

University of Nevada, Reno

**Early Childhood Education Teachers' Job-Related Well-Being: Examining
Protective Factors on Stress and Burnout**

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in
Human Development and Family Studies

by

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Abstract

Early childhood education teachers report one of the highest levels of stress of all other professions, which can lead to burnout and quitting intentions. This paper examines the relationship between protective factors and job-related stress and burnout, including types of support, education, the school climate, and parent-teacher relationships. A web-based survey was administered to 143 early childhood education teachers in the Reno/Sparks area to determine the correlations between each of these protective factors and stress/burnout. Bivariate correlations showed the relationships between variables. Results suggest that there is statistically significant negative relationship between school climate and stress, as well as highest level of education and stress. Additional correlations were found between the parent-teacher relationship, stress, and burnout. Significance, implications, and directions for future research are discussed including making improvements to the school climate, improving parent-teacher relationships, and further studies addressing directors' education and the impact on school climate.

Keywords: early childhood education, teacher stress, burnout, protective factors, school climate, parent-teacher relationships, turnover, support

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CHAPTER ONE: INTRODUCTION

Background

Although individuals enter the teaching profession for a variety of reasons, many teachers cite a passion for working with children, the desire to make a difference, and the hope that they will be able to do work that they enjoy. This is expressed with idealism and enthusiasm for the profession (Richards, 2012). However, it appears that these ideals may not be enough to sustain long-term teaching for many, as teacher stress and turnover in this profession are very high. Teacher turnover not only affects program quality, but it is costly and time consuming to have to constantly train new staff members (Mor Barak, Nissly, & Levin 2001; Russell, Williams, & Gleason-Gomez, 2010). Additionally, it can disrupt the bonds between colleagues, which negatively impacts the school climate (Arnup & Bowles, 2016). The constant rotation of new teachers in a classroom is particularly disrupting for the children and has implications for child development and the quality of interactions between teachers and children (Cassidy, Lower, Kintner-Duffy, Hegde, & Shim, 2011).

This study examines the protective factors that help to mitigate risks associated with early childhood education (ECE) teachers' stress and burnout. Vazi et al. (2013) identified a scarcity of studies that report on protective factors against stress. This research is important in order to develop prevention strategies and policies with the goal of retaining quality teachers in ECE programs and enhancing their interactions with children in their care.

Research Hypotheses

The current study addressed the following research hypotheses to examine possible protective factors associated with teacher stress and burnout:

Hypothesis 1. ECE teachers who receive more support are less likely to report high levels of job-related stress and burnout.

Hypothesis 2. ECE teachers who have more education are less likely to report high levels of job-related stress and burnout.

Hypothesis 3. ECE teachers who perceive more positive school climates are less likely to report high levels of job-related stress and burnout.

Hypothesis 4. ECE teachers who view themselves as in partnerships with parents are less likely to report high levels of job-related stress and burnout.

Definition of Terms

Burnout. Maslach and Jackson (1981) describe burnout as a state of emotional exhaustion characterized by detachment from their job and losing the sense of accomplishment or satisfaction for one's work. This construct is often considered the final stage in a chain of reactions due to chronic job-related stress.

Continuity of care. The presence of a consistent teacher in the classroom over time, which helps maintain stability and normalcy for children. Continuity of care is considered a best practice as it helps teacher and child form secure attachments (Longstreth et al., 2016).

Instrumental support. Instrumental supports are the tangible ways in which individuals are supported. Examples of instrumental support include time, money, educational assistance, and benefits stemming from education or health-related expenses (Malecki & Demaray, 2003).

Resilience. Resilience has been defined as the ability to successfully adapt despite challenging or threatening circumstances (Arnup & Bowles, 2016). Additionally, specific to teachers, resilience has been thought of as what sustains and enables teachers to not just survive in their profession, but thrive – maintaining commitment and motivation – while meeting the challenges that are intrinsic to the field (Beltman, Mansfield, & Price, 2011). Others cite the presence of protective factors that allow the individual to overcome stressors (Sottimano, Viotti, Guidetti, & Converso, 2017).

Social support. Social support is a process through which social relationships promote the well-being of an individual. It also involves the social resources perceived as being available and provided to an individual by the social environment (Cohen, Gottlieb, & Underwood, 2000).

Teacher stress. Commonly defined as the experience by a teacher of physiological responses such as tension, which stem from their work as a teacher. While stress does not always have to be negative, for this study, the researcher is focused on stressors that inhibit teacher's ability to do their job well (Selye, 1974). These feelings are unpleasant and include emotions like anger, anxiety, frustration, or depression (Kyriacou, 2001).

Turnover. Turnover occurs when a teacher leaves the center where they are currently employed, either for another job in the same field or to leave the field altogether (Whitebook & Sakai, 2003). The turnover process is said to be one that is gradual and happens over a period of time with confounding variables relating to job satisfaction piling up (Russell et al., 2010).

CHAPTER TWO: LITERATURE REVIEW

Teacher Stress

A review of the literature suggests that teacher stress is a widespread, pervasive problem in ECE programs (Bernard, 2016; Buchanan, 2012; Moriarty, Edmonds, Blatchford, & Martin, 2001). Teachers report one of the highest levels of job-related stress when compared to all other professions (Bernard, 2016). As concerns related to job-related stress increase, the need also emerges for research related to combating and preventing these stressors from resulting in disruptions to classroom quality and teacher turnover. There is a need for future research around teacher stress including prevalence, coping strategies, and career development despite stress (Kyriacaou, 2001). There are clearly identified gaps in the literature that call for more research concerning teacher resilience and continued quantitative research in this area with larger sample sizes (Beltman et al., 2011).

In the field of ECE, job-related stress not only affects the individual but also has implications on the quality of the environment and care that children receive. Teacher stress may stem from a variety of sources working in the field including time pressures and workload, difficulties with administration or management, and dealing with colleagues (Kyriacaou, 2001). Other studies have cited dealing with parents who treat the school as a child-minding service, a lack of control, and other non-teaching related duties as stressors (De Stasio, Fiorilli, Benevene, Uusitalo-Malmivaara, & Chiacchio, 2017; Kelly & Berthelsen, 1995). Stressors included juggling the various demands that are inherent to the profession in conjunction with a lack of respect from members of the community, low wages, demanding tasks, and high child to teacher ratios (Whitebook &

Sakai, 2003). This accumulation of stressors may lead to positions in the field being filled by individuals who are unqualified and further perpetuate the problem (Essa, 2014).

Implications. As of the last United States Census, it is estimated that 48% of children ages three and four attend a preschool program (Davis & Bauman, 2013). This means that almost half of preschool-aged children in the United States will be affected by teacher stress and the implications that it has on program quality. A growing body of evidence in the ECE field reveals that teachers have considerable influence on classroom quality and children's learning and development (Burchinal et al., 2008; Burchinal, Cryer, Clifford, & Howes, 2002; Hamre & Pianta, 2001; Mashburn et al., 2008). Not only are there implications for child learning, development, and classroom quality, but teacher stress can impact the physical and psychological health of the individual.

Iacovides, Fountoulakis, Kaprinis, and Kaprinis (2003) stated that stressors that occur on the job may have a substantial impact on mental health and well-being, going as far as to state that about 41% of the disparity in general health may be attributed to job-related stress. Stress was associated with negative consequences such as poor teacher health and lesser job satisfaction (Prilleltensky, Neff, & Bessell, 2016). Others stated that job-related stress resulted in lesser occupational commitment, an increase in absenteeism, and higher instances of turnover (Mor Barak et al., 2001). Stress and reduced job satisfaction drive burnout, which can lead to amplified stress and a further deterioration of job satisfaction (Manlove, 1993).

