

FACTORS LEADING TO RETENTION AND ATTRITION OF SPECIAL EDUCATION
TEACHERS

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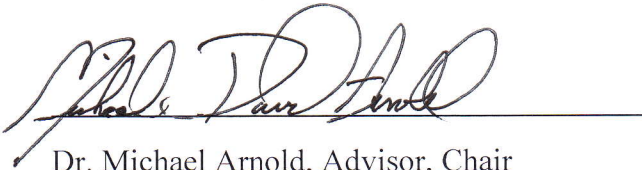
Jarad Rinne

2021

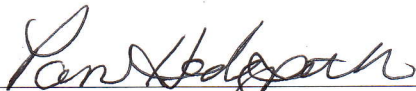
The undersigned, approved by the Department Chair of Graduate Studies in education, have examined a dissertation entitled:

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TEACHERS

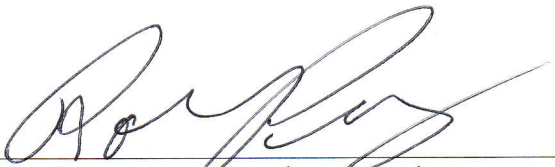
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FACTORS LEADING TO RETENTION AND ATTRITION OF SPECIAL
EDUCATION TEACHERS

A Dissertation
Presented to
The Faculty of the Graduate Education Department
Southwest Baptist University

In Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education

By

Jarad Rinne

Dr. Michael Arnold, Dissertation Advisor

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ABSTRACT

This study assesses the relationship between job satisfaction and attrition of special education teachers. The study uses The Job Satisfaction Survey by Spector (1985) to determine the level of satisfaction of special education teachers. In this quantitative study, the independent variables were the nine facets measured by the survey: pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication. The variables were related to the intent of the special education teacher to renew the contract for the following school year. Descriptive data was disseminated further through demographic questions. The problem of special education teacher attrition has been studied but continues to be a problem for school districts. The aim of this research was to determine if a relationship existed between job satisfaction and the intent of a special education teacher to either renew or not renew his or her contract. Additionally, the researcher used one open-ended question to gather more insight into the impact of Covid-19 on the teacher's job satisfaction level. The study was unable to determine the existence of a relationship between job satisfaction and special education teacher attrition. Findings indicated a connection between job satisfaction and teacher feelings about professional development. Results and implications for educators are included for the study as well as recommendations for further research.

CHAPTER ONE

INTRODUCTION

Administrators across America are seeking to fill teaching positions with highly qualified individuals who will educate children with care and concern, build and foster relationships, and meet the academic needs of the school. The task of filling teaching positions is becoming increasingly more difficult as shortages of teachers are identified throughout the United States (Billingsley, 2004; Billingsley & Bettini, 2019; Donne & Lin, 2013; Kaff, 2004; Mehrenberg, 2013; Menlove et al., 2004; Mitchell & Arnold, 2004; Plash & Piotrowski, 2006; Tyler & Brunner, 2014; Whitaker, 2003; Williams & Dikes, 2015). General teacher attrition rates in the United States are unacceptably high. Teacher attrition is the term used for educators choosing to leave the teaching profession (Chapman, 1982). National attrition rates have been reported as high as 30% within the teacher's first five years, with some states reporting much higher rates (Boe et al., 1997; Darling-Hammond, 2003; Tyler & Brunner, 2014). Teacher shortages have been identified and numbers studied more extensively in the areas of math, science, world languages, and special education (Tyler & Brunner, 2014). The studies have found concerns about general teacher attrition and the attrition rate of special education teachers has increased more rapidly than any other educational position (Boe, 2006; Ingersoll & May, 2012; Tyler & Brunner, 2014). Teachers of special education students are leaving the classroom at alarming rates (Billingsley, 2004; Billingsley & Bettini, 2019; Donne & Lin, 2013; Edgar & Pair, 2005; Fore et al., 2002; Kaff, 2004; Mehrenberg, 2013; Plash & Piotrowski, 2006; Whitaker, 2003). In addition, the number of students needing special education services in public schools is rising as well (Billingsley & McLeskey, 2004;

Tyler & Brunner, 2014). In the ten-year span from 1993 to 2003, the special educator shortage grew from 7.4% to 13.4 % (Boe, 2006) while the number of students served under IDEA grew from 5.08 million students to 6.5 million students nationally, which is an increase of 27.9% (Cook & Boe, 2007; DeMik, 2008; Tyler & Brunner, 2014).

DeMik (2008) found during the same time the population of teachers with special education certification increased only 8%, thus implying the numerical spread of the student-to-teacher ratio was larger. Special education is an area identified as having a critical shortage by the United States Department of Education since 1990 (Williams & Dikes, 2015). A 2008 report from the American Association for Employment in Education identified nine of 13 educational fields considered in critical shortage were in the area of special education (as cited in Provost, 2009).

The first landmark court case to impact special education in the United States was *Brown versus the Board of Education* (1954). In *Brown versus the Board of Education* (1954), the U.S. Supreme Court determined segregation on the basis of race deprives the child of educational opportunities on an equal basis. The court decision began a series of court cases from parents of students with disabilities (Esteves & Rao, 2008). As a result of court decisions and the passing of the Elementary and Secondary Education Act (ESEA) of 1965, schools began providing special education services to students in public schools (Esteves & Rao, 2008; Wright, 2010). The ESEA provided necessary resources for disadvantaged students to have a quality education (Esteves & Rao, 2008). In 1966, the ESEA was amended to provide financing through a grant program to schools to aid in creating or expanding special education programs (Esteves & Rao, 2008). Legislators continued to address the need for equal education of students with disabilities by passing

Section 504 of the Rehabilitation Act in 1973 which prohibits the discrimination of persons with disabilities from any program receiving federal funding (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979).

In 1975, up to half of the nation's children with disabilities were not receiving an appropriate education or any education at all (Pulliam & Van Patten, 2006). In response to such numbers, legislators passed the Education for All Handicapped Children Act which was later changed to the Individuals with Disabilities Act (IDEA) which is in place today (Esteves & Rao, 2008). For teachers of students with disabilities, IDEA gave specific guidelines on what educators were expected to do to provide students with an appropriate education (Esteves & Rao, 2008; Mandlawitz, 2016). As a result of the IDEA, teachers became responsible for developing and maintaining an Individualized Education Plan (IEP) for each student outlining goals and accommodations for the student (Gamson, D. A. et al., 2015; Simms-Robinson, 2019).

The responsibilities of a special education teacher became increasingly more complex due to the passage of the Individual with Disabilities Education Act (IDEA) of 1973 (Esteves & Rao, 2008). Since 1973, the Individual with Disabilities Education Act (IDEA) has been modified multiple times, with the most recent change occurring with the 2004 reauthorization (Esteves & Rao, 2008; Mandlawitz, 2016; Yell, 2019). The amendments made to the IDEA in 2004 have led to increased paperwork for special education teachers as more procedures were established to help identify students with specific learning disabilities as well as the requirement of more documentation as a part of the IEP process (Bettini et al., 2017; Mandlawitz, 2016). The 2004 amendments to the IDEA required special education educators to be certified not only in special education but

with a content area as well (Yell et al., 2006). Special educators are required to be dually certified while general educators are only expected to have one certification (Yell et al., 2006). The expectations provided in IDEA impacted workload of teachers of special education students through an increase in time and intensity needed to complete the new expectations (Yell, 2019; Yell et al., 2006). Teachers are expected to differentiate learning for each individual student as well as create, modify, and present paperwork for all students on their caseload (Williams & Dikes, 2015; Yell et al., 2006). Keeping up with Individualized Education Plan (IEP) paperwork, conducting student evaluations, and hosting IEP meetings with parents is a burden of time on teachers (Mehrenberg, 2013). Suter and Giangreco (2009) found an average special education teacher spends five hours a week on special education paperwork which is more time than is spent grading papers, communicating with parents, attending IEP meetings, and collaborating with colleagues combined (Carlson et al., 2003; Mehrenberg, 2013). The increased workload has been identified as a contributing factor for the high numbers of teacher attrition in special education (Fish & Stephens, 2010; Ingersoll & May, 2012; Leko & Smith, 2010; McLeskey & Billingsley, 2008; Nance & Calabrese, 2009; Tyler & Brunner, 2014; Vannest et al., 2010). The national average rate of teacher attrition in special education was reported by Tyler and Brunner (2014) as approximately 50% within the first five years of teaching. Billingsley (2004) found nearly 40% of special education teachers left the profession within the first three years. Additionally, 98% of school districts reported teacher shortages in special education and several districts also reported hiring teachers not fully qualified to fill the open positions (Billingsley, 2004; Henley et al., 2010;

Kaufman & Ring, 2011; Presidential Commission on Excellence in Special Education, 2002; Tyler & Brunner, 2014).

