated work environment factors as perceived by ECE teachers in the study involved work promotions and shared decision making. The mean for “Promotions are handled fairly” was 2.79, and for “Teachers help make decisions about things that directly affect them,” the mean was 2.73.

Table 13

Work Environment Mean and Standard Deviation

Item	<i>n</i>	Mean	Standard Deviation	Standard Error
Agreement on philosophy	76	3.26	1.41	0.16
Attractive environment	75	3.53	1.14	0.13
Changes implemented	75	3.44	1.15	0.13

(continued)

Item	<i>n</i>	Mean	Standard Deviation	Standard Error
Common vision	76	3.32	1.17	0.13
Communication about policies	76	3.29	1.42	0.16
Equitable salaries	75	3.09	1.40	0.16
Family involvement	76	3.21	1.28	0.15
Feel free to express opinions	76	2.82	1.33	0.15
Friendly staff	76	3.5	1.15	0.13
Guidance for professional advancement	75	3.12	1.26	0.15
Helpful feedback	76	3.38	1.22	0.14
High morale	76	3.07	1.21	0.14
Innovation encouraged	76	3.5	1.15	0.13
Jobs well defined	76	3.67	1.16	0.13
Knowledgeable supervisor	74	3.72	1.12	0.13
Learn new skills	76	3.49	1.21	0.14
Parent communication	75	4.45	0.83	9.55E-02
Productive meetings	76	2.87	1.31	0.15
Promotions are fair	72	2.79	1.43	0.17
Sufficient supplies	76	3.45	1.20	0.14
Teachers help make decisions	75	2.73	1.32	0.15
Well planned program	76	3.41	1.12	0.13

Unexpected Findings

The study's main purpose was to survey ECE teachers in respect to job attrition via an online survey. Several ECE administrators, however, also completed the online survey. There were 55 survey respondents who categorized themselves as administrators, and participated in the study. Their responses were analyzed separately which gave an opportunity to compare the data to the ECE teachers. The average age for

administrators was 46 years. The job retention rates for current job setting as anticipated by the ECE administrators surveyed averaged to be 8.34 years ($n=41$).

The majority of the ECE administrators, 51% (27), possessed master's degrees. There were 36% (19) of the administrators who reported having bachelor's degree as the highest educational level. Administrators with associate's degree accounted for 11% (6) of the survey participants, and only one (2%) had a Child Development Permit as the highest education received, see Figure 5.

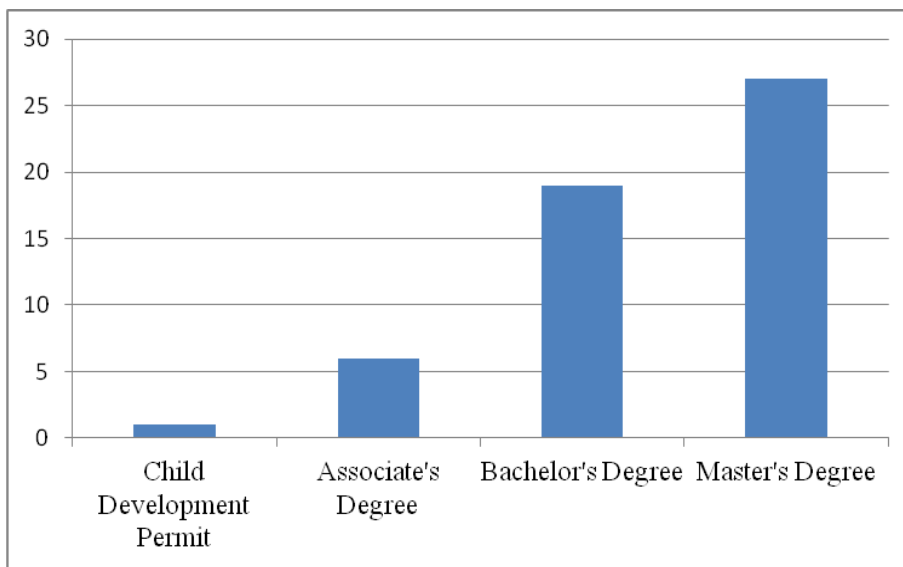


Figure 5. Administrators' highest educational level. The number of ECE administrators in each educational level being their highest level.

The relationship between administrators' highest level of education and their anticipated job retention was examined by using the ANOVA statistical formula. The ANOVA looks at the probability level being less than .05 to be considered a significant relationship between the two variables. In this particular comparison, the ANOVA revealed a probability level of 0.003 with $df=2$ which indicates that there is a significant difference between the ECE administrators' level of education and their anticipated job retention, see Table 14. One of the administrator respondents listed possessing a Child

Development Permit and two years for projected job retention was excluded from the ANOVA analysis since only one respondent represented that educational level category.

Table 14

Administrator Highest Educational Level and Job Retention, ANOVA Results

<i>df</i>	Sum of Squares	Mean Square	F-Ratio	Probability Level	Power (Alpha=0.05)	Interpretation
2	645.33	322.67	7.09	0.003*	0.91	Significant relationship

*Term significant at alpha=0.05

The mean for anticipated job retention according to administrators' highest educational level is outlined in Figure 6. The ECE administrators with associate's degrees had a mean of 19 years for anticipated job retention. The administrators with bachelor's degrees projected a mean of 8 years, and those with master's degrees projected remaining at their present job setting for a mean of 6.3 years.

