Teaching in Early Education: Examining the Relationship among Job Satisfaction, Efficacy, Connection to Students and Student Poverty Concentration

THESIS

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By

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Abstract

A majority of children in the United States are currently in some type of childcare setting. In defining quality, education of teachers is often used as an important indicator but has been shown to be an ineffective way to define quality. The importance of understanding high quality is especially important given gains that children in poverty can make in high quality settings. Research suggests a more comprehensive definition of quality childcare might include the connection between teachers and children which can be influenced by a number of factors, i.e. job satisfaction, teacher efficacy. The present study seeks to examine these teacher variables that can potentially affect the quality of childcare. Child care teachers completed a state-wide, 71-question, online survey, to address the following two research questions: 1) What is the relationship between job satisfaction, teacher efficacy, connection to students and teacher demographics; and 2) Do teachers’ perceptions of the number of children in poverty attending their center relate to any of the variables of study? Connection to students was found to be positively correlated with teacher efficacy and job satisfaction and negatively correlated with concentration of poverty in the center. Education, often used as an indicator of quality, was not correlated with any variable other than salary.
Dedications

I would like to dedicate my thesis to my grandparents, Bob and Jackie Robinson. My grandfather studied education at The Ohio State University about 50 years ago, and has helped me understand the importance of education. My grandfather is the most hardworking man I have ever met. He is also the most generous and would give his last penny to help others, especially his family. My grandmother serves as the rock of my family and the person who has been most influential in my life, giving me an example of the kind of strong, caring and passionate woman that I strive to be. My grandparents have always been unconditionally loving and supportive and the best memories I have in life take place around their dining room table with my family. The reason I have been able to finish my thesis and graduate school is because my grandparents demonstrated through example the importance of hard work, dedication and integrity.
Acknowledgments

I would like to acknowledge The Ohio State University for the use of resources, especially the research assistance from Lauren Haas-Gehres. I would also like to acknowledge my committee member, Dawn Anderson-Butcher for her guidance and assistance. The help of The Ohio Childcare Resource and Referral Agency was much appreciated and contributed to the project in a vast way. Finally, I need to acknowledge my advisor and professor, Dr. Amber Moodie-Dyer who was influential in my MSW experience. Her passion for social work and research inspired me to complete my thesis and I could not have done it without her support and encouragement.
Vita

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Fields of Study

Major Field of Study: Social Work
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Chapter One: Introduction

The effects of high quality child care programs on improving child and family outcomes has been discussed in academic research in recent decades due to the increase of the need for child care among working single parent and dual earner families (Early et al., 2007). For example in 2007, over half of children aged 3-6 were reported to be enrolled in a child care setting (Forum on Child and Family Statistics, 2011). However, “high quality” child care can be difficult to define and evaluate in child care settings. Teacher education level is often used as an indicator, but that is not always shown to contribute to higher quality (Early et al., 2007).

While requiring certain educational requirements for elementary, middle or high school teachers may be effective, early childhood education is vastly different and educators of this area may need to be evaluated on different qualities. With state guidelines and regulations for elementary, middle and high schools, there is an expectation that teachers are educated and capable of managing their classrooms. While there are certainly stressors for these teachers, early childhood educators face very different issues. In order to be licensed by the state and receive public funding, child care centers must meet certain guidelines. One of these regulations is related to education of the teachers, though it has been examined and shown to be less important than one would think (Early et al., 2007). Early et al. (2007) investigated the relationship of teacher education on child outcomes and found little evidence that supported the theory that
teacher education predicts higher quality outcomes. Early et al. (2007) recommends the need for further research to examine areas that might also have an effect on the quality of early childhood education, such as positive relationships between students and teachers. The present study seeks to understand how different variables such as teacher perceived job satisfaction, efficacy and concentration of students in poverty, influences the teacher/child relationship. Job satisfaction, teacher efficacy, teacher demographics and the concentration of poverty may each exact a level of influence on a quality measure such as teacher child connection/relationship. Teacher efficacy has shown to be influential in determining positive teacher student relationships, with teachers with higher efficacy scores showing more positive relationships with their students (Chung, Marvin and Churchill, 2004). Job satisfaction has been shown to be influenced by self-efficacy, to influence student outcomes and to lead to teachers creating more positive work environments (Caprara et al., 2006). Less is known in the research literature about the concentration of student poverty and teacher student relationships. As such, this study explores whether or not a relationship exists between teachers’ perception of student poverty concentration and connection to students in childcare centers.
Chapter Two: Review of the Literature

Children from low-income households are less likely than high income children to experience quality educational experiences in home and are less likely to be enrolled in high quality childcare centers (Magnuson, Meyers, Ruhm & Waldfogel, 2004). Childcare subsidies, through the Child Care Development Block Grant intend to provide low income families greater access to quality child care. However, as previously mentioned, “quality” is difficult to define and evaluate.