Several researchers have examined the financial implications of teacher stress (European Agency for Safety, 2014; Rosch, 2001). Calculating the cost considers factors like missed wages due to absenteeism, reduced productivity and poor performance,

overstaffing, and health care costs, which have been estimated to be around \$300 billion in the United States alone per year (European Agency for Safety, 2014).

Burnout and Turnover

The term “burnout” was first introduced by Freudenberger (1974) to describe the exhaustion of mental health and well-being of professionals in the workplace. He defined it as to “fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources” (Freudenberger, 1974, p. 159). This fatigue can be both mental and physical and has been commonly observed in teachers (Freudenberger, 1974).

Burnout may be caused by an imbalance of job demands including time, the necessary emotional contributions and empathy required to do the job well, poor job satisfaction, taxing working conditions, and high demands (Iacovides et al., 2003).

Within ECE programs, one of the most common issues that the field faces is the high turnover rate of teachers (Whitebook & Sakai, 2003). In 2003, the annual rate of departure from teachers in ECE settings was 30%, compared to just 7% in elementary education (Whitebook & Sakai, 2003). “Research reveals that an estimated 82% of ECE teachers employed in 1994 and 76% employed in 1996 were no longer retained in the field by the year 2000” (Cassidy et al., 2011, p. 1). In addition, low retention rates have been associated with increased stress for remaining ECE teachers, as well as increased costs to the center itself. High turnover rates of teachers have the potential to affect an ECE center’s quality at a variety of levels including children, remaining staff, and the center overall, which can further perpetuate the problem.

Seiderman's (1978) study of the stages of burnout identified specific behaviors that indicated different stages of burnout. In the early stages, teachers began complaining

about the minutiae of every day, namely children's behavior, parent engagement, the center administration, wages, and job demands (Seiderman, 1978). As the burnout progressed, researchers saw an increase in boredom, negative discussions, gossiping, and recurrent conflicts with others on the job, all of which resulted in low staff morale (Seiderman, 1978). In the final stages of burnout, staff members either resigned or were asked to leave, ending their employment (Seiderman, 1978). Richards (2012) built upon this idea, stating that teachers who experience burnout are likely to detach themselves from others, accomplish less, and feel emotionally exhausted and depressed. The full picture of antecedents to teacher turnover must take into consideration other factors such as teacher-child ratios, educational level, salary, working conditions, and the like (Cassidy et al., 2011).

Furthermore, in a study of human service workers, researchers found that there were three major categories that led to turnover in the workplace: (1) demographic factors, both personal and work-related; (2) job perceptions, including job-related commitment and fulfilment; and (3) administration quality (Mor Barak et al., 2001). A subsequent study of 387 middle school teachers found that when work-related pressures went unrelieved, teachers lost their passion for teaching, became indifferent toward their students, and ultimately led to burnout (Yu, Wang, Zhai, Dai, & Yang, 2015).

It is widely recognized that turnover impacts the quality of the classroom and educational environment, characterized by less appropriate teacher-child interactions (Howes & Hamilton, 1993; Jennings et al., 2017; Ronfeldt, Loeb, & Wycoff, 2013; Russell et al., 2010; Whitebook & Sakai, 2003). Studies have found that when ECE teachers were emotionally exhausted in their job and burnt out, they were less likely to

exhibit positive practices for children in the classroom (Jennings et al., 2017; Rentzou, 2012). For example, Whitebook, Sakai, Gerber, and Howes (2001) conducted a longitudinal study of staffing and quality over three points in time and estimated average teacher turnover per year at 30%. Notably, this study did not find any differences between National Association for the Education of Young Children (NAEYC) accredited programs and those that were not accredited. Whitebook et al. (2001) did find that more stable caregivers developed secure relationships with the children in their classroom and had higher overall classroom quality.

Continuity of Care

Caregiver stability is a vital piece of the puzzle of classroom quality. When teachers remain with their children for longer periods of time, it fosters secure attachment relationships between child and caregiver (Ackerman, 2008). High-quality teaching also promotes the development of cognitive, behavioral, and social-emotional skills (Domitrovich, Gest, Gill, Bierman, & Welsh, 2009). High-quality programs have been found to produce students who achieve more all the way through eighth grade (Hamre & Pianta, 2001). However, high staff turnover hinders these processes.

Cassidy et al. (2011) used real-time turnover transitions in 13 classrooms as the lead teacher left the center and a new teacher entered the classroom to examine how these transitions affected the classroom quality, staff, parents, and children in the classroom. In the event of a “turnover situation,” the researchers were contacted and began their data collection. During their last week of employment, teachers were interviewed, observed in their classrooms, and completed an exit survey. This was then compared to the week

after departure in which the new and remaining teacher were surveyed and the classroom was again observed.

The researchers identified that the remaining teachers who were the constant presence and bridged the gap between the departing teacher and the new teacher, felt largely depended upon and reported increased stress (Cassidy et al., 2011). In addition, they reported that classroom management was especially difficult during turnover, which has implications for the quality of interactions teachers have with children as well as the climate (Cassidy et al., 2011). Following teacher's departure, parents stated that changes in the classroom staff, regardless of permanency, affected the parent-teacher relationship as well as the teacher-child relationship, which is important for attachment (Ackerman, 2008). Some parents also identified disruptions to child well-being as well as reduced trust and confidence in the classroom teachers (Cassidy et al., 2011).

Theoretical Framework

Bioecological model. Teacher stress may be understood by exploring both proximal and distal forces that affect the individual. The Bioecological Model was developed by Urie Bronfenbrenner (1994) as a comprehensive understanding of the nature and scope of developmental processes in context. This approach distinguishes itself from others as the individual is at the center, and is conceptualized in terms of systems, and subsystems within systems (Bronfenbrenner, 1994). Changes both in the micro- and macro- level influences affect the teacher and those in their immediate environment will impact the individual (Bronfenbrenner, 1994).

At the micro level, Bronfenbrenner (1994) included direct influences such as relationships with a spouse, partner, and other family members. Included in the

microsystem is the job, which includes co-workers, school/program climate, and the children in a teacher's classroom and their families. Supportive relationships with others are at the most proximal level of development according to the Bioecological Model, meaning that these direct influences and relationships have the greatest impact on the individual. Dyadic relationships, or those between two individuals, are intrinsic to the microsystem, which is why there is such a focus on relationships that the teacher has with others.

The next closest influences are the mesosystem, in which any two or more microsystems interact or influence each other. For example, staff cooperation may influence teachers' well-being and job satisfaction, thereby enhancing work performance. Since the programs are complex and multi-faceted, a community of support in the center may be more important than just one or two sources (Halverson, 2010). Additional factors such as administrative support, opportunities for professional development, and influence in school-level decisions would be mesosystem influences (Brownwell & Smith, 1993).

The more distal systems and the environment are linked in numerous ways, many of which can influence teacher stress. In the field of ECE, one such influence is changing policies and procedures such as those handed down through accreditation requirements, a center's funding, and a lack of community resources devoted to professional development (Price & McCallum, 2015). One such example in Nevada is the Quality Ratings and Improvement System (QRIS), which classifies quality indicators for ECE programs throughout the state. To receive any funding from the state, the center must participate in QRIS, which uses a "Star Rating" to evaluate programs based on their criteria (Nevada

Silver State QRIS, 2018). These additional regulatory entities would fall into the exosystem, including things that still indirectly influence the person at the center. A combination of exosystem influences may result in teachers feeling less able to cope with stressors and be more likely leave the profession.

Lastly, the macrosystem level consists of state or federal policies and economic conditions to the social conditions at the time. Macrosystem effects may include societal perceptions of ECE teachers, a lack of respect for the profession, and the lack of federal funding for ECE programs. While these influences are further away from the individual, they may still have a significant impact.