The causes for high teacher attrition in special education has been researched extensively finding common characteristics as to why these trends are occurring (Williams & Dikes, 2015). Research has shown teacher attrition is the result of different factors like school climate, lack of administrative support, workplace conditions and paperwork to name a few (Williams & Dikes, 2015). Special education teachers are leaving the teaching profession due to teacher burnout (Billingsley, 2004; Goetzinger, 2006; Kaufman & Ring, 2011; Langher et al., 2017; McDowell, 2017; Plash & Piotrowski, 2006; Shen et al., 2015; Williams & Dikes, 2015). Teacher burnout is characterized as feelings of emotional exhaustion, depersonalization, and lack of personal accomplishment as a result of continued exposure to high stress (Maslach, 2003). A lack of administrative and collegial support contribute to other reasons special education teacher leave the teaching profession (Billingsley, 2004; Langher et al., 2017; Nance & Calabrese, 2009; Skaalvik and Skaalvik, 2010; Vittek, 2015). Additionally, time-consuming clerical expectations as a result of more IEP paperwork and teachers teaching multiple subjects has caused special education teachers to walk away from the classroom (Goetzinger, 2006; McDowell, 2017; Menlove et al., 2004; Nance & Calabrese, 2009; Plash & Piotrowski, 2006; Vittek, 2015; Williams & Dikes, 2015).

Administrators are seeking ways to keep highly qualified teachers in the classroom to help students learn. The causes for teacher attrition have been discussed, but the research identifying what may cause SPED teachers to stay in their positions is lacking. The researcher is reviewing findings where districts or government entities have

attempted to increase retention numbers of SPED teachers through financial incentives, mentoring/induction programs, and joint decision-making models. Chapter one contains the problem statement, purpose of the study, research questions, null hypotheses, limitations, delimitations, assumptions, design controls, definition of key terms, and theoretical frameworks.

Theoretical Framework

The theoretical framework of this study is based on the work of Maslow (1954), Herzberg et al. (1959), and Maslach (2001) focusing on job satisfaction. Maslow (1954) found job satisfaction was achieved when the needs of the individual are met by the job and the environment. Maslow's Theory of Motivation (1954) is organized as a hierarchy of needs and the needs ascend in the following order: physiological needs, social-emotional needs, safety, love and belongingness, esteem, and intellectual. According to Maslow (1954), all prior needs must be satisfied before intellectual needs can be met. As each need is met, the need on the next level then becomes the priority. In alignment with Maslow's (1954) work, for teachers to feel satisfied with their job, the most basic needs of the teacher must be met by the organization. Only when an individual's most basic needs are met can an individual achieve full satisfaction (Maslow, 1954). When the lower needs go unmet by an organization, teachers seek other organizations or other job opportunities to satisfy the needs (Cannon, 2013; Wilsford, 2018).

Herzberg's Motivator-Hygiene or Two-Factor Theory of Job Satisfaction separated the needs of individuals into two sets, motivator and hygiene factors. Hygiene factors are related to maintenance needs of an individual and are the lower needs, such as the physiological and safety needs identified by Maslow (1954). The motivator factors

are more related to the relationship between the individual and his or her job (Pinder, 1984). Motivator factors are comparable to the higher order needs of esteem and self-actualization from Maslow's Hierarchy of Needs (1954).

Herzberg's (1959) findings challenged the theory that job satisfaction and job dissatisfaction were complete opposites (Foor & Cano, 2011). Employers meeting the hygiene factors for an individual were able to prevent job dissatisfaction, but meeting the hygiene factors had little relationship or effect on job satisfaction (Foor & Cano, 2011; Pinder, 1984). Meeting an individual's extrinsic needs such as higher pay or school provided insurance, can effectively prevent job dissatisfaction but does little to nothing in improving the satisfaction and growth of the individual (Fong, 2015).

In contrast, motivator factors can affect job satisfaction but do not impact job dissatisfaction (Ford, 1992). These motivator factors promote feelings of personal development and growth (Pinder, 1984). Herzberg et al. (1959) concluded that hygiene factors are predictors of job dissatisfaction and motivator factors affect job satisfaction (Foor & Cano, 2011; Ford, 1992).

Christina Maslach (2001) designed a three-dimensional model to describe the job-related burnout individuals feel. Maslach (2001) found burnout was a product of job stress which led to individuals experiencing emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is the feeling of being overextended emotionally with little left to give to the workplace. Individuals who give a large amount of time to their job on a regular basis eventually feel a level of emotional exhaustion (Maslach, 2001). Maslach (2001) found emotional exhaustion as the most commonly reported mode of burnout experienced with educators. Depersonalization is

the second dimension as defined by Maslach (2001) is and can be defined as cynicism. Depersonalization is the development of negative attitudes toward the people receiving care or service from the individuals. As a result, the individual chooses to emotionally remove themselves from the job, thus, making the relationship with the job more impersonal (Maslach, 2001). Both emotional exhaustion and depersonalization generally emerge from prolonged stress caused by an overabundance of work and social conflict (Maslach, 2003). The two dimensions are found to be closely related in the research done by Maslach (2003) as depersonalization is consistently found as a product of emotional exhaustion. The third component of Maslach's (2001) model is a lack of personal accomplishment and represents a feeling of incompetence and inability to successfully achieve the desired result by the individual under stress. Maslach (2001) proposed a lack of personal accomplishment could be the result of a lack of efficacy and resources.

Problem Statement

High attrition rates in special education teachers are well documented since 1987 (Goetzinger, 2006; Horrison-Collier, 2013; McDowell, 2017; Menlove et al., 2004; Nance & Calabrese, 2009; Plash & Piotrowski, 2006; Vittek, 2015; Williams & Dikes, 2015). Teaching positions in special education have been difficult to fill with highly qualified applicants, even as the number of students identified with disabilities continue to increase (Tyler & Brunner, 2014). Special education is an area identified as having a critical shortage by the United States Department of Education since 1990 (Williams & Dikes, 2015). The MetLife Survey of the American Teacher, a national survey published in 2012, surveyed 1,000 teachers and 500 administrators and found 51% of surveyed

teachers reported feelings of stress several days a week (Markow et al., 2013). Additionally, the MetLife Survey of the American Teacher survey found only 39% of teachers were satisfied with their jobs, which is a decline of 23% in four years (Markow et al., 2013). Employees not feeling satisfied with their jobs are more likely to leave their jobs (Spector, 2016).

Each year the Department of Elementary and Secondary Education (DESE) of Missouri releases a report showing trends in teacher recruitment and retention. The 2019 Recruitment and Retention report demonstrates, from 2013-2019, Missouri public schools have consistently had an annual attrition rate of 13-14%. Approximately 40% of teachers leave the profession within the first three years of teaching and approximately 55% leave within the first five years of teaching in Missouri (DESE, n.d.d.). Additionally, for the 2018-2019 school year, Missouri hired more teachers and issued nearly 1,500 fewer initial certificates than in the previous five year combined which indicates a supply and demand concern (DESE, n.d.d.). According to the report on teacher shortage areas released by the U.S. Department of Education in 2016, Missouri has increased the subject areas experiencing a shortage from five areas in 2012-2013 to 22 areas in 2016-2017.

Though factors causing the high attrition rates in special education have been identified by researchers, current recommendations have been unsuccessful in retaining highly qualified special education teachers in the classroom. Research showing job satisfaction of special education teachers is lacking. The purpose of this study is to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by

Spector (1985) and the contract renewal of special education teachers to help address the lack of literature regarding the job satisfaction of special education teachers.

Purpose for the Study

The purpose of this study is to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) and the contract renewal of special education teachers to help address the lack of literature regarding the job satisfaction of special education teachers. The numbers of students with IEPs in public schools is rising, while the turnover of teachers qualified to provide students with IEP's with a quality education is remaining at an alarming rate (Tyler & Brunner, 2014). High attrition rate of special education teachers in the United States is well documented (Billingsley et al., 2011; Boe & Cook, 2006; Ingersoll, 2001; Leko & Smith, 2010; McLeskey & Billingsley, 2008; Prather-Jones, 2011; Thornton et al., 2007; Tyler & Brunner, 2014; Vannest et al., 2010), however, little has changed to keep qualified teachers in the classroom. As special education teachers continue to experience burnout due to high stress and increased workloads, administrators are looking for an answer to help retain qualified teachers (Abiyou, 2017; Billingsley, 2004; Major, 2012). Stempien and Loeb (2002) compared job satisfaction of general educators and special educators and special educators were found to be more dissatisfied. The purpose of this quantitative correlational study is to determine the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers in Missouri public schools to renew contracts following administrative approval for rehire. The independent

variables of this study are pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication. The dependent variable is the teacher's decision to accept the contract for renewal for the next academic school year.