Early et al. (2007) addressed this issue of policies that require preschool teachers to have at least a Bachelor’s degree. There was little evidence that supported the theory that teacher education is associated with higher outcomes. Early et al. (2007) suggested further exploration of relationships between teachers and students. The authors also suggest further research to define and explain teacher quality. The implications in this article suggest that the quality of a teacher depends on qualities other than those that are easily measurable, such as level of education.

The present study seeks to expand on different variables that may be associated with student teacher connections such as demographic qualities of teachers and the teaching environment, job satisfaction and teacher efficacy.

Connection to Students
A child’s relationships with teachers can be significant in developing skills that lead to future relationships (Quan-McGimpsey, Kuczynski, and Brophy, 2011). Closeness described by early childhood educators is unique in that these teachers find it appropriate and necessary to engage in physical displays of affections such as hugs and kisses that may not be determined to be appropriate in an elementary school. In addition, these teachers need to balance these loving gestures with authority in order to maintain a professional role as educator. Though difficult to conceptualize or measure, teachers’ relationships with their students is an area that is underemphasized in preschools and based on Early et. al (2007), it is an area that deserves attention.

Job Satisfaction

Empowerment theories suggest that increasing access to resources can improve quality of life. In the context of early education, access to resources and supervisor or management support can increase job satisfaction. This is supported in Early et. al (2007). Access to resources and an emotionally supportive environment can decrease stressors in the life of an early childhood educator, allow the teachers to focus on the children and empower them to do their jobs to the best of their abilities. Different types of centers may have varying levels of access to resources based on the funds they have available, affecting the satisfaction of the teachers. Teachers in childcare centers have expressed the importance of seeing childcare centers as educational, rather than play. In
addition to job stress, “They want to be acknowledged, regarded, addressed, and paid in accordance with their skills, commitment, and contribution” (Shpancer, et. al, 2008, p.410).

Job satisfaction can include variables such as salary, school environment, stress, access to supplies, curriculum, and center and family support. These factors are all included in the Early Childhood Teacher Experiences Scale (Fantuzzo, Perlman, Sproul, & Minney, 2012). School environment includes the area that the school is located in, along with the physical condition of the school and classroom. Support includes support from the management of the school, such as emotional or job support. It can also include support from parents such as participation in classroom activities, daily communication regarding the child’s progress and the extent to which parents assist in the education of their children. Fantuzzo, Perlman, Sproul, and Minney (2012) studied relationships between stress, support and efficacy among teachers in different types of teaching positions. The study however did not discuss how the variables interacted with each other, but focused on differences in teachers’ demographics, education or positions.

Teacher Efficacy

Teacher efficacy is defined as how much a teacher believes he or she has the ability to teach a child and, to have a positive influence in a child’s educational success (Guo, Justice, Sawyer & Tompkins, 2011). Efficacy related to early childhood education
has been examined in numerous studies, but not in the context of educational environmental variables such as the concentration of students in poverty in a center. Previous research has shown a relationship between child involvement, connection to other teachers and increased self-efficacy in preschool teachers (Guo, Justice, Sawyer & Tompkins, 2011). The study included 48 preschool teachers from 38 different centers completing a survey about efficacy, connection to children and connection to other teachers. The overall findings were that teachers were more efficacious when they reported higher levels of connection to children and connection to other teachers (Guo, Justice, Sawyer & Tompkins, 2011). These results suggest that children’s involvement could help a teacher throughout lesson planning. Connection to other teachers assumes that teachers have collaboration in their jobs, suggesting peer support in the workplace increases a teacher’s sense of efficacy. Both of these indicators can increase a teacher’s belief in himself or herself. The present study will include variables similar to the indicators of child involvement and job satisfaction to further understand their relationship to teacher efficacy.