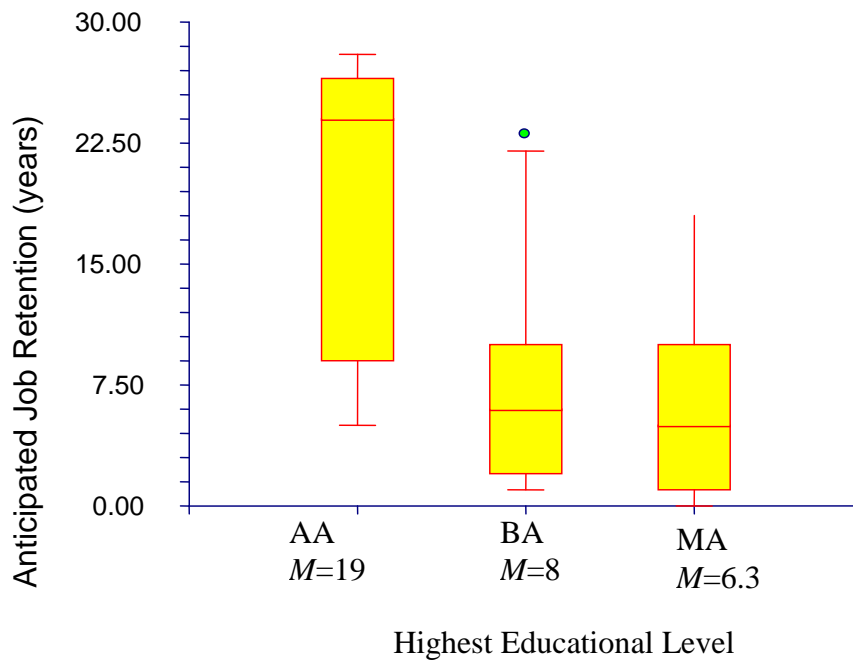


Figure 6. Administrators' educational level and retention. The box plot shows the mean and ranges for ECE administrators' level of education in relation to anticipated retention.

Further analysis of the relationship between ECE administrator educational level and job retention was conducted using the Fisher's LSD statistical method. The pair-wise comparison revealed a T-value of 3.66 and p-value of less than 0.01 which was considered to statistically significant. Moreover, the pair-wise comparison also showed that the ECE administrators with associate's degrees had a comparison coefficient of -2 versus those with bachelor's or master's had a comparison coefficient of 1, see Table 15. Therefore, ECE administrators with associate's degrees had statistically significantly longer anticipated job retention than those administrators with bachelor's or master's degrees.

Table 15

Administrator Educational Level and Retention, Fisher's LSD Results

	T-value	P-Value	
Pair-wise Comparison	3.66	Less than 0.01	
Educational Level	Comparison Coefficient	<i>n</i>	Mean
Associate's degree	-2	5	19
Bachelor's degree	1	15	8
Master's degree	1	19	6.3

Administrator compensation earned and job retention. The average monthly salary for administrators was \$5,004 (n=46), as illustrated in Table 16. Further examination of the compensation earned in comparison to educational level revealed that the ECE administrators with master's degree earned the highest monthly salary, an average of \$6,119, as compared to the other educational levels.

Table 16

Administrator Educational Level and Salary Averages

Administrator Highest Educational Level	<i>n</i>	Monthly Salary Average
Child Development Permit	1	\$3,813
Associate's Degree	6	\$3,728
Bachelor's Degree	16	\$3,899
Master's Degree	22	\$6,119

Administrators' compensation earned versus anticipated job retention was further investigated with a linear regression analysis. The regression analysis on Table 17 showed an R^2 of 0.014 which is not statistically significant predictor of variation between the two variables. Nevertheless, these findings are included in this chapter as the author will be making a recommendation in Chapter 5 regarding compensation model based on educational level and skill, referencing the salary data for administrators.

Table 17

Regression Analysis of Administrator Compensation and Retention

Linear Regression	Slope	R^2	Correlation	Interpretation	Significant
	-0.0004	0.014	-0.120	Negative Correlation	No

Administrator work environment perceptions. The administrators' ratings for work environment were compiled in Table 18 on a 5-point Likert scale ranging from 0-*never* to 5-*always*. The highest rated work environment factor for ECE administrators was "Staff communicate with parents on daily basis" with a mean of 4.30. The second highest rated item was "Staff are encouraged to be creative and innovative in their work" with a mean of 4.06. The third highest rated work environment factor for ECE administrator participants was for "Job responsibilities are well defined" with a mean of

3.89. The fourth highest rated factor was for “The work environment is attractive and well organized” with a mean of 3.85. Interestingly enough, both ECE teachers and administrators rated four of the work environment factors higher than the others: parent communication, innovation encouraged, jobs well defined, and attractive environment.

Both ECE teachers and administrators included “Teachers help make decisions about things that directly affect them” in their lowest ratings group.

Table 18

Administrator Work Environment Mean and Standard Deviation

Item	<i>n</i>	Mean	Standard Deviation	Standard Error
Agreement on philosophy	46	3.76	1.06	0.16
Attractive environment	48	3.85	0.99	0.14
Changes implemented	48	3.83	1.12	0.16
Common vision	47	3.68	1.07	0.16
Communication about policies and procedures	48	3.58	1.09	0.16
Equitable salaries	47	3.57	1.41	0.21
Family involvement	48	3.42	1.27	0.18
Feel free to express opinions	47	3.55	1.25	0.18
Friendly staff	48	3.63	1.16	0.17
Guidance for professional advancement	48	3.58	1.29	0.19
Helpful feedback	47	3.47	1.23	0.18
High morale	48	3.27	1.16	0.17
Innovation encouraged	48	4.06	1.10	0.16
Jobs well defined	47	3.89	1.07	0.16
Knowledgeable supervisor	48	3.83	1.10	0.16
Learn new skills	48	3.83	1.29	0.19

(continued)