Research Questions

The intent of this study was to determine the relationship between the job satisfaction factors and special education teacher's intent to renew their contract following administrative approval for rehire. Correlational research was used to identify trends occurring naturally and use the data to make predictions for the given population (Simon, 2011). Relationships identified were used to predict contract renewal following administrative approval for rehire of special education teachers. The researcher sought to address the following questions:

RQ1: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **elementary special education teachers**?

RQ2: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **secondary special education teachers**?

RQ3: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and

communication to predict the teacher's decision following administrative approval for rehire to renew the teaching contract of **all special education teachers**?

Null Hypotheses

H₀₁: The variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the **elementary special education teacher's** decision to renew the teaching contract following administrative approval for rehire.

H₀₂: The variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the **secondary special education teacher's** decision to renew the teaching contract following administrative approval for rehire.

H₀₃: The-variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the decision of **all special education teacher's** to renew the teaching contract following administrative approval for rehire.

Limitations

- The willingness of the building principals to distribute the survey to teachers in the building.
- The number of participants voluntarily participating in the survey.
- Time period of survey.
- Sample may not be representative of the desired population due to participant drop-out.

- The study can only determine a correlation between the job satisfaction facets and teacher intent to renew teaching contracts and not causation.

Delimitations

- Many variables are related to teacher decisions to renew teaching contracts; however, all variables were not investigated for the purpose of this study.
- The study only surveyed special education teachers currently employed in Missouri public schools and teaching grades Kindergarten through 12th grade.
- The surveys were limited to public school districts in the state of Missouri.
- School districts of St. Louis, Kansas City, and Springfield were excluded as the school districts are not rural or suburban districts.
- Surveys were sent electronically for ease of accessibility and data collection.

Assumptions

- The participants answered the survey questions honestly.
- Data is generalizable to non-urban public schools in Missouri.

Design Controls

This study was a non-experimental, correlational design. As a correlational study, causation will not be determined but merely relationship established (Gay et al., 2009). Data for this study were collected by survey and included demographic information. The study examined the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) as the instrument used in the research and a teachers' decision to renew their contracts following administrative approval for rehire. The Job Satisfaction Survey, developed by Spector (1985), was

developed for the purpose of measuring job satisfaction for the human services sector. The survey is widely utilized in research and has proven to be a valid instrument to measure job satisfaction of any human service position (Spector, 2016).

Surveys were sent to 515 public school districts in Missouri. In order to provide valid results, a survey was sent to all school districts of DESE in the state of Missouri outside of Kansas City, Springfield, and St. Louis who agreed to participate. The districts of Kansas City, Springfield, and St. Louis were excluded as the districts are urban school districts and do not fit the parameters of the study. Surveys were sent during the school year so teachers were most accessible. All district principals were sent an email containing a link to the survey (Appendix C). Principals, upon approval, were asked to forward the survey link to special education teachers in their building. Only currently employed special education teachers were surveyed due to ease of location accessibility. A follow-up email (Appendix D) was sent to the same districts after two weeks from the original email request. Teachers in districts agreeing to participate in the survey were given two weeks to complete the survey. The survey was used to gather demographic information and basic information regarding whether pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication influenced the special education teacher's decision to renew his/her contract for the following school year.

The survey was voluntary and confidential. Surveys were completed online through Microsoft Forms for ease of accessibility by teachers as well as ease of data collection and analysis for the researcher. The use of the online survey tool allowed the researcher to maintain the anonymity of participants and school districts, which also

encouraged honesty from participants. The study assumed special education settings of non-urban, public-school districts in Missouri were similar in composition and function.

Definition of Key Terms

- **Burnout.** A syndrome of emotional exhaustion, depersonalization, and personal accomplishment which can occur among individuals who do human services of some kind (Maslach et al., 1986).
- **Communication.** Communication expounds on information flow within the school, goals of the institution, activities within the organization, and clear descriptions of the work assignments (Spector, 1985).
- **Coworkers.** Coworkers encompass the collegiality and positive working relationships among teachers and include active collaboration and recognition (Shen et al., 2012).
- **Depersonalization.** An attempt to put distance between oneself and service recipients by actively ignoring the qualities which make individuals unique and engaging people (Maslach et al., 2001).
- **Emotional Exhaustion.** Psychological depletion caused by the constant demands of caring for others, includes physiological illness, chronic fatigue, and decreased stress resistance (Maslach et al., 1986).
- **Fringe Benefits.** Fringe benefits are defined as non-salary aspects of a job, such as medical insurance, substitutes for wages, and retirement fund (Artz, 2010).
- **Job Dissatisfaction.** Job dissatisfaction refers to negative and unfavorable attitudes towards the job (Bolger, 2001).

- **Job Satisfaction.** Job satisfaction is the feeling that a job environment will let the worker's skills and abilities be maximized while the attitudes and values of both the worker and organization coincide (Holland, 1973).
- **Nature of Work.** Nature of work encompasses a job's sense of purpose, enjoyment, and pride in the job (Spector, 1985).
- **Operating Procedures.** Operating procedures pertain to school rules, structure, bureaucracy, and amount of work (Spector, 1985).
- **Pay.** Pay is the monetary compensation given to teachers. Also included in the pay subdomain are raises and amount relative to other schools (Judge et al., 2010).
- **Performance-based and Contingent Rewards.** Performance based and contingent rewards are reward types given to employees in addition to base pay. Two broad categories of rewards are financial and psychological and can include recognition, compliments, appreciation, and encouragement (Hofmans et al., 2013).
- **Promotion.** Promotion is the opportunity for advancement such as the transition from teacher to an administrator or specialist (Chapman, 1982).
- **Reduced Personal Accomplishment.** The loss of feeling qualified and successful which is characterized by feeling ineffective and hopeless (Maslach et al., 1986).
- **Supervision.** Supervision involves administrators demonstrating competency, promoting opportunities to engage in meaningful conversations regarding practice, and focusing on aspects of good teaching (Danielson, 2002).

- **Teacher Attrition.** Teacher attrition is the term used for educators choosing to leave the teaching profession (Chapman, 1982).
- **Teacher Retention.** Teacher Retention is the term used for educators choosing to stay in the teaching profession (Mancuso et al., 2011).

Summary

Chapter One provides a brief introduction of factors leading to attrition and retention of special education teachers. Nationwide data on special education teacher attrition clearly indicate attrition is an unfortunate problem schools must face (Abiyou, 2017; Tyler & Brunner, 2014; Williams & Dikes, 2015). Special education teachers are leaving education at a rate of 50% in the first five years upon entering the profession as a result of burnout, lack of support, and several other factors (Abiyou, 2017; Billingsley & Bettini, 2019; Tyler & Brunner, 2014; Vittek, 2015; Williams & Dikes, 2015).

Additionally, Chapter One presented how Maslow's theory (1954) stating all humans require satisfactory fulfillment of their physiological and safety needs before moving to the next higher level relates to teacher job satisfaction. Additionally, Herzberg et al.'s (1959) motivation and hygiene theory describes motivator factors impact job satisfaction, and hygiene factors can reduce job dissatisfaction. Thus, these factors are to be explored further in relation to special education teachers. Research is limited showing the relationship between level of job satisfaction for special education teachers thus, the researcher investigated whether a relationship existed between any of the nine facets of Spector's (1985) Job Satisfaction Survey (JSS) and the likelihood a special education teacher would sign his or her contract for the following school year.

Administrators must find ways to retain the best qualified teachers to meet student needs. Thus, this research will fill the gap in literature connecting level of job satisfaction with special educators to the factors school and/or district administrators can implement in retaining special educators. If the study reveals a relationship exists, the findings could provide researchers with a more intentional focus for future study. The purpose of this study is to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) and the contract renewal of special education teachers following administrative approval for rehire to help address the lack of literature regarding the job satisfaction of special education teachers.

Chapter Two presents a thorough review organized thematic of the literature pertaining to special educator attrition numbers and the relationship with teacher burnout. Legal landmarks of special education are highlighted as legal decisions have contributed to teacher stress. Additionally, financial incentives to retain quality special educators are detailed and include teacher induction programs, professional development, administrative support, and improved workplace conditions. Chapter Three provides the methodology, including the purpose of the study, research questions, null hypotheses, participants, selection and sampling, research setting, design, instrumentation, procedures, and data analysis. Chapter Four includes the presentation of data collected, review of data organization, and the reporting and analysis of the findings of the quantitative study. Chapter Five summarizes findings, offers conclusions, proposes implications for practice, and recommendations for future research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Special education teachers are leaving the special education classroom at alarming rates (Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017; Nance & Calabrese, 2009; Plash & Piotrowski, 2006; Vittek, 2015; Williams & Dikes, 2015).