Previous studies have examined efficacy in different levels of early education. For example, Kindergarten and Head Start teachers report higher levels of efficacy than daycare center teachers (Fantuzzo, Perlman, Sproul, Minney, Perry & Li, 2012). Teachers with higher education levels also reported more stress than teacher’s with lesser or no degrees and Head Start educators were the most likely to report higher levels of school
support (Fantuzzo, Perlman, Sproul, Minney, Perry & Li, 2012). Future research suggested by the researches included comparing the similar variables in a variety of school environments.

Demographic Variables

Education of teachers is often used as a measure of quality for childcare centers, but evidence shows that this is not the best way to measure quality. In this student, connection to students is used as a measure of quality and education information is examined to determine if it correlates with any of the variables, including the measure for quality, connection to students.

Teacher variables have been used in studying student/teacher relationships to determine teacher variables that relate to connection to students (Koles, O’Connor & McCartney, 2009). The research is not conclusive and suggests studying teacher variables with groups at different income levels to determine risk and protective factors associated with schools (Koles, O’Connor & McCartney, 2009). The present study encompasses teacher variables, such as age, race, education and experience to determine whether any of these variables correlate with connection to students, the quality determinant in the study.

Poverty
One important aspect of early education environment is the poverty level of students who attend and the surrounding communities. Research has shown that children from low income families have worse academic performance and are not as prepared to enter school as children from wealthier families (Janus & Duku, 2007). In studying different childcare and preschool programs, Magnuson, Meyers, Ruhm, and Waldfogel (2004) found that children from poorer families who attended childcare centers saw a greater improvement in academics than children from wealthier families. Though they did not study the quality of the centers, they suggest that disadvantaged children receive less stimulation and learning opportunities at home, which may explain the larger benefit received at school (Magnuson, Meyers, Ruhm & Waldfogel, 2004). The present study included a question of perceived concentration of students in poverty to examine relationships with each variable measured.

This previous research illustrates the need to study the quality of care that children are receiving, along with the need to increase access to low income families. The academic benefits to childcare may lead to children being prepared to enter school, but do not always lead to continued academic success (Magnuson, Meyers, Ruhm & Waldfogel, 2004). This is one reason to study other factors that lead to quality, such as connection.

Research suggests a closer examination of connection to students as an outcome for children. The current study used connection to students as an indicator of quality in
childcare centers. Variables that have shown to be related to connection to students in previous research include teacher efficacy, job satisfaction and teacher variables. Concentration of poverty has additionally been shown to relate to quality of education received in childcare and is another variable examined in the current study.

The conceptual framework for the study illustrates that in a childcare setting, variables are expected to have effects on each other, as opposed to one solely influencing the other. Figure 1 depicts the way the variables in the study all relate to each other.

Figure 1: Conceptual Framework
Research Questions

The present study built on previous research to take a comprehensive look at early childhood education from the teacher’s perspective. The study examined the relationship between job satisfaction, teacher efficacy and connection to students, along with perceived concentration of poverty in the teacher’s center and demographic variables such as education level and experience.

The study was designed to address the following questions:

1. What is the relationship between job satisfaction, teacher efficacy, connection to students and teacher demographics?

2. Do teachers’ perceptions of the number of children in poverty attending their center relate to any of the variables of study?

The variables in the study are teacher perceptions of teacher efficacy and job satisfaction; demographic information such as race, education level, experience in childcare, and salary; teachers’ perception of the percentage of children in poverty in their center; and teacher perceived connection to students.

Teacher efficacy is operationally defined as how much a teacher believes he or she has the ability to teach a child and to have a positive influence in a child’s educational success. Connection to children is the extent to which a teacher feels an emotional connection with the majority of the students in a classroom in which he or she
is teaching. Job satisfaction is the extent to which a teacher has positive feelings towards the work he or she does.
Chapter 3: Method