Stress theory. Applying Family Stress Theory to teacher stress is another valuable framework to help understand how teacher stress affects the individual and their intentions to stay in the profession. Reuben Hill (1949) first identified the relationship between families and whether they were able to stay together in the face of crisis. Conceptualizing teacher stress using this theory, the teacher replaces the family as the unit intended to analyze. Using the ABC-X model of Family Stress, a letter represents each variable. Variable A is the stressor that may or may not precipitate a crisis, B is composed of the available resources, C the perception and appraisal of the stressor, and lastly, X is whether the stressor ends in crisis (Rosino, 2016).

In 1983, McCubbin and Patterson expanded on the ABC-X model with the double ABC-X model, which considered the accumulation of stressors, both ordinary stressors that build up over time and the initial stress event, identified as the aA Factor (Lavee et al., 1985). For teachers, these stressors may include their everyday tasks and workload, administration difficulties, salary, and fatigue. In addition, the bB factor considers the

resources that the individual has that can reduce the impact of the stressors, these can be personal such as resiliency, education and knowledge, and efficacy or social support from those around you, including family, co-workers, or administration (Lavee et al., 1985). Next, the cC factor, encompasses the general perception and disposition regarding the stressors shape the meaning the individual makes of the situation (Lavee et al., 1985). This ability to adapt and react to the stressors and helps to determine whether they enter crisis. Finally, the xX factor is the outcome of the processes that determine if there will be reorganization and return to equilibrium, or crisis (Lavee, McCubbin, & Patterson, 1985).

To further illustrate the application of Family Stress Theory to teacher stress, Richards (2012) initiated a study of 1,201 K-12 teachers in the United States and focused on three concerns: (1) the sources of teacher stress, (2) the indicators of that stress, and (3) the ways in which teachers cope. Richards (2012) identified the trigger that most frequently initiates the stress response as the perception that ones' coping resources are inadequate for handling life demands. Mirroring the assumptions of Family Stress Theory, Richards (2012) found that if the resources available to the teacher appear equal to the demands, they were more likely to view them as mere challenges and treat them as such. In this case, teachers do not enter crisis, and rather, reorganize. If, however, these demands are viewed as exceeding teachers' resources, they become stressors and may trigger the stress response (Richards, 2012).

Conceptual Framework

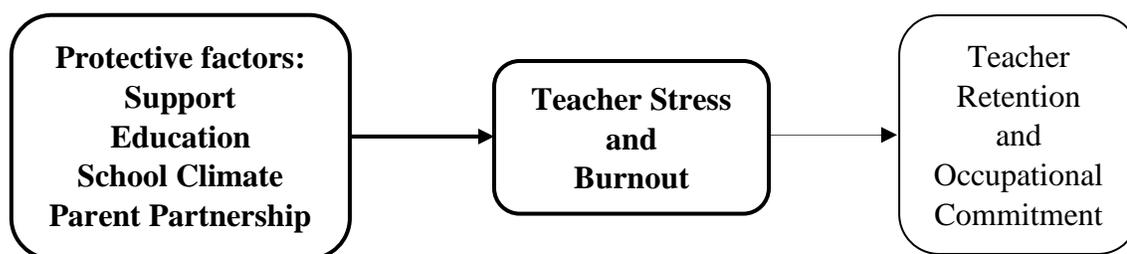


Figure 1. Conceptual model being tested to identify the relationship between protective factors and teacher stress.

Protective Factors

Protective factors strengthen the individual's ability to cope with stressors and improve the likelihood of positive outcomes (Prilleltensky et al., 2016). In comparing the experiences of teachers in nearly identical workplace situations, one key to staying in the profession may be the resilience of the individual (Beltman et al., 2011). Types of protective factors range from individual factors such as temperament, coping strategies, and outlook, to more contextual factors surrounding the environment and the types of support that the individual receives. Figure 1 shows each protective factor that was specifically addressed in this study to determine the relationship between each protective factor and teacher stress and burnout. Although data was not collected on teacher retention, the influence that teacher stress has on retention is integral to understanding the scope of the problem.

A cross-sectional survey of public school teachers in the Eastern Cape of South Africa sampled 562 randomly selected teachers from both primary and high schools in urban and rural areas (Vazi et al., 2013). Vazi et al. (2013) attempted to identify the relationship between teacher well-being and psychological stress. The researchers

identified psychological well-being as negatively related to stress and role problems were significant predictors of stress (Vazi et al., 2013). The findings provided a basis for the argument that interventions aiming to increase psychological well-being would help teachers to cope better with stress.

Adding to this argument, Jennings and Greenberg (2009) proposed that certain social and emotional competencies support teachers' abilities to cope with the demands of teaching and prevent burnout. Teachers with high levels of social and emotional competence could better cope with the demands of the profession, maintain an encouraging classroom climate, have better quality relationships with students, and interacted with students in ways that promoted learning (Jennings & Greenberg, 2009).

Furthermore, Sottimano et al. (2017) asked 706 preschool teachers in northwest Italy to complete a self-report questionnaire to determine any correlates to work ability. Sottimano et al. (2017) defined work ability as the physical and intellectual resources on which individuals can rely to respond to work demands and found that among younger preschool teachers, support from colleagues was positively associated with work ability. This means that support from co-workers was directly related to their ability to deal with job demands.

As a final point, Morgan, Ludlow, Kitching, O'Leary, and Clarke (2010) found that the absence of positive experiences in the teaching environment was more detrimental to occupational commitment than the presence of negative experiences. With a sample of 749 primary teachers in Ireland over a five-year span, a questionnaire was administered asking teachers to measure the frequency of "affective episodes" in the classroom, commitment to the profession, and teacher efficacy. Affective episodes were

defined in this study as (1) evoking a positive or negative feeling, (2) triggered by an interaction involving teachers' work and identity, (3) having a beginning and end, and (4) having the potential to recur routinely (Morgan et al., 2010). Findings indicated that teachers can more easily maintain motivation for the profession when positive experiences are present, rather than having the negative experiences deter them from the profession (Morgan et al., 2010). This highlights the need for positive experiences, in which we may be able to affect change.

Support network. There is evidence to support the concept that social support from individuals outside of the work environment such as a spouse or partner, family, and friends can serve as safeguards against the harmful effects of job-related stress and can generally reduce stress (Tai, 1996). Having the support of individuals around you, whether that be a spouse, friend, or co-worker, may have a buffering effect on teacher stress, burnout, and turnover.

In particular, teaching comes with numerous job demands that can be both time consuming and stressful. Social support in the workplace itself may also help teachers resist burnout. When teachers have opportunities to benefit from the positive and healthy social contacts with others, they may be more able to share in coping strategies, common experiences, and navigate solutions in stressful situations (Howard & Johnson, 2004).

Halbesleben (2006) examined how different sources of social support that are related to the three dimensions of burnout, depersonalization, exhaustion, and personal accomplishment. The researcher found that overall social support did not have a significant effect on these burnout dimensions. However, sources of support at work, such as those from co-workers and administrators, had more of an influence on job

demands and were more closely related to emotional exhaustion (Halbesleben, 2006). Moreover, in a survey of 83 student teachers in Hong Kong, social support was not found to buffer against stress but was found to be a protective factor against psychological distress (Chan, 2002).

Lastly, a survey of 846 ECE teachers in a small, mid-Atlantic state, and found that education and experience predicted the teachers' intent to stay in the field (Holochwost, DeMott, Buell, Yannetta, & Amsden, 2009). Specifically, researchers found that married educators tended to identify intent to remain in the field as did older educators. Findings related to age suggested that intent increased with age until it reached 55 years old, after which the researchers attribute the decline in intent to thoughts of retirement (Holochwost et al., 2009).