Attrition rate of special education teachers in 2012-2013 was 17.1%, second only to English language development teachers (Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017; Goldring et al., 2014). Attrition for special education teachers is a result of paperwork, fear of litigation, time away from family, dealing with student behaviors, and managing an overwhelming course load (Goetzinger, 2006; McDowell, 2017; Menlove et al., 2004; Nance & Calabrese, 2009; Plash & Piotrowski, 2006; Vittek, 2015; Williams & Dikes, 2015). Additionally, studies have linked special education teacher attrition to the amount of perceived support from building administrators and colleagues (Billingsley, 2004; Billingsley & Bettini, 2019; Langher et al., 2017; Nance & Calabrese, 2009; Skaalvik and Skaalvik, 2010; Vittek, 2015). Research findings presented in this chapter include both legal expectations and professional expectations placed on special education teachers. Since research is extensive in showing burnout as the primary reason teachers, including special education teachers, leave the profession (Brunsting et al., 2014; Kerr & Brown, 2016; Langher et al., 2017; Maslach, 2001; Shen et al., 2015; Williams & Dikes, 2015) the causes of burnout for special education teachers, leading to job dissatisfaction are discussed. Studies regarding efforts made by school districts to retain both special education and general education teachers is also

examined. The chapter also explores the literature on the history of special education by highlighting legal landmarks in U.S. history, and data on teacher attrition and burnout. Additionally, the literature available on incentives used to retain special education teachers (financial incentives, induction programs, professional development, administrative support, and workplace conditions are also examined).

History of Special Education

Aristotle, after studying people with hearing impairments, concluded people with disabilities were “dumb” and incapable of communication (Grasso, 2008; Winzer, 1998, p. 3). Aristotle's beliefs were accepted and followed until the late 1500s (Plann, 1991). During the 1500's, Plann (1991) found a very select group of the wealthy population in Spain was being educated by Ponce de Leon, a Benedictine monk. However, public philosophy began to change in the 17th century as British philosophers began studying individuals with hearing disabilities, visual impairments, and learning disabilities (Winzer, 1998). The early 17th century philosophers were able to counter Aristotle's opinion as they created sign language and proved individuals with disabilities were capable of learning (Winzer, 1998).

Private education for individuals with disabilities was the primary mode of education from the 17th century for nearly 250 years (Winzer, 1998). In 1898, Alexander Graham Bell, in closing remarks to the National Education Association (NEA) convention, advocated for the development of special programs in public schools for students with disabilities (Gearheart, 1972; Grasso, 2008; Kode, 2017). Bell advocated students with disabilities should be educated by special teachers without being removed from their areas, having to attend separate schools (Gearheart, 1972; Grasso, 2008). In

1902, the Department of Special Education was developed by the National Education Association (NEA) with the intention of assisting students with disabilities but was soon gone by 1918 due to lack of funding and limited committee work (Kode, 2017). Even with advanced awareness efforts, students with disabilities faced discrimination and exclusion on a regular basis through the first part of the 1900s in America (Gearheart, 1972; Grasso, 2008).

The later part of the 1900s experienced a substantial amount of change (Wright, 2010). Significant legal cases occurring after 1950 opened doors for students with disabilities (Wright, 2010). Cases including *Brown v. Board of Education (1954)*, *Pennsylvania Association of Retarded Citizens (PARC) v. Commonwealth of Pennsylvania (1972)*, and *Mills v. D.C. Board of Education (1972)* led to national legislation, such as the Education for All Handicapped Children Act (1975) and Individuals with Disabilities Act (1990). The Education for All Handicapped Children Act (1975) and Individuals with Disabilities Act (1990) form the current system schools operate under today (Wright, 2010).

Legal Landmarks of Special Education

Prior to 1954, students with learning disabilities were excluded from educational settings due to struggling to keep up academically or viewed as a depressing presence in the classroom (Smith, 2004; Yell et al., 1998). The landmark case of *Brown v. Board of Education (1954)* opened the door for students previously excluded from school on the basis of discrimination due to race, gender, or disability (Wright, 2010). The Supreme Court of the United States determined in the 1954 decision, separate educational facilities were not inherently equal (Wright, 2010). The court determined education must be

equally made available to all students (Wright, 2010). As a result of the 1954 Supreme Court ruling, parents of students with disabilities have brought lawsuits against local school districts claiming discrimination by exclusion on the basis of their children's disabilities (Wright, 2010; Rowe, 2004). Parents sought for their children to be provided more than just the same access to education in the same settings as students in general education (Wright, 2010).

Although *Brown (1954)* made equal education more available to students with disabilities, school districts still had the option of participating in special education incentive programs, which still allowed districts to restrict education to some students (Esteves & Rao, 2008; Smith, 2004). Awareness of the need to educate individuals with disabilities was heightened in the 1960s when President Kennedy began speaking out about the needs of children with disabilities (Gearhart, 1975; Grasso, 2008). In 1965, Congress sought to address the issue of discrimination by passing the Elementary and Secondary Education Act (ESEA) (Esteves & Rao, 2008; Wright, 2010). The ESEA was the first legislation to make federal funds available to school districts with the intent of improving the quality of education for all students, including students with disabilities (Esteves & Rao, 2008; Wright, 2010). In 1966, Congress assisted the advancement of individuals with special needs further by establishing a grant program known as Title VI of the ESEA which provided aid for local school districts to begin, expand on, or assist special needs programs (Esteves & Rao, 2008; Wright, 2010).

Section 504 of the Rehabilitation Act of 1973 followed litigation progressed through district and federal courts (Esteves & Rao, 2008). Section 504 denied public or private schools receiving federal assistance from excluding students with disabilities from

any program or activity (Esteves & Rao, 2008). The two most notable cases during the 1970's were the *Pennsylvania Association of Retarded Citizens (PARC) v. Commonwealth of Pennsylvania (1972)* and *Mills v. D.C. Board of Education (1972)* (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979). In *PARC v. Commonwealth of Pennsylvania (1972)*, the defendant claimed the state did not provide a publicly supported education for students with mental retardation. The court ruled all children with mental retardation, between the ages of six and 21, must be provided a free public education and should be educated in programs most like their peers (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979). *Mills v. D.C. Board of Education (1972)* was brought to the courts shortly after *PARC (1972)* (Simms-Robinson, 2019). In *Mills (1972)*, children of various disabilities were represented due to discrimination as the District of Columbia was denying students with disabilities access to public schooling (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979). The court ruled the exclusion of students with disabilities from public education was unconstitutional just as segregation due to race is unconstitutional (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979). Additionally, the courts outlined due process procedures and procedural safeguards for school districts (Simms-Robinson, 2019; Yell et al., 2006; Zettel & Ballard, 1979). The two cases laid a foundation for what would become the standard expectation in protecting the rights of students with disabilities. Over the next two and a half years, 46 right-to-educate cases were filed on behalf of students with disabilities (Yell et al., 2006; Zettel & Ballard, 1979).

In 1975, nearly half or up to four million children with disabilities were either not receiving appropriate education or were excluded from school. (Esteves & Rao, 2008;

Pulliam & Van Patten, 2006). In response, Congress made its first attempt to create procedural safeguards designed to protect children with disabilities and their parents from discrimination by passing the Education for All Handicapped Children Act (EAHCA) in 1975 (Grasso, 2008). The components of EAHCA were formed directly from the rulings and recommendations of *PARC v. Commonwealth of Pennsylvania (1972)* and *Mills v. D.C. Board of Education (1972)* (Grasso, 2008). As prior legislation did not hold school districts accountable to educate children with disabilities, the EAHCA legislation made education a guaranteed right (Grasso, 2008). Components of the EAHCA required all students with disabilities be given a free and appropriate education, an individualized education plan (IEP), and due process (Grasso, 2008). Schools were mandated by EAHCA, as public institutions receiving government funding, to provide an education to meet the needs of students with disabilities (Esteves & Rao, 2008). One way schools could better meet the needs of students with disabilities was through the development of an individualized education plan (IEP) (Grasso, 2008). The purpose of an IEP was to establish goals and accommodations needed to provide students equal access to success. The development process of an IEP includes a team effort of teachers, parents, and the student. Additionally, the EAHCA provided protection for students with special needs through due process so parents could have an impartial hearing to resolve conflicts between them and the school system (Gamson, D. A. et al., 2015; Simms-Robinson, 2019).

From 1976 to 1990, the number of students receiving educational services grew 23% (Yell & Shriner, 1997) suggesting that accessibility to programs increased with the passing of the Education for All Handicapped Children Act. In 1976, the EAHCA was

amended to include expectations for states to provide educational services to students with disabilities beginning at birth rather than at three years old (Zettel & Ballard, 1979). In 1990, the Education for All Handicapped Children Act (EAHCA) was reauthorized and renamed the Individuals with Disabilities Act (IDEA) (Grasso, 2008). The reauthorization included expectations for students' IEPs to transition to post-secondary life for students as well as students with disabilities be educated in their local community schools rather than separate locations (Mandlawitz, 2016). The next wave of changes to the IDEA came in 1997 with a series of amendments which placed more rigorous accountability standards on teachers and schools (Mandlawitz, 2016). The 1997 amendments moved IDEA from just focusing on the access of services to providing quality programs for students (Esteves & Rao, 2008; Hardman & Nagle, 2004). The revision required IEP's to include measurable annual goals which must be monitored continuously and encourage students to take part in the general curriculum as much as possible (Esteves & Rao, 2008). In addition, with the revision parents were expected to participate in the development of their child's IEP as well (Esteves & Rao, 2008).