Item	<i>n</i>	Mean	Standard Deviation	Standard Error
Parent communication	47	4.30	1.00	0.15
Productive meetings	47	3.51	1.14	0.17
Promotions are fair	46	3.43	1.56	0.23
Sufficient supplies	48	3.77	1.02	0.15
Teachers help make decisions	48	3.42	1.25	0.18
Well planned program	47	3.77	1.03	0.15

Table 19 compares the means of the two groups for each work environment factor as well as the T-Test results for probability level. The T-Test was performed on each work environment item to compare the means of the ECE teachers with those of the ECE administrators. Three items were found to be statistically different between the two groups. One of the items was “teachers help make decisions” with a probability level of 0.01 which is less than .05 and therefore considered to be statistically significant. The other items were “feel free to express opinions” with a probability level of 0.004, and “productive meetings” with a probability level of 0.02. Table 20 lists the ANOVA results on the three work environment items found to be statistically significant from the T-test results. The ANOVA also included the Bonferroni all pair-wise and Dunn’s Test comparison for the three significant items.

Table 19

Comparison of Means in Work Environment Ratings and T-Test Results.

Work Environment Factor	Mean-ECE Teachers (N=62)	Mean- ECE Administrators (N=48)	Probability Level
Friendly staff	3.60	3.63	0.89
High morale	3.11	3.28	0.49

(continued)

Work Environment Factor	Mean-ECE Teachers (N=62)	Mean- ECE Administrators (N=48)	Probability Level
Learn new skills	3.55	3.83	0.24
Guidance for professional advancement	3.19	3.58	0.12
Knowledgeable supervisor	3.82	3.83	0.96
Helpful feedback	3.42	3.47	0.83
Communication about policies	3.29	3.58	0.24
Jobs well defined	3.71	3.89	0.41
Equitable salaries	3.18	3.57	0.15
Promotions are fair	2.97	3.43	0.11
Teachers help make decisions	2.79	3.42	0.01*
Feel free to express opinions	2.81	3.55	0.004*
Agreement on philosophy	3.31	3.76	0.06
Common vision	3.35	3.68	0.13
Well planned program	3.48	3.77	0.17
Productive meetings	2.94	3.51	0.02*
Attractive environment	3.61	3.85	0.24
Sufficient supplies	3.58	3.77	0.37
Innovation encouraged	3.65	4.06	0.07
Changes implemented	3.54	3.83	0.18
Parent communication	4.44	4.30	0.43
Family involvement	3.31	3.42	0.65

* Term significant at alpha = 0.05

Table 20

ANOVA Results for Significant Work Environment Items

Work environment item	P-value	Bonferroni	Dunn's Test z-value	df
Teachers help make decisions	0.01*	Significantly different	z-value=2.5656	1
Feel free to express opinions	0.004*	Significantly different	z-value=2.9915	1
Productive meetings	0.02*	Significantly different	z-value=2.3992	1

* Term significant at alpha = 0.05

Figure 7 shows the comparison of the means between the ECE teacher and administrator groups' ratings for each work environment item.

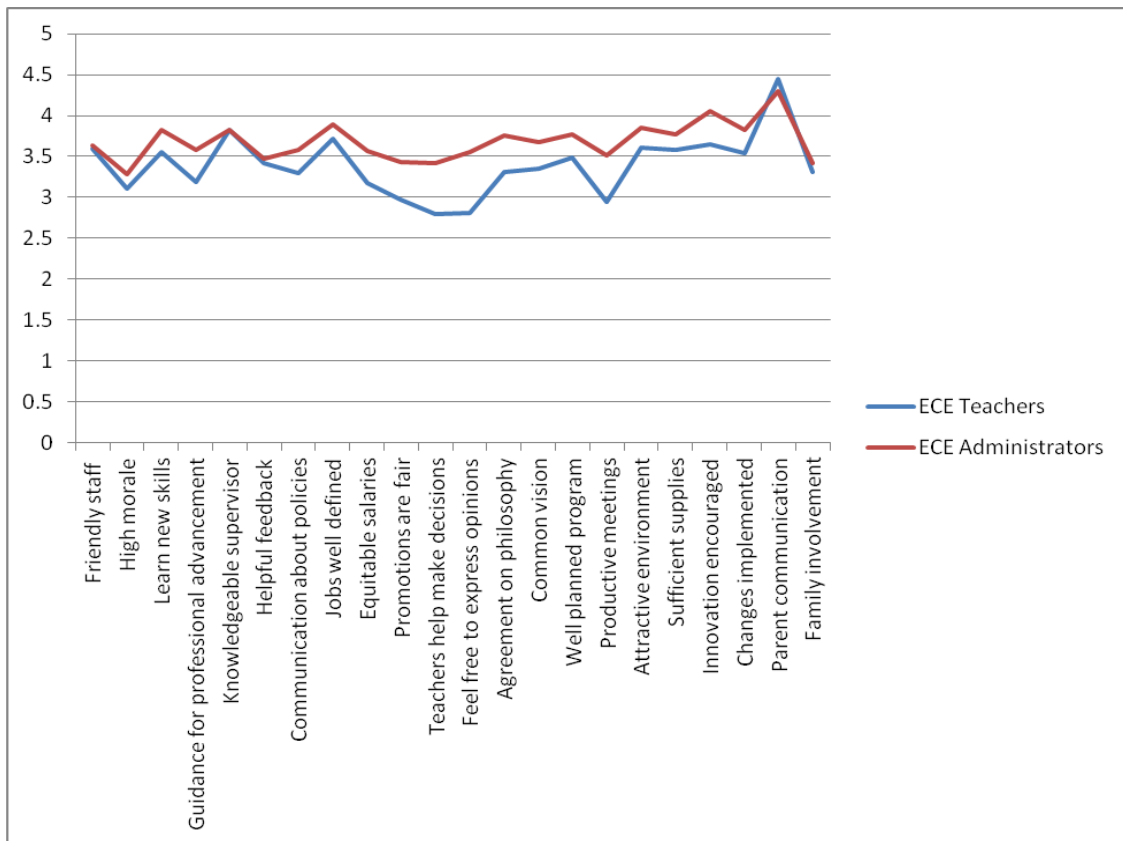


Figure 7. Comparison of work environment means. Line chart showing the means for ECE teachers and administrators across the different work environment factors.