Education and professional development. Entering the field of ECE, teachers come from a variety of backgrounds in education, prior work experience, and training in the field. Goelman and Guo (1998) suggested that there may be a strong correlation between these factors and program quality. In addition, education and experience may impact the ways that childcare workers view their role as an educator and professional in the field and may be a protective factor against stress and burnout (Manlove, 1993).

Holochwost et al. (2009) found that ECE teachers with high school diplomas, some college credits, and those with an associate degree in ECE or a related field, had progressively increased intent to stay in the field. However, there were no findings for those educators with a bachelor's degree in ECE, membership to NAEYC, or enrollment in continuing education credits (Holochwost et al., 2009).

A contrasting view of the value of education surmises that higher levels of teacher education may actually contribute to higher levels of burnout (Goelman & Guo, 1998). One possible explanation for this is that those teachers with higher education may experience more stress due to their self-perception as professionals, but their low-status, low paying jobs (Goelman & Guo, 1998). If workers feel overqualified and are not being challenged or compensated appropriately, they may experience higher rates of turnover (Pines & Aronson, 1988).

School/program climate. One protective factor that has been identified is teacher experience. When novice teachers partner with seasoned teachers who are able to share how to thrive in this setting as a mentor, they can gain the confidence that they need to continue on with the profession (Prilleltensky et al., 2016). There is some evidence to suggest that staff members supporting each other through simple friendship, may also be beneficial. For new teachers, additional co-worker support and mentorship including collaborative worktime and relaying suggestions, aides the transition into teaching (Gersten, Keating, Yovanoff, & Harness, 2001). However, colleague support may not always be enough, as administrative support may be even more important (Stockard & Lehman, 2004).

In a study of first-year teachers, using data from both a national data-set as well as a smaller sample of districts in Michigan, Stockard and Lehman (2004) compared teachers' general satisfaction over their first year of teaching with second-year retention data. Stockard and Lehman (2004) found that teachers' perceptions of influence over their working environment as well as the direct support they received from administration correlated significantly to self-reported teacher satisfaction. Other research suggests that

ECE teachers who left the field, reported a hesitation to return to teaching due to the program's culture (Buchanan, 2012). These findings suggest the satisfaction of first-year teachers is influenced by an effective administration as well as mentor relationships, which may provide the support that ECE teachers need to maintain longevity in their profession (Beltman et al., 2011; Stockard & Lehman, 2004).

Moreover, Russell et al. (2010) suggest that inadequate administrative support can be a significant antecedent of turnover in the field. Using the Early Childhood Work Environment Study and the Competing Values Framework, staff perceptions of administrative support were collected in this study. The results of this study linked teachers' perceptions of administrative support, namely their level of skill, dependability, and enforcement of rules and standards to their thoughts of leaving their current job (Russell et al., 2010). In addition, being able to ask for help and support, without being deemed incompetent, was important for the program's culture. When teachers reported that leadership within their child care organization was strong and well-organized, it provided support for teachers (Russell et al., 2010).

Parents as partners. Between parents and teachers, there has been marked change in recent decades. Shifting from a lack of parent participation and a divide between home life and school life, there used to be considerable distance between parents and educators (Troman, 2000). Following that was a period wherein parents were viewed as co-educators and played a valuable role in the process. We have now moved into what Troman (2000) described as a "parentocracy" where parents have greater choice in education and can exert their control over the education process. The parent-teacher relationship, when positive, can be defined as working together to support children's

development and a sense of collaboration and partnership between them (U.S. Department of Health and Human Services [HHS], 2011). Although the parent is the child's first teacher, parents and teachers can be equal partners and foster the child's development, help overcome challenges in behavior, and complement each other's efforts (HHS, 2011). Having consistent two-way communication, which takes place in multiple ways, helps with the exchange of knowledge and strengthens the efforts of both parties (Halgunseth, Peterson, Stark, & Moodie, 2009). A breakdown in communication between parents and teachers can result in a difficult situation or may make an already difficult situation worse.

The attitudes of parents and teachers towards each other, as well as their shared goals and expectations regarding child development, are important indicators of this partnership (Minke, Sheridan, Moorman-Kim, Ryoo, & Koziol, 2014). When parents and teachers establish and maintain a healthy bidirectional relationship, there is often continuity across environments, which is ideal for child development (Sheridan, Holmes, Smith, & Moen, 2016). Additionally, teachers' perceptions of their relationships with parents have been linked to teachers' perceptions of children's academic ability (Hughes, Gleason, & Zhang, 2005). Much research has been devoted to how parent-teacher partnerships benefit both families and their children, but does not address the benefits for teachers, specifically potential reductions in stress and burnout.

Summary

If job-related stress and the resulting burnout and turnover remain the same, there are implications that are far-reaching not only for the profession but also for child development. Keeping in mind the goal of providing high-quality ECE environments,

further research into prevention of job-related stress and how to retain teachers in ECE is necessary. In the present study, my goal was to identify protective factors that may moderate teachers' perceptions of stress and experiences of burnout.

CHAPTER THREE: METHOD

Participants

A web-based survey was administered to 143 teachers from 44 programs across the Reno/Sparks area of Northern Nevada. Characteristics of the study participants are presented in Table 1. Teachers that participated in this study were made up of 140 women, 2 men, and 1 individual that identified as other. The age range of teachers was from 17 to 68, with a mean of 32.77 years ($SD = 13.28$). Of note, 37% of teachers in this study were between 17 and 24 years of age, and 50% were younger than 27 years. In addition, a large portion of this sample identified as Caucasian (74.41%). Teachers reported as 12.6% Latino, 4.9% Bi- and Multi-racial, 4.3% Asian American, 2.1% Black/African American, 2.1% American Indian/Alaskan, and 1.4% Native/Pacific Islander.

Highest education levels of teachers were as follows: less than high school/GED (0.7%), high school/GED (23.1%), some college coursework (30.1%), an associate degree (11.2%), bachelor's degree (25.9%), and master's degree (9.1%). Teachers' majors in their highest degree program were also surveyed. ECE majors (including Human Development and Family Studies) comprised 48.3% of the sample, Psychology (3.5%), Education (5.6%), Special Education (1.4%), not applicable (22.4%), and other (18.9%). Lastly, of major importance to this study was experience in the field. Of the 143 teachers surveyed, 9.8% had been in the field for less than one year, 39.2% between one and five years, 19.6% between six and 10 years, 9.1% for 11-14 years, and 22.4% for over 15 years.

Table 1

Demographic Characteristics of Teachers

Variable	<i>n</i>	%	<i>M</i>	<i>SD</i>	Min	Max
Teacher's age (years)	143		32.77	13.28	17	68
Sex	143					
Female	140	97.9				
Male	2	1.4				
Other	1	.7				
Ethnicity	143					
Caucasian	106	74.41				
African American/Black	3	2.1				
Asian American	2	4.3				
American Indian/Alaskan	3	2.1				
Native/Pacific Islander	2	1.4				
Latino	18	12.6				
Biracial/Multiracial	7	4.9				
Highest Education	143					
Less than high school/GED	1	.7				
High school/GED	33	23.1				
Some College Courses	43	30.1				
Associate's Degree	16	11.2				
Bachelor's Degree	37	25.9				
Master's Degree	13	9.1				
Major	143					
Early Childhood Education	69	48.3				
Psychology	5	3.5				
Education	8	5.6				
Special Education	2	1.4				
Not Applicable	32	22.4				
Other	27	18.9				
Experience in the field (years)	143					
Less than 1	14	9.8				
1-5	56	39.2				
6-10	28	19.6				
11-14	13	9.1				
15+	32	22.4				

Recruitment Procedures

Teachers were recruited by identifying all center-based programs serving children from ages 0-6 in the Reno/Sparks area. An inclusive list of all center-based programs in the area included 94 total programs. In their 2017 annual report, The Nevada Registry reported that there were 553 lead teachers in Washoe County (The Nevada Registry, 2018). Of the 94 programs, teachers from 42 programs participated in this study. During recruitment, only six directors directly refused participation. The remainder of the programs were either unable to be reached or did not complete the collection documents. The researcher called each of the directors to explain the study, and if they consented to the process, an email collection form was distributed to the lead teachers at the center. Lead teachers were able to opt-in to receive the survey via email and in exchange for completing the survey, they received a \$15 electronic gift-card. Once the email collection form was completed, directors scanned and emailed it back to the researcher or they were collected directly from the site. Participation in this survey was voluntary and teachers could opt-out at any time in the process. The web survey was sent to each teacher that put their name on the collection form, and reminder messages were sent weekly to those that had not yet participated via SurveyMonkey, as well as to those that partially responded.