In 2004, IDEA was again reauthorized as part of the No Child Left Behind Act (NCLB) (Wright, 2010). The reauthorization of the IDEA required schools to employ highly qualified teachers as well as increase the participation of students with disabilities on statewide assessments (Yell, 2019). The expectation of being highly qualified requires teachers to meet three criteria: hold a minimum of a bachelor's degree, have full state teacher certification, and demonstrate competency in their subject area (Yell, 2019). The No Child Left Behind legislation placed the accountability of student success on schools by labeling students with IEPs as a subgroup within their data analysis and

reporting (Mandlawitz, 2016). State assessment scores reported for the IEP subgroup have made schools more aware of the significant educational gap in learning between students with disabilities and students without (Mandlawitz, 2016). The 2004 amendments to the IDEA led to increased paperwork for special education teachers as more procedures and documentation were put into place through the process of identifying students with specific learning disabilities and completing the IEP process (Williams & Dikes, 2015; Yell et al., 2006). The 2004 amendment of IDEA for special educators to be highly qualified allowed IDEA to meet the expectations set forth in NCLB but also put further stress on schools to find certified teachers as special education teachers could no longer receive emergency, temporary, or provisional certification (Yell, 2019; Yell et al., 2006).

The most recent amendments to of IDEA occurred in 2015 through Public Law 114-95, known as the Every Student Succeeds Act (ESSA, 2015). The policy was intended to change the educational gap, and did so through adjusting accountability measures and placing more focus on improving instruction for all students (ESSA, 2015). Although the legislative changes in 2004 and 2015 have resulted in benefits to children with disabilities, the changes have also contributed to increased workloads and stress on special education teachers and school districts (Bettini et al., 2017; Mandlawitz, 2016; Wright, 2010). As workloads and expectations have increased over the decades, special education teachers have continued to experience burnout, as identified by Maslach (2001), and have resulted in high attrition rates across the United States (Abiyou, 2017; Billingsley, 2004; Major, 2012).

Teacher Attrition Rates and Causes

Studies have shown general teacher attrition rates in the United States are unacceptably high (Billingsley, 2007; Billingsley et al., 2011; Boe & Cook, 2006; Gilmour & Wehby, 2019; Ingersoll, 2001; Leko & Smith, 2010; McLeskey & Billingsley, 2008; Prather-Jones, 2011; Thornton et al., 2007; Tyler & Brunner, 2014; Vannest et al., 2010; Whitaker, 2003). Attrition rates have significant negative effects on student learning (Feng & Sass, 2017; Gilmour & Wehby, 2019; Ronfeldt et al., 2013). Nearly two-thirds of the total attrition of teachers is pre-retirement and is normally associated with job dissatisfaction (Fong et al., 2016; Ondrasek et al., 2020; Sutchter et al., 2016). National attrition rates, within a teacher's first five years of teaching, have been reported as high as 30%, with some states reporting much higher rates (Boe et al., 1997; Darling-Hammond, 2003; Tyler & Brunner, 2014). The MetLife Survey of the American Teacher, a national survey of 1,000 teachers and 500 administrators released in 2013, indicated 51% of teachers surveyed felt a great deal of stress several days a week (Williams & Dikes, 2015). The same survey found only 39% of teachers were satisfied with their jobs, which was a decline of 23% over the course of four years (Williams & Dikes, 2015). Employees not feeling satisfied with their jobs are more likely to leave their jobs (Spector, 2016).

Research demonstrates teacher attrition is the result of different factors such as school climate, lack of administrative support, workplace conditions, and amount of paperwork (Billingsley & Bettini, 2019; Feng & Sass, 2017; Gilmour & Wehby, 2019; Ronfeldt et al., 2013; Tyler & Brunner, 2014). Such factors can create a sense of emotional exhaustion, depersonalization, and low levels of satisfaction for special

education teachers (Williams & Dikes, 2015). Teacher burnout occurs when such factors exist (Abiyou, 2017; Brunsting et al., 2014; Fore et al., 2002; Goetzinger, 2006; Kaufman & Ring, 2011; Kerr & Brown, 2016; Langher et al., 2017; Maslach, 2001; Shen et al., 2015; Williams & Dikes, 2015).

Burnout has been defined by Maslach in multiple publications since 1981 (Maslach, 2003; Maslach et al., 1986; Maslach et al., 2001). Maslach's (2001) definition of burnout is widely accepted for research in the field of education as well as the social welfare and health care fields. Burnout is described as a result of three specific components: emotional exhaustion, depersonalization, and lack of personal accomplishment (Maslach, 2001; 2003). Emotional exhaustion is the beginning phase of burnout and occurs as the teacher becomes overworked (Maslach, 2001). Emotional exhaustion occurs as a result of increased job commitments such as paperwork, class sizes, caseloads, lack of administrative support, etc. (Major, 2012). The teacher becomes exhausted with trying to keep up with increased expectations and the inability to maintain a level of satisfaction in their work (Abiyou, 2017; Billingsley, 2004; Major, 2012).

Stress teachers endure ultimately leads to depersonalization, which is the second component of burnout (Maslach, 2003). Teachers who begin to pull themselves away personally and emotionally are experiencing burnout to a larger degree than individuals who are working through the stress (Maslach, 2003). Teachers working through or experiencing depersonalization find it easier to manage by creating some distance between them and the students (Maslach, 2003). In addition, depersonalization often leads teachers to become cynical and negative toward themselves and others (Abiyou, 2017; Skaalvik & Skaalvik, 2010).

Maslach's third stage of burnout is reduced personal accomplishment. This "refers to a tendency when teachers evaluate themselves negatively as well as a general feeling that they are no longer doing a meaningful and important job" (Skaalvik & Skaalvik, 2010, p. 1060). A teacher's reduced personal accomplishment is not a third step in a sequence but is interconnected with emotional exhaustion and depersonalization as each will interfere with an individual's sense of effectiveness (Abiyou, 2017; Maslach et al., 2001). Teachers experience difficulty helping individuals of whom they have little connection when feeling exhausted and such feelings lead to reduced personal accomplishment (Maslach et al., 2001). In connecting to Herzberg's et al. (1959) two-factor motivation theory, a teacher feeling a reduced personal accomplishment will not achieve job satisfaction. Low job satisfaction and prolonged stress creates a feeling of burnout in teachers (Jennett et al., 2003; Mendel, 1987; Moore, 2012).

Special Education Teacher Attrition Rates and Causes

Forty-nine of 50 states in the U.S. reported shortages of special education teachers during the 2011-2012 school year (Berry & Shields, 2017). Additionally, special education teachers leave the teaching profession at twice the rate of general education teachers (Mandlawitz, 2016). Oklahoma was the only state without a shortage of special education teachers in 2011-2012, but since the 2011-2012 school year has reported a shortage of special education teachers every year since (Berry & Shields, 2017). Almost one-third of new special education teachers leave the profession after three years, and nearly 50% leave the profession after five years (Donne & Lin, 2013; Edgar & Pair, 2005; Langher et al., 2017). The statistics as to why teachers are leaving, according to research, are due largely to teacher burnout (Abiyou, 2017; Fore et al., 2002; Goetzinger,

2006; Kaufman & Ring, 2011; Langher et al., 2017; Maslach, 2001; Shen et al., 2015; Williams & Dikes, 2015). Studies conducted since 2010 have shown similar conclusions with teachers of special education expressing low levels of satisfaction with their jobs, however no nationwide studies were found to have been conducted since 2010 (Carver-Thomas & Darling-Hammond, 2017; Conley & You, 2017; Turner, 2019; Vittek, 2015). Low levels of satisfaction can influence the performance of a teacher as well as impact a teacher's decision to stay in the profession (Gee & Gonsier-Gerdin, 2018; Griffin et al., 2009), especially when teachers' motivator needs are not met (Herzberg et al., 1959). Knox and Anfara (2013) found since job satisfaction has a tremendous effect on success, job satisfaction is the most frequently studied variable. Mendel (1987) found teacher burnout is a result of low teacher satisfaction as increased difficulties in a profession can cause more dissatisfaction (Moore, 2012). Additionally, teachers not able to handle prolonged stress can result in teacher burnout (Jennett et al., 2003). Special education teachers are often, "prone to low job satisfaction, low self-efficacy, as well as increased stress and burnout" (Emery & Vanderberg, 2010, p. 126). A teacher's level of emotional exhaustion has been used to predict whether the teacher will stay or leave the profession (Leung & Lee, 2006).