Chapter 5

Conclusions and Recommendations

This study was conducted to better inform the early childhood education field regarding particular aspects that may be more salient in retaining ECE teachers at their job settings. The study used a quantitative analysis of ECE teacher responses on a job retention survey. The study examined the variables of education, salary, and work environment factors in relation to ECE teachers' perceived estimate of remaining at their present job setting. Teacher attrition is important to investigate since the costs of retraining teachers are problematic for educational programs, in general (Barnes et al, 2007). Also, particularly in early education, recurring changes with teachers as caregivers of young children may adversely affect children's social-emotional development (Boyd et al, 2005; Howes & Hamilton, 1993). ECE administrators may use the study's findings, especially in the area of work environment ratings, to assist in the development of teacher trainings and employee policies. Policymakers in the ECE field may find that the study's conclusions relevant to the work being done in establishing educational requirements for ECE teachers, and in configuring public funding for ECE programs.

Interpretations

The study yielded some similarities and differences in comparison to other ECE teacher retention studies specifically in the Los Angeles County area. In regards to the demographics, in particular, the ethnicity composition of the participants, this study included more ECE teachers of Hispanic/Latino background. Half of the participants (n=38) were of Hispanic/Latino ethnic background, and almost one-third (n=24) were Caucasian/White. In the Whitebook et al. (2006) study, there was close to equal

representation of Latina (36.6%) and White/Non-Hispanic (35.5%). Therefore, both of the studies had more Hispanic/Latino respondents than other ethnicities. This data pattern is in accordance with the increase of 27.8% in the Hispanic/Latino population in California from 2000 to 2010, as indicated by the US Census Bureau (2010).

The ages of the study participants, on the other hand, are similar to other ECE teacher research in California. The average age of participants in this study was 41 years. In another study, Whitebook et al. (2006) found that the majority (33.5%) of teachers in the child care workforce in Los Angeles County were in the 30-39 age range. The sample consisted of 731 centers not serving infants. The other age ranges included 24.7% in the 29 years or younger and 24.1% in the 40 to 40 age range. Both studies had the same age demographics for ECE teachers.

In the area of work experience, the mean for the years in present job was 7.49 years for the ECE teachers and almost half, 47%, of the ECE teacher respondents (37) reported retention of 1 to 5 years at present job. One-quarter percent (20) of the ECE teachers reported being at their present job for more than 10 years, and 27% (21) reported 6-10 years at current job. This data finding is similar to Whitebook et al. (2006) study in which 39.3% of the teachers were employed at current child care center for more than 5 years.

Educational level and job retention findings. The first research question addressed the relationship between ECE teachers' level of education and job retention. The study found that the majority of the study participants possessed at least bachelor's degrees as highest educational level. In fact, 51% (n=38) of the study participants possessed a bachelor's degree and 19% (n=14) possessed a master's degree as their

highest educational level. This finding is in contrast to other ECE teacher education research in which the majority of teachers do not have bachelor's degrees (Herzenberg et al. 2005). In a Los Angeles County-based study, out of 12,930 child care teachers, 43% reported possessing "some college", 30.7% possessed an associate's degree, and 26.2% possessed a bachelor's degree or higher (Whitebook et al. 2006). The present study may have had more ECE teachers with higher education levels than ECE teachers in other studies since the survey was online and disseminated through ECE-related listserv. Survey respondents who were more familiar with technology may have been more inclined to participate in the study than those who use technology less often. Some studies have found technology use, especially in the work setting, to be more prevalent with college graduates compared to high school graduates. The use of technology at work, furthermore, translated to higher wages for the college graduates (Hotchkiss & Shiferaw, 2010).

Furthermore, this study also revealed an interesting data trend in regards to age and educational level. The average age decreased as the educational level increased. For study participants with master's degrees, for instance, the average age was 38.6 years, whereas, for study participants with Child Development Permits the average age was 44.5 years and those with associate's degrees had average age of 45.8 years. The age differences between the educational levels are considered a relative data finding but are not statistically significant. It is, however, worth noting given the recent attention and emphasis for ECE teachers to earn bachelor's degrees or higher (Barnett, 2004). The younger ECE teachers may be more likely to have higher college degrees due to the current changes in college accessibility.

Further analysis between ECE teachers' educational level and job retention revealed that there was not a significant relationship between the two variables. The data, however, did reveal an inverse relationship, though statistically non-significant, with higher educational level corresponding to lower anticipated job retention. This data observation is consistent with the finding that the most frequent reason for ECE teachers leaving their present job was for promotion. An outlier from the master's degree group was included in the data analysis since it came from the same population as the other responses. The ECE teachers with higher education level may be more motivated to seek administrative jobs or occupations outside of the ECE field since they have qualifications that could transfer to other positions.

Some of the study participants included ECE administrators, as previously mentioned in Chapter 4. The majority of the ECE administrators (51%) possessed master's degrees, and another 36% of the ECE administrators possessed bachelor's degree. The study revealed higher educational attainment for ECE administrators than other research. An earlier study found that out of 1,365 center directors in Los Angeles County, 63% possessed bachelor's degree or higher (Whitebook et al. 2006). The occurrence of higher educational levels for ECE administrators in the studies may be due to ECE administrative positions now requiring bachelor's or master's degrees.