Of the 281 teachers that were sent the survey, 143 teachers completed it. The response rate for this study was 50.8%. There were an additional 47 teachers who only partially responded and were not included in this data analysis. The average time to complete the survey was 53 minutes. IRB approval for this study can be found in Appendix B.

Measures

Demographic Information

Demographic information was collected on each teacher who participated. Information including age, gender, race/ethnicity, and their highest level of education were obtained. Using a scale from 1 (Less than high school/GED) to 9 (Ph.D.), teachers indicated their highest degree program completed. Teacher's majors were also of interest in this study. To run the Pearson product-moment correlation, teacher's majors were coded as 1 for fields related to ECE including Human Development and Family Studies and Early Childhood Education while all others were coded as 0. Additional demographic data focused on the type of child care center that the teachers work at and their years of experience in the field. The structure of the center, program size, teacher-child ratios, and sources of support in the classroom were also addressed.

School/Program Environment

Teachers' perceptions of their program environment were identified with the Teachers' Sense of the School Measure (Battistich, Solomon, Watson, & Schaps, 1997). This was a 13-item scale assessing teachers' perceptions of the types of relationships among staff and administration at their center. Examples of items included "There is a great deal of cooperative effort among staff members," "This school seems like a big family, everyone is so close and cordial," and "The faculty here fall into conflicting cliques." This was measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Two of the items were phrased in a negative direction to avoid response bias. Battistich et al. (1997) found that this scale had high internal consistency ($\alpha = .89$). Correlation between students' Sense of Community construct (narrowed to the

classroom level) and teachers' Sense of Community was .35 (Roberts, Hohm, & Battistich, 2000).

Beliefs about ECE

The Teacher Modernity Scale was adapted from the Parent Modernity Scale (Schaefer & Edgerton, 1985). This construct asked teachers to measure their feelings related to rearing and educating children using a 4-point Likert scale from 1 (disagree) to 4 (strongly agree). The questionnaire was originally comprised of 30 items; only 16 items were used in this study. Examples included, "Preparing for the future is more important for a child than enjoying today," "Since parents lack special training in education, they should not question the teacher's teaching methods," and "The most important thing to teach children is absolute obedience to whoever is in authority." Reliability and validity information was not available for this measure.

Stress

Using the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) teachers reported their feelings in the last month relating to appraising experiences that they may find stressful. The Perceived Stress Scale consisted of 14 items, and teachers indicated how often they felt or thought a certain way in the last month on a 5-point scale from 0 (never) to 4 (very often). Examples included, "In the last month, how often have you felt nervous and stressed?" and "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?" The perceived stress total score was obtained by reverse-scoring seven items (4, 5, 6, 7, 9, 10 and 13), and then summing the scale items. This scale demonstrated good internal reliability ($\alpha =$

.84–.86), as well as adequate concurrent validity ($r = .62$) with the Daily Stress Inventory (Cohen et al., 1983; Machulda, Berquist, Ito, & Chew, 1998).

Burnout

Using the Maslach Burnout Inventory for Educators (Maslach, Jackson, & Schwab, 1986), teachers' burnout scores were collected. This measure consisted of 22 items, and teachers reported how often they experience certain feelings related to their work using a seven-point, fully anchored scale from 0 (never) to 6 (every day). The three subscales include Emotional Exhaustion, Depersonalization, and Personal Accomplishment (Maslach et al., 1986). Emotional exhaustion assessed the degree to which teachers were exhausted by their work including feeling fatigued and tired. Depending on the severity of this exhaustion, teachers may no longer feel able to do their work (Maslach, Jackson, & Leiter, 2016). Depersonalization measured the teachers' response and feelings towards their students. They may have negative attitudes, including coldness, distancing themselves from the students, or withdrawing completely emotionally (Maslach et al., 2016).

For internal consistency, Cronbach's alpha was .90 for Emotional Exhaustion and .76 for Depersonalization (Iwanicki & Schwab, 1981). Maslach, Jackson, and Leiter (2016) assessed concurrent validity by examining the relationship between burnout and student misbehavior, which resulted in the following correlations: Emotional Exhaustion ($r = .36, p < .01$) and Depersonalization ($r = .29, p < .01$). For this paper only Emotional Exhaustion and Depersonalization were used. To obtain the total burnout score, the Emotional Exhaustion and Depersonalization subscales were summed.

Attitudes Toward the Profession

The Early Childhood Teaching Inventory (VandeWiele, 2001) consisted of 19 items designed to measure teachers' attitudes toward their profession. Teachers were asked to indicate the extent to which they agreed with the statements using a 5-point Likert scale from 1 (cannot do this) to 5 (I'm sure I can do this). Sample items included, "Help parents support their children's growth and development," "Maintain a working relationship with a parent even if I disagree with his/her attitudes about child care," and "Get support and ideas from other professionals to help me solve problems I face as a child care teacher." Reliability and validity information were not available for this construct.

Job Control

The Child Care Worker Job Stress Inventory (Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2001) was comprised of three, 17-item instruments. One of these instruments was the Job Control Scale. Only five items from this scale (out of 17) were used for this study. Teachers were asked how much control they have over things at work on a 5-point Likert scale from 1 (very little) to 5 (very much). Example items included, "The number of children you have to care for," Getting parents to work with you on a behavior problem," and "Getting parents to be consistent with you on how to deal with a child." The original scale had a Cronbach's alpha of 0.88. Teachers' job control was positively correlated ($r = .79, .68, \text{ and } .74$) with another measure of job control, the National Institute for Occupational Safety and Health's Job Control Scale (Curbow et al., 2001).

Types of Support

Types of support that teachers have available were collected for this study. Both emotional and instrumental support categories were measured and separated into two scales. Each teacher was asked to check all sources of support that they receive and were then categorized into instrumental and emotional support based on whether the support provided financial or tangible resources, or not. Examples of items include, “Are you currently a member of any of the following (professional development) organizations?” “How supportive is your spouse or partner of your childcare work?” and “Is there a person or group who especially encourages your development as a child care teacher?”

Data Analysis Plan

The data were transferred into the IBM Statistical Package 24 for the Social Sciences (SPSS). Descriptive statistics including frequencies or means, standard deviations, minimums and maximums were run to examine the distribution and normality of the data. Bivariate correlations were used to test associations between ECE teachers’ protective factors and their stress and burnout.

CHAPTER FOUR: RESULTS

Preliminary Analysis

Table 2 shows descriptive statistics for study variables. Statistics of skewness and kurtosis indicated that all study variables were distributed normally.