The attrition rate of special education teachers has increased more rapidly when compared with any other educational field (Boe, 2006; Ingersoll & May, 2012; Tyler & Brunner, 2014). Teachers of special education students are leaving the classroom at alarming rates (Bettini et al., 2017; Billingsley, 2004; Billingsley & Bettini, 2019; Donne & Lin, 2013; Edgar & Pair, 2005; Fore et al., 2002; Kaff, 2004; Mehrenberg, 2013; Menlove et al., 2004; Mitchell & Arnold, 2004; Plash & Piotrowski, 2006; Tyler &

Brunner, 2014; Whitaker, 2003). While attrition rates of general education teachers is approximately 30% (Boe et al., 1997; Darling-Hammond, 2003; Tyler & Brunner, 2014) within the first five years, attrition rates among special education teachers increase to nearly 50% (Boe et al., 1997; Edgar & Pair, 2005). In addition to the increasing attrition rates of special education teachers, the number of students needing special education services in public schools is rising as well (Billingsley & McLeskey, 2004). In the ten-year span from 1993 to 2003, the shortage of special educator's increased from 7.4% to 13.4 % (Boe, 2006) while the number of students served under IDEA grew from 5.08 million students to 6.5 million students nationally, resulting in an overall increase of 27.9% (Cook & Boe, 2007; DeMik, 2008; Tyler & Brunner, 2014). DeMik (2008) found the population of teachers with special education certification increased only 8% which has resulted in larger student-to-teacher classroom ratios. Between 2006 and 2016, the number of special education teachers decreased by 17%, while the number of students receiving SPED services dropped by only 1% (Samuels, 2018). Special education is an area identified as having a critical shortage by the United States Department of Education since 1990 (Williams & Dikes, 2015). A 2008 report from the American Association for Employment in Education identified nine of 13 educational fields considered in critical shortage were in the area of special education (Provost, 2009).

Billingsley (2004) has conducted extensive research on special education teacher attrition and found the challenges special education teachers face leads to teacher dissatisfaction, health problems, and teacher withdrawal from work. Billingsley (2004) and colleagues synthesized 18 studies regarding new special educators' experiences during the first teaching years. New special educators struggle in three major areas: a)

problems with inclusion, collaboration, and interactions with adults; b) pedagogical concerns; and c) difficulties managing roles (Billingsley et al., 2011). Donne and Lin found new teachers need assistance with “paperwork and IEPs (84%); referral, placement, and evaluation (75%); materials (70%); behavior management (60%); getting acclimated to the school (66%); instructional strategies (58%); assessments (54%); collaboration with general educators (54%); parent-family conferences (48%); and learning/using the curriculum (46%).” (2013, p. 43). Tyler and Brunner (2014) categorized the six thematic factors which cause special education teacher attrition: workplace conditions, administrative support, professional development, teacher mentorship/induction, teacher preparation, and workplace decision-making. Ketron (2007) described five primary reasons teachers leave the special education classroom: school/community, lack of support from administration, lack of preparation to handle job responsibilities, professional responsibilities, and external factors such as stress.

In the spring and fall of 2000, the U.S. Department of Education’s Office of Special Education Programs (OSEP) conducted a national survey of thousands of educators to determine the needs of personnel in special education (Carlson et al., 2003). The national survey completed in 2000 was the Study of Personnel Needs in Special Education (SPeNSE) and the results were released in 2002. The survey is the most recent quantitative study found in literature regarding special education studies. The study found teachers working in a positive climate have a higher retention rate (SPeNSE Paperwork in Special Education Fact Sheet, n.d.d.). A positive climate could be a result of better organization, teachers being allowed to focus more attention on instruction, and administrators protecting teachers from time consuming administrative tasks (Carlson et

al., 2003). Additionally, the SPeNSE study found the average special education teacher spends five hours per week on paperwork and administrative tasks with 8% of teachers spending more than 14 hours on paperwork each week (SPeNSE Paperwork in Special Education Fact Sheet, n.d.d.). Fifty-three percent of elementary and secondary educators reported the amount of paperwork interfered dramatically with regular instructional duties (Carlson et al., 2003). The researcher has found zero other quantitative studies related to special education teachers and job satisfaction since this last SPeNSE study conducted in 2000.

Bonnie Billingsley and Bettini conducted an intensive review of literature pertaining to special education attrition (1993, 2004, Billingsley & Bettini, 2019). Billingsley completed three literature reviews specifically addressing attrition in special education. The first literature review was published in 1993, and reviewed all research pertaining to special education teacher attrition studies from 1980-1992 (Billingsley, 1993). The reason Billingsley's first review began reviewing research in 1980 was due to not finding any studies for special education teacher attrition prior to 1980 as only general education teacher attrition studies were found prior to 1980 (1993). The culminating review of Billingsley's first review of literature led Billingsley (1993) to state "two specific variables consistently linked to special education attrition are lack of administrative support and role problems" (p. 159).

The second extensive review of literature by Billingsley was published in 2004 and reviewed literature from 1992-2002 and included 20 studies were selected to be reviewed by the criteria set forth by Billingsley (Billingsley, 2004). Using criteria set forth by Billingsley, the second review presented more conclusive findings than the first

review (Billingsley, 2004). Herzberg et al. (1959) found when motivator factors such as professional development are not met by an organization, the individual will experience a lack of job satisfaction. When the motivator factors of teachers are not met, teachers are often led to leave the teaching profession (Billingsley, 2004). Billingsley found the factors affecting the attrition of special education teachers included teacher salaries, school climate, administrative support, professional development, and role demands within the workplace (Billingsley, 2004).

The third review of literature completed by Bonnie Billingsley was published in 2019. Billingsley joined with Bettini to review the most current literature and examined studies and dissertations from 2002-2017. Using criteria set forth by Billingsley and Bettini, 30 studies were studied in detail for Billingsley's third review. The field of study regarding the attrition of special education teachers became more extensive in the years leading up to Billingsley's third review. From Billingsley's first review in 1993 to her third in 2019, the number of relevant studies increased from 13 studies to 30 studies (Billingsley, 1993; Billingsley & Bettini, 2019). The work of Billingsley and Bettini yielded some consistent findings present in Billingsley's previous work as well as a new finding as well. Studies reviewed by Billingsley & Bettini (2019), including one from Conley & You (2017), continued to identify administrative support for special education teachers and decrease in role demands increases retention of special education teachers. Billingsley and Bettini (2019) found professional development was again valued by teachers which indicated greater intention to remain in their current teaching positions. Through the work of Billingsley's (2019) third review, the new finding which surfaced in two studies identified financial incentives may raise teacher retention. The findings of

Billingsley and Bettini (2019) regarding financial incentives, along with school climate, administrative support, professional development, and role demands will be explored further in the literature review of this current study.

Incentives to Retain Special Education Teachers

As special education teachers continue to experience burnout due to high stress and increased workloads, administrators often look for an answer to help in retaining qualified teachers (Billingsley & Bettini, 2019). The researcher reviewed the findings where districts or government entities attempted to increase retention numbers of SPED teachers through financial incentives, teacher induction programs, professional development, administrative support, and the creation of an inclusive school culture (Billingsley & Bettini, 2019; Tyler & Brunner, 2014). The efforts to increase retention numbers, sought to meet the higher order needs of belonging, self-esteem, and intellectual needs (Maslow, 1954) as well as Herzberg et al's (1959) motivator factors to increase job satisfaction. Research demonstrates some incentives, such as bonus pay and loan forgiveness, can increase the retention rates of teachers representing all areas (Conley & You, 2017), while other incentives work better for teachers outside of special education (Clotfelter et al., 2008; Feng & Sass, 2017). Overall, financial incentives and hiring incentives have been researched and found to increase the retention rates of SPED teachers specifically (Fowler, 2003; Liu et al., 2004; Owens, 2010).

Financial Incentives. Herzberg et al. (1959) and Maslow (1954) each identify physiological needs and safety as primary elements individuals need to find satisfaction and avoid dissatisfaction. Two physiological needs necessary for satisfaction include monetary income and stability (Herzberg et al., 1959). A key finding regarding a factor

why special education teachers leave teaching includes a need for an increase in salary (Berry et al., 2011; Billingsley & Bettini, 2019; Boe et al., 2008; Carver-Thomas & Darling-Hammond, 2017). Beginning teachers will nationally earn 20% less than others who have earned a college degree, even after adjustments have been made to accommodate for working a shorter work year when compared to other professions (Baker et al., 2014). From 1994 to 2015 the total compensation, including salary, benefits, and pension, dropped drastically for teachers when compared to other graduates with a college degree (Allegretto & Mishel, 2016). Teachers made 11% less per week in total compensation in 2015 when compared with those other career fields, though the compensation was similar in 1994 (Allegretto & Mishel, 2016). A teacher in mid-career and head of a household of four, qualifies for public benefit programs which includes free and reduced lunches in 30 states (Boser & Straus, 2014). As such, state legislatures and school districts have sought to determine how salary incentives can impact teacher recruitment and retention (Espinoza et al., 2018). However, the researcher found limited studies that presented significant findings on the impact of financial incentives of some form regarding special education teacher retention.