Participants

To obtain participants, a non-random, convenience sampling method was used targeting child care centers in Ohio. Teachers from childcare centers in Ohio that were listed in the Ohio Child Care Resource and Referral Association’s (OCCRRA) list serve were contacted via email to complete an on-line survey. A representative from the Ohio Child Care Resource and Referral Agency forwarded a recruitment email containing a link to the online survey to all of the childcare centers in the OCCRRA database in Ohio (approximately 4,600). The first recipients of those emails were most likely to be child care center directors and not child care center teachers, so the email was a request for center directors to forward the text of the email and survey link to all of the child care teachers at their site. The number of teachers at each setting is unknown, but likely ranged from approximately 2 – 30. After one month of the survey being active online, the total number of participants was 109. It is unknown how many center directors forwarded the email to teachers at their center, which makes it difficult to calculate an accurate response rate. Assuming that each director forwarded the email to at least one teacher, the response rate is 2.3%. After removing participants for failing to complete the necessary amount of information, the sample size decreased to 98 participants.

Procedures
The study was a cross-sectional design and used an online questionnaire distributed to child care teachers in Ohio to measure the variables described. The study was determined exempt by the Ohio State University Institutional Review Board due to the fact that the study was anonymous, the study dealt only with adults, did not ask about sensitive information and there was a low risk of harm to participants. Once IRB approval was granted, data were collected through an online survey, using the Lime Survey online tool. Lime Survey is a user-developed software tool by which to build internet surveys. The tool enables survey administrators to encrypt all survey traffic sent through the world wide web using a Secure Sockets Layer (SSL). Surveys created for this study using Lime Survey will be enabled with SSL for both administrative tasks and participant responses using a root url that begins with "https." All respondent data were stored on a firewall protected server housed in the College of Social Work at Stillman Hall. Only research personnel were able to access these data.

The survey remained active online for one month. The teachers were informed that participation in the survey was completely voluntary and that there was no way for the researchers or the directors of the centers to be aware of who completed or did not complete the survey. The survey did not ask any identifying information and was anonymous. It was also recommended that the teachers complete the survey on a personal computer, rather than a work computer, where employers may have access to the information.
Instrument

Connection to Students

For the present study, connection to students was measured by the Student-Teacher Relationship Scale, developed by Pianta (2001). The scale measures the teacher’s perception of the relationship he or she has with students. The scale was developed as a tool to measure a teacher’s connection with an individual child, but was used in the present study as a measure of the classroom as a whole. The Teacher Child Relationship Scale was found to have an alpha level of .89 (Pianta, 2001).

The scale was designed to measure teacher’s relationships with an individual student and was adapted for the current study to assess teacher’s relationships with most of the children in their classroom as a group. Participants answered 15 questions about emotional aspects of relationships with students. One example of an original question is “I share an emotional, warm relationship with this child.” The modification of this question is “I share an emotional, warm relationship with most of the children in my class.” The response code includes 1=Definitely does not apply, 2=Not really, 3=Neutral/Not sure, 4=Applies somewhat, 5=Definitely Applies.

Job Satisfaction
Job Satisfaction was measured by the Job Satisfaction Survey created by Spector (1985). It is a general job satisfaction questionnaire: applicable to many work settings. The alpha level for the Job Satisfaction survey was found to be .91 (Spector, 1985).

The scale included 36 questions asking the participant questions about their attitudes and feelings towards their job. Examples include “I sometimes feel like my job is meaningless” and “raises are too few and far between.” The response codes for job satisfaction questions include 1=disagree very much, 2=disagree moderately, 3=Disagree slightly, 4=agree Slightly, 5=agree moderately, 6=agree very much.

Teacher Efficacy

Fantuzzo, Perlman, Sproul, Minney, Perry and Li (2012) adapted the School and Staffing Survey (SASS), a national tool used to examine teacher experiences and practice, to be used with early childhood teachers. The adapted survey was named the Early Childhood Teacher Experiences Scale (ECTES) and focuses on teacher efficacy, job stress, and school support between teachers of first grade, Kindergarten, Comprehensive Day Care and Head Start programs. The efficacy portion of the ECTES was used to measure teacher efficacy in the current study. The teacher efficacy dimension on the ECTES resulted in an alpha level of .80 (Fantuzzo et al., 2012). The teacher efficacy scale included ten questions about efficacy, including “I feel that I am making a significant difference in the lives of my students.” The response code for the
scale is as follows: 1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree.