Table 2

Descriptive Statistics

Variable	<i>M</i>	<i>SD</i>	Min	Max	Skew	Kurtosis
Support						
Total	2.17	1.39	1	6	1.04	0.15
Emotional	4.99	1.90	2	8	0.01	-1.03
Instrumental	5.26	1.78	2	8	-0.19	-0.78
Spousal	3.78	2.05	1	6	-0.35	-1.53
School climate	3.72	0.88	1.4	5	-.293	-0.83
Parents as partners						
Working relationship	4.66	0.59	2	5	-1.80	3.14
Collaboration	3.13	1.08	1	5	-0.17	-0.31
Agreement	3.01	1.08	1	5	0.02	-0.54
Superiority	2.48	1.16	1	5	0.36	-1.03
Perceived stress total	24.9	6.97	10	54	0.96	1.98
Burnout						
Total	2.55	0.78	0.93	4.36	0.10	-0.66
Exhaustion	2.47	1.36	0.00	6.0	0.09	-0.67
Depersonalization	0.74	0.83	0.00	3.4	1.28	1.08

Note. $N = 143$

Table 3 shows frequencies of teachers' sources of support. Over half of the teachers surveyed felt supported by a current or former co-worker. More than half also identified support from a current or former supervisor. About a third of the teachers noted support from another family member. Of note, only six teachers reported support from a local child care agency.

Table 3

Frequencies of Teacher Identified Sources of Support

Source	<i>n</i>	%
Co-worker or former co-worker	83	58
Supervisor/former supervisor	76	53.1
Another Family Member	47	32.9
Spouse/Partner	42	29.4
Friend	38	26.6
A teacher support network	18	12.6
A local child care agency	6	4.2

Note. *N* = 143

Hypothesis 1: Support

The first hypothesis of the current study is that ECE teachers who receive more support are less likely to report high levels of job-related stress and burnout. To examine the relationship between support and ECE teachers' stress and burnout, correlations were examined. As seen in Table 4, there was only one statistically significant correlation between support from ECE teachers' spouse and the total scores of their perceived stress. This moderately negative correlation suggests that ECE teachers felt less stressed when they had a supportive spouse or partner. The remaining types of support showed no statistically significant association with ECE teachers' stress and burnout.

Table 4

Intercorrelations Between Sources of Support and Levels of Job-Related Stress

Variable	Support			
	Total	Emotional	Instrumental	Spousal
Perceived Stress Total	.159	.054	.110	-.176*
Burnout				
Total	.054	-.019	-.004	-.101
Exhaustion	.081	.015	.021	-.074
Depersonalization	.122	.025	-.001	-.080

* $p < .05$

Hypothesis 2: Education

The second hypothesis presented in the current study is that ECE teachers who have more education are less likely to report high levels of job-related stress and burnout. Table 5 shows bivariate correlations between ECE teachers' education and their perceived job-related stress and burnout. There was a statistically significant, moderately negative relationship between ECE teachers' highest level of education and their perceived job-related stress, indicating that the higher their education, the lower their perceived stress. The same is true for total scores of perceived job-related burnout, wherein their education level was negatively related to their total scores of burnout, which combined scores of both exhaustion and depersonalization.

Notably, there was no statistically significant relationship between ECE teachers' exhaustion and their highest level of education. In addition, there were no significant associations between ECE teachers' majors with stress and burnout.

Table 5

Intercorrelations Between Education and Levels of Job-Related Stress

Variable	Highest Edu	Major
Perceived Stress Total	-.270**	.037
Burnout		
Total	-.171*	-.004
Exhaustion	-.134	.032
Depersonalization	-.187*	-.063

Note. Teachers' majors were coded as 1 for fields related to ECE including Human Development and Family Studies and Early Childhood Education while all others were coded as 0.

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

Hypothesis 3: School /Program Climate

The third hypothesis of the current study is that ECE teachers who perceive more positive school/program climates are less likely to report high levels of job-related stress and burnout. The results shown in Table 6, indicate that there were statistically significant negative relationships between ECE teachers' sense of the school/program with perceived stress and total scores of burnout as well as scores of exhaustion and depersonalization. These negative, moderate relationships indicate that ECE teachers who have a more cohesive, positive school environment were likely to be less stressed in their job and fewer experienced burnout.

Table 6

Intercorrelations Between the School/Program Climate and Levels of Job-Related Stress

Variable	School Climate ^a
Perceived Stress Total	-.321**
Burnout	
Total	-.341**
Exhaustion	-.378**
Depersonalization	-.278**

Note. ^a The Sense of the School Measure (Battistich, Solomon, Watson, & Schaps, 1997) was used.

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

Hypothesis 4: Partnership with Parents

The final hypothesis of the current study states that ECE teachers who view themselves in partnerships with parents are less likely to report high levels of job-related stress and burnout. Correlations between ECE teachers' perceived parent-teacher relationships and job-related stress were outlined in Table 7. The moderate relationships between each item with stress and burnout, were statistically significant. When ECE teachers rated themselves highly as having good working relationships with parents, they perceived less stress and depersonalization. If ECE teachers perceived their ability to work well with parents to deal with children's challenging behaviors, they rated lower on perceived stress and burnout, exhaustion, and depersonalization. The same was true for when ECE teachers perceived that they reached a level of agreement with children's parents about dealing with their children, apart from significance in the depersonalization subscale. One item on the Teacher Modernity Scale (Schaefer & Edgerton, 1985) addressed the degree with which ECE teachers agreed that since parents lack special training in education, they should not question teachers' teaching methods. Teachers

who strongly agreed with this statement rated higher on job-related stress. An additional correlation matrix can be found in Appendix A, which shows the relationships between all variables used in this study.

Table 7

Intercorrelations Between Parent-Teacher Relationship and Levels of Job-Related Stress

Variable	Working relationship ^a	Collaboration on behavior ^b	Level of agreement ^c	Superiority of teaching methods ^d
Perceived Stress Total	-.299**	-.240**	-.263**	.305**
Burnout Total	-.102	-.333**	-.331**	.096
Exhaustion	-.093	-.317**	-.351**	.137
Depersonalization	-.243**	-.280**	-.286**	.148

Note. ^aItem about maintaining a working relationship with a parent even if I disagree with his/her attitudes about child care from Early Childhood Teaching Inventory (VandeWeile, 2001). ^bItem about degree with which the teacher feels they can get parents to work with them on a behavior problem from Child Care Worker Job Stress Inventory (Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2001). ^cItem about degree to which they can get parents to be consistent with them on how to deal with their child from Child Care Worker Job Stress Inventory (Curbow et al., , 2001). ^dItem about since parents lack special training in education, they should not question teachers' teaching methods from Teacher Modernity Scale (Schaefer & Edgerton, 1985).

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

CHAPTER FIVE: DISCUSSION

The present study examined ECE teacher's experiences of job-related stress and burnout in relation to protective factors. The purpose of the current study was to identify which protective factors, if any, protected ECE teachers against their experiences of job-related stress and burnout. I hypothesized that four specific protective factors would be negatively correlated with ECE teachers' stress and burnout including 1) the types of support that ECE teachers receive, 2) their level of education, 3) the school climate, and 4) their relationship with parents. Overall, I found mixed evidence for my hypotheses and many areas which could benefit from further research.

Support

This study examined the total number of supports related to ECE teachers' job, but only found strong associations between support from a spouse and perceived stress. The results of this study provide further supporting evidence for Holochwost et al.'s (2009) findings that married educators intended to stay in the field longer than those that were not married, building on claims that having a supportive spouse may buffer against some of the negative effects of perceived job-related stress and allow ECE teachers to remain in the field longer. However, these results were vastly different from those of Al-Adwan and Al-Khayat (2017) who found that ECE teachers' burnout levels were higher among married women than single women. The researchers suggested this was due to the added demands of running the home and tending to social commitments that stem from marriage (Al-Adwan & Al-Khayat, 2017).

The current study did not find any associations between support, stress, and burnout, which is consistent with findings of previous studies (Chan, 2002; Halbesleben; 2006). Halbesleben (2006) speculated that work-related supports may be more closely related to exhaustion and non-work-related support to depersonalization. Halbesleben suggests that because work-related supports have a more direct influence on the job itself, they can impact the level of exhaustion with job-related demands. Work-related and non-work-related supports were not explored fully thorough this research design beyond the school climate construct.