One successful attempt at attracting a larger number of candidates and candidates with a higher aptitude was done by the San Francisco Unified School District (Hough, 2012). The San Francisco Unified School District (SFUSD) passed the Quality Teacher and Education Act (QTEA) in 2008 with the purpose to provide financial incentives for teachers early in their careers (Hough, 2012). The QTEA provided teachers who were in their first five years of teaching a salary increase of 8-13% (Hough, 2012). The district hoped through the passage of the QTEA, the financial incentive would assist in recruiting

and retaining high quality teachers during the early part the teacher's career (Hough, 2012). Hough (2012) conducted an analysis of the effectiveness of QTEA on recruitment of high-quality teachers and found the increase in salary increased both the size of the applicant pool and the quality of applicants within the applicant pool. Thus, Hough (2012) concluded the results provided potential for the district to hire more qualified applicants. Hough's work (2012), identified a larger pool of qualified candidates does provide an increase in recruitment of applicants but does not necessarily address retention.

Clotfelter et al. (2008) reviewed the teacher bonus program attempted by the state of North Carolina from 2001 to 2004. Providing teachers bonus pay through state funded programs has been attempted over the last recent decades as lawmakers have sought ways to retain and recruit quality teachers to school with a history of high teacher turnover (Clotfelter et al., 2008). The program was intended to increase teacher retention, rather than focus on recruitment (Clotfelter et al., 2008). Lawmakers sought to retain quality teachers and recruit other quality teachers to these schools who have a history of high teacher turnover. North Carolina's program was established to provide an annual bonus of \$1,800 to the salaries of certified teachers in the fields of math, science, and special education (Clotfelter et al., 2008). However, only teachers in low performing or high poverty secondary schools qualified for the yearly bonus and then only qualified if they remained in their position (Clotfelter et al., 2008). Districts receiving the bonus showed a 17% reduction in the overall turnover during the time of the initiative, but principals and teachers believed the \$1,800 salary bonus was too small to retain high quality

teachers in high demand subjects like math, science, and special education (Clotfelter et al., 2008; Feng & Sass, 2017).

In an effort to both increase high-quality teacher recruitment and retention, a teacher bonus program was implemented in Massachusetts in 1999, called the Massachusetts Signing Bonus Program (Fowler, 2003). The program promised qualified professionals who were interested in receiving a teaching certificate a \$20,000 signing bonus to complete the state's fast track program to certification (Fowler, 2003). Recipients of the bonus were required to attend a seven-week certification course through the Massachusetts Institute for New Teachers (MINT) (Fowler, 2003). Qualifying teachers would receive the bonus in installment payments of \$8,000 the first year, followed by \$4,000 for each of the next three years the teacher taught in Massachusetts schools (Fowler, 2003; Liu et al., 2004). Though the bonus program was halted after three years, the program was found to have increased the pool of teachers, particularly in certificate areas of high need (Fowler, 2003; Owens, 2010). Nearly 60% of the teachers who graduated from the MINT program taught subjects of high need including special education (Owens, 2010). However, graduates of the program were found to leave the profession at higher rates than teachers trained through traditional means of certification (Fowler, 2003). Graduates of the MINT program had a 12-20% attrition rate after the first year and nearly a 50% attrition rate by the end of the third year (Fowler, 2003). Overall, the increase in attrition rates led researchers to conclude the salary bonus was not effective in retaining teachers. However, the program did provide a larger pool of applicants for the high need areas, including special education (Fowler, 2003; Liu et al., 2004; Owens, 2010).

For years many states and the federal government have sought to address teacher shortages by offering service scholarships and loan forgiveness to teachers who complete a post-secondary program in the state and teach for a specified number of years (Espinoza et al., 2018). In a national survey conducted by the U.S. Department of Education in 2012 and 2013, one in four public school teachers who left teaching rated loan forgiveness as an extremely important or a very important component to consider returning to teaching (NCES, 2013). Many teachers value loan forgiveness programs since teacher salaries are much lower than other occupations requiring a bachelor's degree but accrue a similar debt for the student on average: \$20,000 for a bachelor's degree and \$50,000 for a master's degree (Podolsky & Kini, 2016). Special education teachers make the same salaries as general education teachers, but often have a larger workload (Tyler & Brunner, 2014). A recent review of literature by Podolsky and Kini (2016) found when loan forgiveness or service scholarship is enough to cover a significant portion of a student's tuition, the program is considered effective in recruiting and retaining teachers. Podolsky's and Kini's findings hold true for teachers of special education as well (Carver-Thomas & Darling-Hammond, 2017; Feng & Sass, 2017).

Florida implemented loan forgiveness as a component of Florida's Critical Teacher Shortage Program (FCTSP) (Feng & Sass, 2017). Florida's Critical Teacher Shortage Program existed from 1986-2010 and ranks as one of the longest running incentive pay programs in the nation (Feng & Sass, 2017). The program provided loan forgiveness, tuition reimbursement, and retention bonuses (Feng & Sass, 2017). Feng & Sass (2017) reviewed the effectiveness of Florida's program on retaining teachers in high-demand subjects like science, math, and special education. The review indicated the

retention bonus was the most effective component of the program for overall teacher attrition, as the bonus reduced the attrition rate by 25% (Feng & Sass, 2017). The loan forgiveness program also had significant positive effects on teacher retention in science, math, ESOL, and foreign language (Feng & Sass, 2017). Loan forgiveness had a positive effect on retention of special education teachers only when the forgiveness amount was about \$2,500 per year (Feng & Sass, 2017).

Finding studies showing financial incentives increase teacher job satisfaction are difficult to find (Fong, 2015; Yuan et. al, 2013). Even though increasing pay has not shown to increase job satisfaction as a motivation factor, teachers having too little pay can decrease teacher satisfaction (Fong, 2015). Increasing starting teacher pay can reduce teacher attrition rates (Hendricks, 2012), increase the applicant pool (Hough, 2012), and attract teachers with a higher aptitude (Leigh, 2012). Numerous studies demonstrate financial incentives such as teacher bonus programs for new teachers and loan forgiveness can impact recruitment and retention of teachers in special education (Feng & Sass, 2017; Podolsky & Kini, 2016).

Professional Development. Prior research indicates professional development is positively associated with SPED retention (Billingsley, 2010; Billingsley & Bettini, 2019; Langher et al., 2017; Thornton et al., 2007). A key theme evident in the literature regarding the retention of teachers in any content area encompasses the component of teacher support (Billingsley, 2010; Billingsley & Bettini, 2019). Almost one-third of new special education teachers leave the profession after three years, and nearly 50% leave after 5 years (Boe et al., 1997; Donne & Lin, 2013; Edgar & Pair, 2005; Langher et al., 2017). “Teachers who are not well prepared for their job are more likely to quit

prematurely.” (Thornton et al., 2007, p. 236). Effective induction programs and professional development opportunities offered to teachers have long been identified as an element of support teachers appreciate. In a variety of literature reviews completed by Billingsley (1993, 2004, 2019) professional development and induction programs have been indirectly associated with reasons special education teachers remain in their positions. Billingsley and Bettini (2019) found no direct relationship between effective professional development and retention of teachers, except teachers who stay were shown to value the professional development, whereas the teachers who chose to leave did not indicate professional development as something of value. Evidence of a relationship between professional development and retention is weak due to a significant lack of studies measuring professional development quality, duration, and intent.

Studies of effective professional development practices for several subject areas have been detailed by Darling-Hammond (2017). Successful professional development models have the following seven criteria: content is focused, incorporates active learning, supports collaboration, uses models and modeling, provides coaching, feedback, and reflection, and has a sustained duration (Darling-Hammond et al., 2017). Professional development done effectively can assist teachers with classroom management and can limit the number of negative classroom behaviors (Darling-Hammond et al., 2017; Ondrasek et al., 2020). Better classroom management in turn can lower the stress levels of teachers, and stress is a key component to teacher burnout and attrition (Maslach, 2001). Effective professional development can also contribute to teachers experiencing higher levels of academic success in the classroom (Darling-Hammond et al., 2017). Feelings of accomplishment as a result of effective professional development can help

meet the motivator factors and can increase teacher job satisfaction (Herzberg et al., 1959).

Though it is difficult to find studies showing direct relationships between professional development and teacher intent to stay, studies have clearly shown professional development is valued by special education teachers (Billingsley & Bettini, 2019; Cornelius et al., 2019; Ondrasek et al., 2020). Gersten et al. (2001) found an indirect relationship between professional development and a special education teacher's intent to stay. Additionally, studies conducted by Cancio et al. (2013) and Albrecht et al. (2009) reported teachers choosing to stay in special education rated support for professional development and professional development opportunities much higher than teachers choosing to leave the profession. The Cancio et al. (2013) and Albrecht et al. (2009) findings are consistent with qualitative studies showing special education teachers intending to stay in the teaching profession place a high value on professional development (Billingsley & Bettini, 2019; Hagaman & Casey, 2018).