The study also found that there was a significant relationship between the educational level of ECE administrators and their projected job retention. ECE administrators with associate's degrees projected significantly higher retention in current job site than administrators with bachelor's or master's degrees. ECE administrators with associate's degrees in this study might have been more inclined to keep their current jobs

since their colleagues in the ECE administration field tend to possess higher educational degrees, as observed in this study as well.

Compensation and job retention findings. The study also addressed the second research question between ECE teachers' compensation earned and anticipated job retention. The monthly salary mean for ECE teachers in the study was \$3,268. Child care teacher compensation in Los Angeles County was studied by Whitebook et al. (2006), and found that 25% of child care center directors reported that their highest-paid teachers with bachelor's degree or higher earned \$12 per hour (\$24,960 annually or \$2,080 monthly). The adjusted hourly rate is \$13.88 given the rate of inflation change, 15.7%, from when Whitebook et al. conducted the study. Another 10% reported that teachers earned \$23 or more per hour (\$47,840 annually or \$3,987 monthly). The adjusted hourly rate is \$26.61 accounting for the rate of inflation change (15.7%). The present study's monthly salary mean is more indicative of the 10% of child care centers that Whitebook et al. reported as paying teachers in the highest range with an estimated average of \$3,987.

The relationship between monetary compensation and job retention for ECE teachers was analyzed in this study. The linear regression analysis found that there is no statistically significant correlation between the two variables. The data analysis, however, did suggest an inverse relationship between monthly salary and anticipated job retention by ECE teachers. The ECE teachers who reported higher monthly salaries projected lower job retention than those ECE teachers with lower monthly salaries. The inverse relationship between compensation and projected job retention may be influenced by current economic situation of program budget cuts and staffing reductions. ECE teachers

with less education may be more motivated to remain in their current job settings since at the time of the study there were more scarce teaching positions and competition for ECE positions.

Work environment ratings and job retention findings. The study also examined the relationship between job retention and work environment ratings for ECE teachers. A multiple linear regression analysis and ANOVA were conducted on all of the 22 work environment ratings that covered the areas of staff development, team building, supervision, compensation, leadership, resources, and teacher-family relations. Data analysis revealed that there was not a significant relationship between job retention and work environment ratings by ECE teachers. The work environment ratings were done on a 5-point Likert scale which has limitations that may have influenced the overall ratings. The total means for all of the work environment ratings was 3.32 for the ECE teachers and 3.68 for the ECE administrators, both within the *somewhat regularly* rating. One of the criticisms of the Likert scale is that there is no evidence that the rating items are placed evenly (Kothari, 2004). The study, for example, used the Early Childhood Education Work Environment Survey by Jorde-Bloom (1988) which consisted of ratings; 0-*never*, 1-*seldom*, 2-*sometimes*, 3-*somewhat regularly*, 4-*frequently*, and 5-*always*. The differences between *frequently*, *somewhat regularly*, and *sometimes* may not have been clear enough for respondents to differentiate their feelings between these three ratings. Also, Likert scale ratings tend to result in the comparable aggregates even when individual items have diverse scores (Narli, 2010). Therefore, the similar work environment ratings between the ECE teachers and administrators may be due more to the descriptions of the survey ratings than the actual perceptions of the respondents.

The work environment ratings were also studied in the context of the most evident factors for ECE teachers and administrators. The study found that ECE teachers rated staff-parent communication as the most evident when comparing across the means of the work environment ratings. This finding was also evident for the ECE administrators' ratings. One of the lowest rated work environment factors for ECE teachers involved job promotions. Opportunities for promotion were also the most common reason for ECE teachers to leave their current job setting. The factor of shared decision-making was another least rated work environment feature by ECE teachers. Furthermore, ECE administrators also rated shared decision-making as one of the lowest work environment items. Therefore, both the ECE teachers and administrators in this study reported lower occurrence of shared decision making taking place in the work setting. This data finding is very different from another study that found contrasting perceptions of shared decision-making with administrators and teachers. The study conducted by Hirsch et al. (2006) found a large difference between teacher ratings of their involvement in decision-making versus the administrator ratings of teacher involvement in decision-making. The percentage of teachers who responded that there was shared decision-making at their school sites was 34.6%, whereas, 82.1% of the administrators reported teacher involvement in decision-making. The administrators and teachers in the Hirsch et al (2006) study may have had very different definitions of shared decision-making.

Some challenges encountered with involving teachers in decision-making roles have been time limitations, hierarchical leadership structure, and lack of trust leading to conflict avoidance (Lambert, 2003). ECE administrators rated one of the collegiality items, staff morale, as the least evident. On the other hand, the ECE teachers rated the

other collegiality item, friendliness and trusting, as one of the higher work environment variables. The intent of this study was not to compare the work environment ratings between ECE teachers and administrators at the same job settings so it is difficult to speculate the reasons for the differences in collegiality ratings. Moreover, teachers may have a more positive perception of staff collegiality since they are members within the teacher peer group whereas administration is not seen or treated as part of the teacher peer group.

Overall, the differences between work environment ratings of ECE teachers and administrators were not statistically different. One possible reason that the work environment ratings were similar for both ECE teachers and administrators may be related to the fact that the work environment factors listed on the Early Childhood Education Work Environment Survey (Jorde-Bloom, 1988) are usually present to some degree in most job settings. The work environment factors may not be overly evident to rate as *always* or absolutely absent to rate as *never* so the survey respondents may have rated the items more in the *sometimes* or *somewhat regularly* range.