Noting the frequencies of reported support from all ECE teachers in this study, it was especially interesting that only six individuals identified support from a local child care agency. Professional support in this area could be beneficial to ECE teachers as it may strengthen ties to the community and to the field. Connecting ECE teachers to these agencies may be an area in where improvement is needed, as well as ensuring that the organizations provide meaningful support in areas of deficit.

Education

Extant research examining education suggests that education plays a role in how ECE teachers perceive their work and identify as professionals in the field, which may shield against stress and burnout (Manlove, 1993). The current study found that as teachers' level of education increased, their perceived job-related stress, burnout, and depersonalization decreased. With added education, ECE teachers may learn coping strategies, be better able to implement developmentally appropriate practices, be better able to deal with challenging behaviors, and to manage the job demands associated with

the profession – skills that may have been gleaned from higher education (National Association for the Education of Young Children [NAEYC], 2012). Goelman and Guo (1998) conversely surmised that ECE teachers' higher education may lead to more stress due to the lack of respect for the profession and their extensive training and education in the field, which was not consistent with the findings of this study. Of note, teachers' majors were not significantly associated with perceived stress and burnout, indicating that it is the level of education, rather than the specific area of focus, which is important. This is consistent with the findings of Holochwost et al. (2009) who found no association between a bachelor's degree in ECE and occupational commitment in the field.

Borko (2004) suggested that it is more effective to have ECE teachers' continuing education take place within the school environment. Ackerman (2008) added that when administrators focus on specific challenges that are preventative in nature and address them through trainings in small groups, ECE teachers are better able to cope with job-demands. Ackerman suggested that “debriefs” wherein teachers share their struggles, strategies, and work together on shared goals, are beneficial to improving the school climate as well.

Grodsky and Gamoran (2003) found that personal relationships formed with co-workers can increase work commitment and efficacy. Furthermore, Ciyer, Nagasaswa, Swadener, and Petat (2010) investigated education and professional development in relation to school cohesion and a term they coined “collective efficacy”. After implementing professional development trainings for ECE teachers, ECE teachers reported improved interaction and communication with other staff members at the center.

Furthermore, in rural programs, these professional development opportunities allowed for a network of professional support that contributed to individuals' beliefs that they could attain higher education (Ciyer et al., 2010). This association stresses the importance of the question of how education can impact the school/program climate and how director's levels of education and majors, influence the school/program climate, an area which could use further exploration.

School/Program Climate

The mentor relationship has been highlighted by Prilleltensky et al. (2016) as an important factor in predicting ECE teacher's stress and burnout. Relationships at work appear incredibly salient in relation to ECE teachers' perceived experiences of stress and burnout. These relationships include support through friendship and mentorship, which impact the school/program climate in a positive way by fostering a sense of cohesion and collaboration. It is no surprise that working conditions and the environment play a role in ECE teachers' stress and burnout. The school/program climate itself ideally involves cooperation between staff, shared values and beliefs, and a collectivistic mentality, which combined, would be symbiotic for work and stress reduction.

Evidence that school cohesion is valuable to minimizing ECE teachers' stress and burnout is present in this study. The negative relationship between school/program climate and ECE teachers' stress and burnout suggest that improving the school/program climate could be beneficial to reducing teacher stress. Stockard and Lehman (2004) suggested that it was ECE teachers' ability to influence their working environment and effect change that was directly associated with their job satisfaction. Back, Polk, Keys,

and McMahon (2016) suggested that improving staff relations would in turn improve school climate. The researchers also found that school/program climate was positively correlated with children's academic achievement, making its importance even greater.

Parents as Partners

Based on the findings from this study, the relationship between parents and ECE teachers appears to be a significant contributing factor in ECE teachers' perceived stress and burnout. Several studies have examined the association between strong parent-teacher relationships and children's development (Lang, Tolbert, Schoppe-Sullivan, & Bonomi, 2014; Rouse & Obrien, 2017; Xu & Gulosino, 2006). Yet, there is a gap in the literature about the associations of parent-teacher relationships on teacher stress and burnout, which is addressed in the current study. The results demonstrate a significant relationship between ECE teachers' views of the parent-teacher relationship with stress and burnout. The view that parents have less knowledge and should blindly accept the teacher's methods suggests that those individuals do not view their relationship with parents as a partnership.

When ECE teachers feel at odds with parents, they may be less likely to effectively deal with challenging behaviors. One study found teachers' perceptions of parents' attitudes predicted their perceptions of children's behavior in kindergarten (Rimm-Kaufman, Pianta, Cox, & Bradley, 2003). This may directly influence how ECE teachers are able to work with children in the classroom and the quality of their interactions with children. Shared perceptions and collaborative partnerships with parents may play an important role in protecting against ECE teachers'

stress and burnout, which ties back to the Bioecological Model and how the mesosystem indirectly influences the individual. With the goal of keeping teachers in the ECE field longer with reduced experiences of stress, improving these partnerships could be one small step with meaningful results.

Implications and Future Directions

These findings are important for a number of reasons that stem from ECE teachers' experiences of stress and burnout. When ECE teachers are fatigued and no longer able to do their work, there are implications that are far reaching for ECE teacher's mental health as well as children's school readiness. Identifying factors that influence ECE teacher's stress and burnout may be valuable for prevention and intervention efforts to reduce ECE teacher turnover and increase occupational commitment in the field.

Although ECE teachers' educational majors were not significantly associated with their stress and burnout, their highest level of education was negatively correlated with stress, which suggests that their education serves as a protective factor against stress. This may have to do with quality of life and the availability of resources that those with higher education have, compared to those without degrees. These findings may have implications for the minimum qualifications for ECE teachers and poses the question if there should be additional requirements for initial licensing in Nevada. In addition to teachers' education requirements, further research into center directors' education and the school climate is an area that I would like to explore further.

The school/program climate also appears to play an important role in ECE teachers' stress and burnout. The quality of the school environment, relationships

between staff members, administrative support, and shared values, all comprise the school/program climate. Further research targeting the school climate as well as prevention and intervention techniques may be beneficial. With the goal of improving school/program climate in mind, programs could implement team building opportunities that center on site development, group cohesion, and sharing ideas with each other. Having the opportunity to communicate about behavior management, curriculum development, and their classrooms could foster a sense of belonging. Another tool could be executing a teacher-mentor model of onboarding in which new ECE teachers partner with veteran teachers to train and support new teachers during the transition. With the goal of improving morale and strengthening relationships, school climate could play a valuable role in minimizing ECE teachers' stress and burnout. As previously stated, director qualifications and education may also impact the school climate in a meaningful way, suggesting the need for further research in this area.

One of the areas that often seems overlooked when discussing the issue of ECE teachers' perceived stress and burnout is the parent-teacher relationship. Congruence between teachers and parents may be an area to explore in depth as it has yet to be fully researched. This study provides evidence that there is a correlation between viewing the parent-teacher relationship as a partnership and stress/burnout. Strategies that would strengthen relationships between parents and teachers could have a moderating influence on ECE teachers' stress and burnout. This may be achieved through a variety of methods including increased frequency and duration of parent-teacher meetings, informal events where parents and teachers can socialize and get to know each other, inviting parents into

the classroom more frequently, and communicating consistently to ensure they form and maintain a relationship. Results of the current study point to the need for parents and ECE teachers to have bidirectional communication centered around shared goals and developing a relationship with one another.

A mixed-method design wherein both quantitative survey data and qualitative observational data are collected would give researchers a more comprehensive view of the problem.