Poverty

There was also a categorical question related to teacher’s perception of the percentage of children in poverty at the center of employment in which teachers could choose [Less than 25 percent, 25-50 percent, 51-75 percent, 76 percent or higher]. For the correlation analysis, the poverty variable was dichotomized so that 0= poverty concentration less than 25 percent and 1= poverty concentration 25 percent or higher. For the ANOVA, the four categorical groupings were used as follows: 0=Less than 25 percent, 1=25-50 percent, 2=51-75 percent and 3=76 percent or higher.

Demographic Variables

Demographic information was asked of each participant. Age, salary, years of childcare experience, years of experience in current setting and number of hours worked per week were all continuous variables. Race, education level, and current job title were all categorical variables. Categorical variables including education race were dichotomized in the following ways to include in correlation analysis: less than a Bachelor’s degree = 0, Bachelor’s degree or higher = 1; White = 0, non-White = 1.
Chapter Four: Results

Ninety-eight participants completed the online survey. Demographic data include race, gender, age, education, job title, years of experience as an early childhood teacher, years of experience at participant’s current job, and hourly wage. With regards to race and gender, 85.3 percent of the participants identified as White and 14.7 percent identified as a non-White category; 96.9 percent of participations were female. The average age of participants was found to be 41.16 years (SD 12.35). Almost half of the participants (41.1 %) held a Bachelor’s Degree, while 28.4 percent reported having an Associate’s Degree. Additionally, 12.6 percent had a graduate degree and 4.2 percent reported no formal education after high school. More than half of the participants (53.6%) were Lead Teachers, 16.5 percent were Management, and 15.5 percent of the participants reported holding a dual position of Lead Teacher and Management. Assistant Teachers and Float teachers (teachers not assigned to a specific classroom, but provide support where needed in the center) each accounted for 7.2 percent of participants. The mean for years of experience was 14.31 (SD 9.82) and participants had worked in their current center for 7.94 years (SD 6.77). The average hourly wage for participants was reported as $12.08 (SD 4.16). Means were also calculated for the variables of efficacy, job satisfaction and connection to student scales. For a complete demographic analysis see Table 1.
Table 1: Descriptive Statistics for Teacher Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly Wages</td>
<td>93</td>
<td>4.5</td>
<td>32.7</td>
<td>12.08</td>
<td>4.16</td>
</tr>
<tr>
<td>Years at current center</td>
<td>98</td>
<td>0.17</td>
<td>27</td>
<td>7.94</td>
<td>6.77</td>
</tr>
<tr>
<td>Age of participant</td>
<td>97</td>
<td>20</td>
<td>68</td>
<td>41.16</td>
<td>12.35</td>
</tr>
<tr>
<td>Teacher Efficacy</td>
<td>94</td>
<td>1</td>
<td>5</td>
<td>4.01</td>
<td>1</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>91</td>
<td>1.89</td>
<td>5.9</td>
<td>4.15</td>
<td>0.78</td>
</tr>
<tr>
<td>Connection to student</td>
<td>96</td>
<td>3</td>
<td>5</td>
<td>4.31</td>
<td>0.61</td>
</tr>
<tr>
<td>Race</td>
<td>95</td>
<td>0 (nonwhite)</td>
<td>1 (white)</td>
<td>0.85</td>
<td>N/A</td>
</tr>
<tr>
<td>Education level of participants</td>
<td>95</td>
<td>0 (less than Bachelor's Degree)</td>
<td>1 (Bach degree or higher)</td>
<td>0.54</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Another variable of interest was teacher perceptions of the number of children in poverty attending the center. A majority of the participants (54.2%) perceived the poverty concentration at their center to be less than 25 percent of students. The second highest poverty concentration category was 26-50% of students, with 19.8 percent of participants reporting this level of students in poverty in their center. Finally, 14.6 percent of participants reported that 76-100 percent of students attending their center were living in poverty, while 11.5 said that 51-75 percent of students were in poverty.