Recommendations for Policy and Practice

This study was conducted targeting ECE teachers in a specific area within the Southern California, the Los Angeles County to examine job retention. Several findings emerged from the study's data that have the capabilities to inform the ECE field in terms of teacher qualifications, compensation and work conditions. Several recommendations for informing policy in the early education field are outlined.

One recommendation is in the area of teacher accessibility. Even with a large pool of ECE teachers in the Los Angeles County as potential study participants, the study still

encountered challenges with participant recruitment. One of the challenges was obtaining direct access to ECE teachers. External correspondence is mostly done with ECE teachers by means of communication with agency directors to convey the information onto the ECE teachers. Since part of the study involved teacher ratings of their work environment and projected job retention, it was imperative to circumvent administrators' involvement in collecting any data, and thus, reducing teacher concerns of confidentiality. The state of California, however, does not have a centralized website to post information or database to disseminate information to ECE teachers. Some ECE teachers may belong to NAEYC and its state and local chapters but most of the information posted on the websites tend to be from the national level. In the K-12 system, teachers have access to teacher information pages on district websites, bargaining union websites and listserv, state union websites, and teacher-generated webpages. It would be beneficial for ECE teachers to have more access to information dissemination resources and local networking efforts so that teachers are better able to participate in future studies and have more opportunities to give teacher input. The NIEER made a similar recommendation, but, more in regards to implementing state-level databases of ECE teacher information (Whitebook & Ryan, 2011). NIEER suggested that the information from the proposed teacher databases could be used for examining demographics, turnover, compensation, and such.

The second policy recommendation relates to compensation. The study found that the average salary of ECE teachers with associate's degree did not differ significantly from teachers with bachelor's degree. The average monthly salary for teachers with associate's degree was \$2,974 and for bachelor's degree was \$3,113. The retention of

teachers with higher educational qualifications may help if there was also a significant enough increase in compensation along with the educational level. In the K-12 system, some school districts offer salary schedules that are aligned with the number of college credits teachers have taken. The National Council on Teacher Quality (2009), however, cautions against salary schedules that offer higher salary based on just higher education degrees since this practice does not promote compensation of effective instruction. The National Council on Teacher Quality instead recommends higher compensation when teachers have earned tenure that is based on effective evidence-driven job performance. One applicable type of compensation model that may reduce the disparity in teacher wages in the ECE field is the one that Odden (2002) recommends as the *knowledge-and-skills-based* compensation model. In this compensation model, certain certifications are required for beginning, mid-career, and experienced teachers leading to higher pay.

The third policy recommendation addresses decision-making in the work environment. The study revealed two work environment factors that ECE teachers rated as the least present in their job settings. The two lowest rated work environment factors were teachers being involved in shared decision-making, and having fair promotions. In order for shared decision-making to take place in educational work settings, the administration needs to have a strong understanding of the benefits and the process of involving others in the planning and implementation of educational practices. The Program Administration Scale (Talan & Jorde Bloom, 2004), which is an instrument used for rating the management aspect of early education programs, includes collaborative decision making in the program planning and evaluation section. One feature of sustainable school improvement is teachers serving as active participants in leadership

decisions (Lambert, 2003). Also, the inclusion of teachers and other stakeholders in decision-making is a critical element of effective leadership in implementing effective professional learning communities (DuFour & Eaker, 1998). The practice of professional learning communities has been constructive in helping teachers to continuously grow professionally (Jorde Bloom, 2005). The work environment, however, needs to foster collaboration among teaching staff, administration, and stakeholders. Administrators working with ECE staff should have specific training in how to devote ample time, model mutual trust, and in goal setting so that collaborative decision-making may take place.

Additionally, administrators, especially in school districts, who are responsible for early education programs should have a background of ECE best practices and child development expectations in order to effectively manage these programs. The training in ECE program supervision may be incorporated into administrative credential programs or provided by the school districts.

The fourth policy recommendation involves family partnerships and ECE teachers. The work environment ratings revealed that communication with parents was the most evident factor for both ECE teachers and administrators. The teacher ratings had a mean of 4.45 and administrators' ratings had a mean 4.30 for parent communication. In other words, both ECE teachers and administrators rated parent communication similarly as being the most evident than the other work environment factors. The other survey item related to family partnerships involved parent attendance at regularly held family involvement activities which had lower rating means than parent communication. The mean for family involvement activities for teachers was 3.21 and for administrators it was 3.42 which are similar ratings by both teachers and administrators. It appears that

communication with families is a common occurrence for the ECE programs in the study whereas regularly held family engagement activities are not. Therefore, ECE programs should strive to develop more positive and quality partnerships with families as well as increasing the quantity of interactions between teachers and parents.

This pattern of parent communication being more evident than regularly offered family involvement may be typical of most early education centers since it is also evident in California's newly adopted Early Learning Quality Improvement System (ELQIS).

The ELQIS includes family involvement as one of the five quality elements. The quality rating scale begins with communication with parents in Tier 1, evolves to parenting education activities in Tier 2, offerings of parent involvement and family engagement activities in Tiers 3 and 4, and then progresses to partnering with parents for advocacy in Tier 5 (California Department of Education, 2011).

The California Department of Education and the First 5 California (2011) also recently developed the Early Childhood Educator Competencies which may be used as a tool to assist ECE teachers move from parent communication to collaborating with families, and to providing family support resources. The educator competencies outline four competency contexts of *early learning and development* that include supporting, planning and guiding, creating and maintaining policies, and lastly, advancing the ECE profession. The competency area of *family and community engagement* has three performance areas: (a) communication with families, (b) relationships with children and families, and (c) community resources. The application of these competencies would guide teachers and early education centers to progress from daily communication with families to more intentional strategies for working with families.