Limitations

There are several limitations that may have influenced the results of this study. First is the diversity of the sample. Of the 143 teachers, 140 of these individuals were women, and 106 teachers were Caucasian, meaning the sample was largely homogenous, is not representative of the larger population of early childhood teachers in Northern Nevada, and may not be generalizable. As of the 2017 annual report from the Nevada Registry, the organization described the landscape of ECE teachers in Nevada, noting that 47.1% identified as Caucasian, 18.69% Hispanic/Latino, 10.58% African American/Black, 5.9% Asian, 1.2% Pacific Islander, 1.02% American Indian, .77% other, and 10.75% unspecified. Additionally, the overall ECE field in Nevada is 91% female and 3% male. These limitations may have biased the data towards the experiences of Caucasian women. Future studies with a more diverse sample population may reveal differences in relationships between variables.

In addition, the availability of this study in English further reduced the sample to English-speaking teachers. Future studies examining ECE teacher stress and burnout

should focus on a diverse sample population that is more representative of the larger population of Reno and Sparks. Additionally, the teacher recruitment method may be a limitation of this study. I recruited teachers from their place of work through their center director or owner, which may have affected how teachers responded or their likelihood to participate in the first place. Although teachers were assured that their information would remain confidential from their employer, if individuals feared that their data was going to be shared, this could have greatly impacted their responses. Moreover, the recruitment procedure of requiring director approval to recruit teachers from the programs is an additional limitation of this study. Programs in which the directors agreed to participate may be inherently different from programs with directors who refused participation in terms of how their employees experience and perceive stress.

Next, the measure of support used in this study captured only types of ECE teachers' support. This could explain the lack of significant findings in this area. A rating scale that could capture the degree of each support type would be beneficial to address this limitation. Furthermore, this study focused solely on the experiences of lead teachers in center-based classrooms, not considering assistant teachers or family care providers. Had the survey also included assistant teachers and family care providers, the results may have been different, and could have painted a broader picture of teacher's experiences. Another limitation stems from the self-reporting bias. Since this study's methodology relied heavily on teachers' responses to the survey questions, the data is limited to their interpretation as well as honesty while taking the survey. A final limitation may be social desirability bias, wherein the teachers may give answers that are

more socially accepted or positive in order to avoid unfavorable responses, which may have obscured some of the relationships between the variables being examined (Johnson & Christensen, 2014).

Conclusion

The purpose of this research was to identify protective factors relating to ECE teachers' stress and burnout. The current study identified associations between stress and burnout with protective factors: teacher's highest level of education, the school climate, and parent partnerships. It is clear that job-related stress is an issue that is widespread and pervasive in the field (Moriarty et al., 2001; Buchanan, 2012; Bernard, 2016). This study highlights the importance of continued research in this area to improve occupational commitment and reduce turnover, which are often a result of stress and burnout.

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Appendix A

Intercorrelations Between Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Support														
1. Total														
2. Emotional	.112													
3. Instrumental	.076	.709**												
4. Spousal	.109	.189*	.033											
Education														
5. Highest Level	-.067	.180*	.092	-.020										
6. Major	.020	.137	.167*	.004	-.053									
School Climate														
7. School Climate	-.036	.110	.140	.075	.138	-.048								
Parents as Partners														
8. working relationship ^a	.018	-.077	-.077	.056	.106	.028	.053							
9. collaboration ^b	.032	.048	-.065	.169*	.121	.060	.439**	.092						
10. agreement ^c	.042	-.048	-.063	.144	.111	-.040	.417**	.213*	.741**					
11. superiority ^d	.094	-.059	-.092	.050	-.154	.040	-.095	-.214*	.033	-.071				
Stress														
12. Total	.159	.054	.110	-.176*	-.270**	.037	-.321**	-.299**	-.240**	-.263**	.305**			
Burnout														
13. Total	.054	-.019	-.004	-.101	-.171*	-.004	-.341**	-.102	-.333**	-.331**	.096	.486**		
14. Exhaustion	.081	.015	.021	-.127	-.134	.032	-.378**	-.093	-.317**	-.351**	.137	.474**	.951**	
15. Depersonalization	.122	.025	-.031	-.001	-.187*	-.063	-.278**	-.243**	-.280**	-.289**	.148	.293**	.661**	.396**

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

Appendix B



University of Nevada, Reno

Research Integrity Office
 218 Ross Hall / 331,
 Reno, Nevada 89557
 775.327.2368 / 775.327.2369 fax
www.unr.edu/research-integrity

DATE: March 2, 2017
 TO: Hyun-Joo Jeon, Ph.D.
 FROM: University of Nevada, Reno Institutional Review Board (IRB)

PROJECT TITLE: [1029523-2] Exploring Early Care and Education (ECE) Teachers' Psychological Stress and Burnout (PSB), Well-being, and Retention

REFERENCE #: Social Behavioral

SUBMISSION TYPE: New Project/Response/Follow-Up

ACTION: APPROVED

APPROVAL DATE: March 2, 2017

EXPIRATION DATE: March 2, 2018

REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review #7

The above-referenced protocol was reviewed and approved by the UNR IRB in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46 and 21 CFR 50 and 56). This approval is based on assessment that the research met all applicable regulatory criteria. The research must be conducted in accordance with this approved submission. This submission has received Expedited Review based on applicable federal regulations.

Please prepare your continuing review form at least 4 weeks prior to your expiration date using IRBNet. <https://www.irbnet.org>. Our office will send you a courtesy reminder to that effect. Unless renewed, the IRB only has authority under the federal regulations to allow a study to be open 12 months or less. There is no grace period. The study will be closed on the above stated expiration date unless the IRB receives and approves a continuing review report.

Instructions on preparing a modification or submitting your renewal is located on our web site at <http://www.unr.edu/research-integrity/human-research/irbnet>. Call our office if you have any questions or problems with use of IRBNet software.

Approved Documents

- Application Form - 1_Part II Application SOC-ED 033116-Jeon-2017-02-27.docx (UPDATED: 02/28/2017)
- Budget - 02 Budget Justification-2017-02-17.pdf (UPDATED: 02/28/2017)
- Letter - Letter response Jeon-2017-02-27.pdf (UPDATED: 02/28/2017)
- Other - Reno_Sparks Childcare sites.pdf (UPDATED: 02/28/2017)
- Study Plan - Study Plan-Jeon-2017-02-17.pdf (UPDATED: 02/28/2017)
- Consent Form - Consent Information Script or Sheet 073015-Jeon-2017-02-13.docx (UPDATED: 02/15/2017)
- Consent Form - Consent FormTemplate SOC 021716-Jeon-2017-02-15.doc (UPDATED: 02/15/2017)
- Questionnaire/Survey - PSB Teacher Survey-2017-02-14.docx (UPDATED: 02/15/2017)

- Study Plan - Study plan-2017.docx (UPDATED: 02/15/2017)
- Training/Certification - CITI training Victor Richard-2015-12-25.pdf (UPDATED: 02/15/2017)
- Training/Certification - 01 Jeon CITI training 2013-09-27.pdf (UPDATED: 02/15/2017)
- Training/Certification - citiCompletionReport-Sara Johnson.pdf (UPDATED: 02/15/2017)
- University of Nevada, Reno - Part I, Cover Sheet - University of Nevada, Reno - Part I, Cover Sheet (UPDATED: 02/15/2017)

If you have any questions, please contact Nancy Moody at 775.327.2367 or at nmoody@unr.edu.

NOTE for VA Researchers: You are not approved to begin this research until you receive an approval letter from the VASNHCS Associate Chief of Staff for Research stating that your research has been approved by the Research and Development Committee.

Sincerely,



Richard Bjur, PhD
Co-Chair, UNR IRB
University of Nevada Reno



Janet Usinger, PhD
Co-Chair, UNR IRB
University of Nevada Reno

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Nevada, Reno IRB's record.