Pearson R correlations were calculated for all continuous and dichotomous variables. Significant, positive correlations at the p < .05 level were found between connection to students and several variables including age (r = .24), years of experience (r = .24), length of time at current center (r = .23), and salary (r = .24). Connection to
students was found to be positively correlated to both teacher efficacy (r = .35) and job satisfaction (r = .29) at the .01 level. Connection to students was significantly negatively correlated to poverty concentration (r = -.33, p < .01) in that teachers reporting 25 percent or more of their students in poverty were significantly less likely to feel connected to students. Concentration of poverty, as a dichotomized measure, was also found to be negatively correlated with efficacy (r = -.21, p < .05), and job satisfaction (r = -.33, p < .01). Therefore teachers at centers with 25 percent or more of their students in poverty reported significantly lower levels of job satisfaction and efficacy. Education was found to correlate with salary, but had no significant correlations with any other variables. For complete correlation analyses see Table 2.
Table 2: Summary of Variable Correlations

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of participants</td>
<td>__</td>
<td>.70**</td>
<td>.12</td>
<td>.43**</td>
<td>.24*</td>
<td>.20</td>
<td>-.02</td>
<td>-.09</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>.70*</td>
<td>___</td>
<td>.13</td>
<td>.52*</td>
<td>.24*</td>
<td>.17</td>
<td>.04</td>
<td>-.05</td>
</tr>
<tr>
<td>Education level of participants</td>
<td>.12</td>
<td>.13</td>
<td>___</td>
<td>.27*</td>
<td>.17</td>
<td>.01</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>Hourly Wages</td>
<td>.43**</td>
<td>.52**</td>
<td>.27*</td>
<td>___</td>
<td>.24*</td>
<td>.14</td>
<td>.12</td>
<td>.09</td>
</tr>
<tr>
<td>Student Teacher Connection Mean</td>
<td>.24*</td>
<td>.24*</td>
<td>.17</td>
<td>.24*</td>
<td>___</td>
<td>.35**</td>
<td>.29**</td>
<td>-</td>
</tr>
<tr>
<td>Teacher Efficacy Mean</td>
<td>.20</td>
<td>.17</td>
<td>.01</td>
<td>.14</td>
<td>.35**</td>
<td>___</td>
<td>.04</td>
<td>.21*</td>
</tr>
<tr>
<td>Job Satisfaction Mean</td>
<td>-.02</td>
<td>.04</td>
<td>.09</td>
<td>.12</td>
<td>.29**</td>
<td>.04</td>
<td>___</td>
<td>-</td>
</tr>
<tr>
<td>Poverty Concentration</td>
<td>-.09</td>
<td>-.05</td>
<td>.07</td>
<td>.09</td>
<td>-.13**</td>
<td>-.21*</td>
<td>-.31**</td>
<td>___</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01
One way ANOVA tests were used with the concentration of poverty variable in its categorical form (1 = less than 25%, 2=25-50%, 3=51-75% and 4=76% or higher) as the independent variable and the following as dependent variables: teacher efficacy, job satisfaction and connection to students. Both connection to students ($F(3, 90) = 3.82, p=.01$) and job satisfaction ($F(3,85) = 3.55, p=.02$) were found to be significant across the four categories of poverty. Tukey post-hoc comparisons were calculated on the significant models. There was a significant difference between the less than 25 percent of poverty group and the over 76 percent group on the connection to students variable with $F= .35 (p = .05)$. On the job satisfaction variable, the difference between the lowest concentration of poverty and the highest concentration of poverty is approaching significance, with $F = .24 (p = .06)$. 
Chapter Five: Discussion

Interpreting the results of the study required utilizing both research questions to illustrate the data. Regarding the first research question, significant relationships were found between the variables of job satisfaction, teacher efficacy, connection to students and teacher demographic variables.

In this study, connection to students was used as a measure of quality. Connection to students was shown to be related to older, more experienced teachers and teachers who had been at the center for a long period of time. Connection to students was also positively correlated with teacher efficacy and job satisfaction.

The second research question examined whether or not teachers’ perception of concentration of poverty of students was related to any of the other variables of interest. Concentration of poverty was found to be negatively correlated with teacher efficacy, job satisfaction and connection to students. In centers with high concentrations of poverty, teachers reported to be less satisfied, less connected to students and less confident about their abilities to educate the students. This contributes to the research discussing the differences between children from low income families and their wealthier counterparts (Janus & Duku, 2007, Magnuson, Meyers, Ruhm, & Waldfogel, 2004). Post hoc tests showed the largest significant differences within groups on the poverty categorical variable occurred between the highest concentration of poverty group (76 percent or
higher) and the lowest concentration group (Less than 25 percent). This further supports the fact that poverty could be related to teacher’s connection to students and job satisfaction.