Recommendations for Future Study

Teacher retention, especially at the early childhood level, continues to be a pressing issue due to the costs involved, and the emotional impact on children. The findings of this study illustrate that more research is warranted in this area. Future research could be assisted with more respondents participating in studies. Data could be collected in a variety of ways in order to reach as many teachers as possible. One of the limitations of the study was that the survey was offered online so ECE teachers who may not be comfortable with the use of technology were unintentionally excluded from the study. Participant recruitment strategies for future research may include; surveys mailed directly to teachers, case studies involving ECE centers with high teacher retention in comparison with those with lower teacher retention, and telephone surveys.

Another enhancement for future studies entails the actual wording of job retention questions. The study asked ECE teachers to predict the number of years they plan to remain in their current job setting in an open-ended question format. Giving survey respondents ranges of years they plan to remain in their current job setting may reduce the number of “don’t know” responses. The “don’t know” responses were eliminated from the study which reduced the overall number of study participants.

The study examined teacher retention in general within the context of three variables; educational qualifications, compensation, and work environment. Future research should also include the retention of teachers delivering high quality instruction so that young children benefit from effective teaching. The data on teacher quality could be based on observations of classroom instruction, administrator ratings of teacher quality, or ECE center quality ratings.

Additional research in ECE teacher attrition could also incorporate qualitative research by conducting case studies on ECE centers that have varying teacher retention rates. For instance, future studies could compare ECE centers with higher teacher retention to ECE centers with lower job retention rates. The case studies could examine the work environment perceptions of both teachers and administrators via interviews in order to obtain more in-depth information. The salary schedules and employee benefits package could be collected and analyzed in greater detail. Even the offerings of professional development could be studied in conjunction with the educational qualifications across the ECE centers. The case studies would allow for information from teacher self-report along with artifacts from the ECE centers to get a more accurate depiction of the variables in relation to teacher retention.

The ECE teacher profession and the field of ECE, in general, could further benefit from more research in terms of overall program effectiveness and its impact on children's skills. Teacher retention would be included in the context of studying quality ECE programs and their long-term effects on children's academic achievement and social emotional development. Future research could consist of a longitudinal study of 8 years or more tracking children who attend targeted ECE programs. Initial data on these targeted ECE programs would include teacher characteristics in terms of education, training, ethnicity, turnover, experience and compensation. Other data would also entail quality ratings on the ECE centers, curriculums taught, as well as student characteristics. Longitudinal studies such as the one described would allow for teacher attrition to be studied in the context of other variables in regards to how children who attend ECE progress and perform in school over time.

Summary

The study was a correlative and comparative research design that examined the responses from ECE teachers in southern California in regards to teacher retention. The study's findings suggest that ECE teacher retention is still an area that warrants future investigation since data analyses on the three variables did not yield statistically significant relationships.

The ECE teacher respondents in the study revealed higher educational qualifications than in previous studies which may have affected the relationship between educational level and projected job retention. The ECE administrators with associate's degrees, however, reported significantly higher job retention projections than administrators with bachelor's or master's degrees.

ECE teachers' compensation and their work environment ratings were not found to be significantly related to projected job retention. ECE teachers and administrators rated some of the work environment factors similarly. One of the work factors that was rated the least evident was teacher involvement in decision-making. The importance of as well as the challenges in implementing shared decision-making in the work setting have often been mentioned in educational leadership and management literature.

Recommendations derived from the study's findings address the creation of networking and technology tools for ECE teachers in order to disseminate and gather career-related information. Other suggestions include administrator training for working with ECE programs, and the expansion of compensation models based on skills in combination with educational merits. The work environment ratings in the area of family partnerships revealed differences in the occurrences of daily communication in

comparison to family involvement activities. Training for ECE teachers and administrators in specific family engagement tools and strategies was also suggested.

ECE teacher retention continues to be an issue confounded by various factors, even more than the factors examined in this study. The responsibility to retain teachers, especially effective teachers, is based on all of the stakeholders. The retention begins with the preparation and recruitment of teachers, and includes the compensation for the work teachers do every day. Additionally, the relationships established in the work setting and professional growth opportunities also influence teacher attrition. Overall teacher attrition requires a multifaceted approach.

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APPENDIX A

Child Development Permit Matrix

Child Development Permit Matrix - with Alternative Qualification Options Indicated					
Permit Title	Education Requirement (Option 1 for all permits)	Experience Requirement (Applies to Option 1 Only)	Alternative Qualifications (with option numbers indicated)	Authorization	Five Year Renewal
Assistant (Optional)	Option 1: 6 units of Early Childhood Education (ECE) or Child Development (CD)	None	Option 2: Accredited HERO program (including ROP)	Authorizes the holder to care for and assist in the development and instruction of children in a child care and development program under the supervision of an Associate Teacher, Teacher, Master Teacher, Site Supervisor or Program Director.	105 hours of professional growth*****
Associate Teacher	Option 1: 12 units ECE/CD including core courses**	50 days of 3+ hours per day within 2 years	Option 2: Child Development Associate (CDA) Credential.	Authorizes the holder to provide service in the care, development, and instruction of children in a child care and development program, and supervise an Assistant and an aide.	Must complete 15 additional units toward a Teacher Permit. Must meet Teacher requirements within 10 years.
Teacher	Option 1: 24 units ECE/CD including core courses** plus 18 General Education (GE) units*	175 days of 3+ hours per day within 4 years	Option 2: AA or higher in ECE/CD or related field with 3 units supervised field experience in ECE/CD setting	Authorizes the holder to provide service in the care, development and instruction of children in a child care and development program, and supervise an Associate Teacher, Assistant and an aide.	105 hours of professional growth*****
Master Teacher	Option 1: 24 units ECE/CD including core courses** plus 18 GE units* plus 6 specialization units plus 2 adult supervision units	350 days of 3+ hours per day within 4 years	Option 2: BA or higher (does not have to be in ECE/CD) with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting	Authorizes the holder to provide service in the care, development and instruction of children in a child care and development program, and supervise a Teacher, Associate Teacher, Assistant and an aide. The permit also authorizes the holder to serve as a coordinator of curriculum and staff development.	105 hours of professional growth*****
Site Supervisor	Option 1: AA (or 60 units) which includes: • 24 ECE/CD units with core courses** plus 6 administration units plus 2 adult supervision units	350 days of 3+ hours per day within 4 years including at least 100 days of supervising adults	Option 2: BA or higher (does not have to be in ECE/CD) with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting; <u>or</u> Option 3: Admin. credential*** with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting; <u>or</u> Option 4: Teaching credential**** with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting	Authorizes the holder to supervise a child care and development program operating at a single site; provide service in the care, development, and instruction of children in a child care and development program; and serve as a coordinator of curriculum and staff development.	105 hours of professional growth*****
Program Director	Option 1: BA or higher (does not have to be in ECE/CD) including: • 24 ECE/CD units with core courses** plus 6 administration units plus 2 adult supervision units	Site Supervisor status and one program year of Site Supervisor experience	Option 2: Admin. credential*** with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting; <u>or</u> Option 3: Teaching credential**** with 12 units of ECE/CD, plus 3 units supervised field experience in ECE/CD setting, plus 6 units administration; <u>or</u> Option 4: Master's Degree in ECE/CD or Child/Human Development	Authorizes the holder to supervise a child care and development program operating in a single site or multiple sites; provide service in the care, development, and instruction of children in a child care and development program; and serve as coordinator of curriculum and staff development.	105 hours of professional growth*****

NOTE: All unit requirements listed above are semester units. All course work must be completed with a grade of C or better from a regionally accredited college. Spanish translation is available.
 *One course in each of four general education categories, which are degree applicable: English/Language Arts, Math or Science, Social Sciences, Humanities and/or Fine Arts.
 **Core courses include child/human growth & development; child/family/community or child and family relations; and programs/curriculum. You must have a minimum of three semester units or four quarter units in each of the core areas.
 ***Holders of the Administrative Services Credential may serve as a Site Supervisor or Program Director.
 ****A valid Multiple Subject or a Single Subject in Home Economics.
 *****Professional growth hours must be completed under the guidance of a Professional Growth Advisor. Call (209) 572-6085 for assistance in locating an advisor.

APPENDIX B

Preschool Teacher Retention Questionnaire

Part I:

1. Please indicate your job title:
 - a. ECE teacher
 - b. Administrator
 - c. Other (please indicate)

2. Age group of children taught
 - a. 0-2 years
 - b. 2-3 years
 - c. 3-4 years
 - d. 4-5 years

3. Gender
 - a. Female
 - b. Male

4. Ethnicity
 - a. African-American/Black
 - b. American Indian/Alaska Native
 - c. Asian/Pacific Islander
 - d. Caucasian/White
 - e. Hispanic/Latino
 - f. Other (please indicate)

5. Marital Status
 - a. Unmarried/Divorced/Widow
 - b. Married

6. Please indicate your age in years: _____.

7. Please indicate the zip code of where you work: _____.

8. Please indicate your current job setting (mark all that apply):
 - a. Licensed Classroom
 - b. License-Exempt Classroom
 - c. State-funded
 - d. School district (LEA)
 - e. Other (_____)

9. Please mark your highest educational level:
 - a. Less than high school diploma

- b. High school diploma or GED
- c. Some college
- d. Child Development Permit
- e. Associate's degree (A.A.)
- f. Bachelor's degree (B.A.)
- g. Master's degree (M.A.)

10. Please indicate your salary rate:

\$ _____ hourly monthly annually

11. Please indicate the number of years you have worked as a preschool teacher (with an authorized teacher permit): _____

12. Please indicate the number of years you have worked at your current job setting:

13. Please indicate how many years you plan to stay at your current job setting:

14. For which of the following reasons do you predict that you will be leaving your current job setting in the number of years indicated above?

- a. Retirement
- b. Home relocation
- c. Completion of college degree program
- d. Promotion
- e. Family obligations (raising a family)
- f. Commute

Part II: Early Childhood Work Environment Survey
(*Blueprint for Action: Achieving Center-Based Change Through Staff Development*. Lake Forest, IL: New Horizons)

Indicate the numeral (0-5) that most accurately describes how you feel about each statement.

0=Never, 1=Seldom, 2=Sometimes, 3=Somewhat Regularly, 4=Frequently, 5=Always

Staff are friendly and trust one another. _____

Morale is high. There is a good team spirit. _____

Staff are encouraged to learn new skills and competencies. _____

The center provides guidance for professional advancement. _____

Supervisor(s) are knowledgeable and competent. _____

Supervisor(s) provide helpful feedback. _____

Communication regarding policies and procedures is clear. _____

Job responsibilities are well defined. _____

Salaries and fringe benefits are distributed equitably. _____

Promotions are handled fairly. _____

Teachers help make decisions about things that directly affect them. _____

People feel free to express their opinions. _____

Staff agree on school philosophy and educational objectives. _____

Staff share a common vision of what the center should be like. _____

The program is well planned and efficiently run. _____

Meetings are productive. Time is not wasted. _____

The work environment is attractive and well organized. _____

There are sufficient supplies and equipment for staff to do their jobs. _____

Staff are encouraged to be creative and innovative in their work. _____

The center implements changes as needed. _____

Staff communicate with parents on a daily basis. _____

Parents attend regularly scheduled meetings and family involvement events. _____