The results contribute to the literature, showing that connection to students is related to greater teacher efficacy and higher levels of job satisfaction. These results are expected, as teachers who are satisfied and confident in their abilities are more connected to their students.

The results support the findings and recommendations of Early et. al (2007). Teacher education was only found to correlate with salary. Higher education levels were not found to be related to the variables of teacher efficacy, connection to students or job satisfaction. Connection to students was found to be positively correlated with job satisfaction and teacher efficacy, which could provide support for using connection as a measure of quality in childcare centers.

Limitations

Limitations in the present study include a small, non-random sample in only one state. The response rate was also very small. Due to small sample size, only descriptive and correlational data could be extracted from the data, and no causal data could be calculated.
There were also measurement issues in the study that cause limitations. Quality of education was measured only through the connection to student variable. This variable was only measured through teacher report. Teachers could potentially report more positive relationships with their students than they actually have. In studying connection to students, more perspectives could be included, along with observations in order to get a more accurate depiction of the teacher/student connection.

Another limitation of the study is that all of the data came from the perspective of the teacher. This was done to make the project feasible for a Master’s thesis. Yet, teachers may not be able to accurately identify the concentration of poverty in the center. In addition, student academic outcomes were not obtained, but the level of closeness was used for the outcome.

In addition, due to a lack of relevant scale, the Teacher-Child connection scale was modified to apply to an entire classroom, while it was designed to measure a teacher’s connection with a single child. However, the results may not have been affected. Koles, O’Connor, and McCartney (2009) found that teachers are consistent within classrooms in their reporting of levels of closeness with students.

Implications
The results of the study are relevant for parents, teachers, administrators and policy makers. In defining quality, teacher education should be considered, but other aspects of teachers need to be considered. Connection to students was correlated positively with teacher satisfaction and job efficacy, suggesting that it could be beneficial to students and school owners if there were ways to increase job satisfaction and efficacy in teachers. With all three of the variables positively correlated, it could be beneficial to determine ways to increase each. Conducting yearly staff surveys to get feedback and suggestions is one way for centers to potentially increase teacher job satisfaction. In addition, if teachers are able to give feedback on areas that they need training on, that could increase efficacy.

One way to potentially increase these variables of interest would be professional development. Typically, teachers are required to complete trainings in areas such as CPR, First Aid, child abuse and communicable disease to work in child care centers. Professional development around the areas of poverty and diversity could be incorporated into required trainings. In addition, trainings around ways to increase emotional connection to students could be beneficial to teachers and students. Providing professional development opportunities could in itself increase teacher efficacy by helping prepare teachers. With the discussion around universal preschool and prekindergarten, this could open up childcare opportunities for students who do not currently have access.
Concentration of poverty was found to have negative relationships with job satisfaction, efficacy and connection to students. Though the nature of the relationships between the variables is not clear based on the study, it is reasonable to provide trainings on poverty and diversity for early childhood professionals. In addition, policies could be put in place requiring a licensed social worker at childcare centers with over 50 percent of families living in poverty. With the negative correlations to connection to children, job satisfaction and teacher efficacy, a social worker could provide an additional resource for parents, children and staff to help reach the whole child and the family to reduce barriers to learning.

Future research should include comparing teacher variables and student outcomes in centers with differing levels of poverty, to further examine the differences in quality in low income versus high income centers while studying the academic benefit of childcare centers on students. For example, longitudinal data could be collected on student academic performance in elementary school to understand the influence of poverty concentration and connection to students on academic performance. Future research could also include multiple measures to understand variables of connection to students. For example using objective observers to code the level of connection between teachers and students in a classroom may provide a more accurate measure of teacher and student connection.
The current study sought to examine if relationships exist between connection to students, job satisfaction, teacher efficacy and teacher demographics in childcare centers. Positive correlations were found between job satisfaction, efficacy and connection to students, which was used as a measure of quality, in response to research suggesting the examination of connection to students as an outcome. In addition, the study was designed to determine if the teachers’ perception of poverty concentration in the center was correlated with any of the other variables of interest. Concentration of poverty was found to be negatively correlated with all three variables of interest: connection to students, job satisfaction and teacher efficacy.

While correlative information cannot describe how these variables are related, the data suggest that the area of quality in childcare, especially in relation to poverty, is an area that needs further research and exploration.
References