SPED Teacher Induction. Professional development for new teachers to the profession is called induction (Ondrasek et al., 2020). Evidence from literature supports educators' beliefs that new special educators experience higher workplace satisfaction when mentoring and/or induction is available (Tyler & Brunner, 2014). Herzberg et al. (1959) and Maslow (1954) each identify a sense of belonging and self-efficacy as primary elements of individuals finding job satisfaction. Induction programs provide a sense of belonging and self-efficacy elements to new teachers by providing resources which build up the teacher's confidence and foster community (Billingsley, 2004; Darling-Hammond et al., 2017). Policy makers and researchers emphasize the

importance of induction to support new teachers (Billingsley, 2010). Teachers who feel more prepared to enter the teaching field tend to leave education at half the rate of teachers who do not feel prepared (Darling-Hammond et al., 2002; 2017; Ingersoll & May, 2012; Ondrasek et al., 2020). A meaningful induction experience can have a significant effect on SPED teacher retention and prolonged teacher quality (Sanchez et al., 2018; Thornton et al., 2007). A comprehensive induction program specifically tailored to first year SPED teachers can positively influence the ability of first year teachers to perform their job, manage stress levels, and intention to stay (Billingsley, 2004; Darling-Hammond et al., 2017). Darling-Hammond et al. (2017) recommended an induction program should include assistance with paperwork, proper mentoring, and directed professional development and can help retain SPED teachers. Billingsley (2004) stated, “One of the most important actions schools can take is to provide support to beginning teachers during these vulnerable first years” (p. 371).

Thornton et al. (2007) found due to the distinctive nature of the job for beginning SPED teachers, induction programs for SPED teachers must be separate from the general induction program. Schools must provide systematic and responsive induction programs for all beginning SPED teachers, involving the new teachers actively in the planning of their staff development (Thornton et al., 2007). Additionally, teachers are less likely to switch careers prematurely when the teachers are familiar with the supports and resources the school district has available (Thornton et al., 2007). Kamman and Long (2010) examined a three-year induction program at a school district in St. Louis and found the retention rate of SPED teachers trended upward during the period studied.

Mentoring is a component of an induction program and effective mentoring programs cannot be optional for beginning teachers (Darling-Hammond et al., 2017; Ondrasek et al., 2020; Sanchez et al., 2018; Thornton et al., 2007). A statistically significant relationship exists between the perceived overall effectiveness of mentoring and the first-year SPED teacher's plans to remain in SPED (Whitaker, 2000). Vittek (2015) found a mentoring program's success is dependent on a mentor who provides quality advice as well as a mentor serving as a person a new teacher can trust and have informal discussions as needed. Billingsley (2004) found first-year teachers preferred and benefited most from informal mentoring as informal mentoring provides first-year teachers with more problem specific advice which can lead to confidence and trust (Billingsley, 2004). Whitaker (2000) agreed with Billingsley's (2004) findings which conclude informal unscheduled contacts between the teacher and mentor are perceived as more beneficial than scheduled formal meetings. Whitaker (2000) also found the new teacher mentor meetings must be held weekly to be seen as productive to both parties.

Literature has identified specific components administration should consider when assigning mentors for SPED teachers. When assigning mentors to new teachers, one component which is beneficial is to provide first-year SPED teachers with a mentor from the SPED department, as well as assign a mentor from the general education department (Wasburn-Moses, 2006). Whitaker (2000) found several arrangements were more effective in mentoring beginning SPED teachers including: mentors' teaching the same grade level and same content area as the beginning teacher, mentors' located in close physical proximity, and mentor and new teacher working with students with similar disabilities. Administrators should seek to find a mentor who has many of the same job

characteristics as the beginning SPED teacher (Whitaker, 2000). When faced with the difficulty of finding a mentor who fits all of the traits, Whitaker (2000) found first-year special education teachers indicated a very strong preference for mentors who are SPED teachers over mentors who are in the same school but general education teachers.

Administrators can provide support by ensuring proper induction and mentoring programs are in place for beginning SPED teachers (Darling-Hammond et al., 2017). Providing supports for beginning SPED teachers can improve a beginning teacher's job satisfaction, and in turn, the probability of the teacher remaining in the field (Billingsley & Bettini, 2019; Darling-Hammond et al., 2017; Vittek, 2015). Unfortunately, however, the best induction programs have not shown to compensate for difficult work circumstances such as unwelcoming school cultures, unreasonable jobs, and insufficient resources. (Billingsley, 2010).

Administrative Support. Several studies related to teacher burnout or teacher attrition found administrative support directly related to teachers staying in the special education field or teaching in general (Berry, 2012; Cancio et al., 2013; Carpenter & Dyal, 2001; Conley & You, 2017; Gersten et al., 2001; Inman & Marlow, 2004; Otto & Arnold, 2005; Prather-Jones, 2011; Sayman et al., 2018). Administrators play a key role in meeting the needs of teachers (Billingsley & Bettini, 2019; Conley & You, 2017). Administrative decisions affect physiological needs of a teacher, as identified by Maslow (1954), which lead to job dissatisfaction and teacher burnout (Conley & You, 2017; Sayman et al., 2018). The decisions and actions of administrators can also provide the motivator factors needed to improve job satisfaction and the higher-level needs of faculty (Billingsley & Bettini, 2019; Conley & You, 2017). Research is consistent regarding the

support special education teachers receive from administration can impact the teacher's decision to remain in the teaching profession (Billingsley, 2004; Billingsley & Bettini, 2019). Many studies have researched administrative support as a broad concept (Albrecht et al., 2009; Carver-Thomas & Darling-Hammond, 2017; Conley & You, 2017), while other studies have focused on specific characteristics of administrative support (Berry, 2012; Cancio et al., 2013; Prather-Jones, 2011). Defining administrative support in broad terms encompasses the traits of supporting an inclusive culture for both special education and general education teachers, providing needed resources, making inclusive decisions, fostering a collaborative culture, and increasing administrators' ease of accessibility (Billingsley & Bettini, 2019; Conley & You, 2017).

When studying intent of teachers to remain in their teaching positions, perceived support from administration contributed to making teachers much more likely to remain in their teaching positions (Albrecht et al., 2009; Conley & You, 2017; Miller et al., 1999; Westling & Whitten, 1996; Youngs et al., 2011). Boe et al. (1999) found teachers were four times more likely to remain in their positions if the teachers felt supported by building administration. Recent studies have also shown, when teachers are asked why they chose to either leave or stay, a common factor is administrative support (Billingsley, 2007; Billingsley & Bettini, 2019; Carver-Thomas & Darling-Hammond, 2017).

Recent studies have examined specific components of administrative support which impact a teacher's intent to stay in the teaching profession (Cancio et al., 2013; Conley & You, 2017; Prather-Jones, 2011). Prather-Jones (2011) found teachers felt more supported when principals expressed appreciation, demonstrated trust and respect,

and involved the teacher in making disciplinary decisions. Additionally, Cancio et al. (2013), found appreciation and trust were significantly higher for teachers intending to stay in the profession long term. Additionally, Cancio et al. (2013) found when teachers are provided with opportunities for growth, teachers have a greater intent of staying in the profession long term. Specific to special education teachers, Schnorr (1995) noted special education teachers reported, the top incentive to teach was having a supportive principal. Gersten et al. (2001) identified the overall job satisfaction of special education teachers is impacted by the actions of building principals and indirectly impacts the teacher's intent to stay in the profession.

Billingsley (2010) and Bozonelos (2008) sought to provide administrators with a more detailed list of ways to support special education teachers. Billingsley (2010) focused on reducing the attrition rate of new special education teachers by reviewing research from 1992-2007. Bozonelos (2008) leaned on research supporting four categories of teacher support first defined by House (1981): emotional support, instrumental support, informational support, and appraisal support. The work of the two researchers reached very similar conclusions for administrators to better support teachers. Administrators should promote a positive and inclusive school climate and show a knowledge and awareness for the job expectations of special education teachers (Billingsley, 2010; Bozonelos, 2008). The duties of a special educator are different than responsibilities of a teacher in general education. The difference in the duties and responsibilities between special education and general education teachers promotes a sense of belonging for special educators (Billingsley, 2010; Bozonelos, 2008). Another similar conclusion, Billingsley (2010) and Bozonelos (2008) found includes the creation

and fostering of a collaborative culture which allows inclusive interaction between special education teachers and teachers in general education can attribute to higher attrition rates. Special educators need to feel respected by their general education colleagues. Billingsley (2010) and Bozonelos (2008) also identified having a learning culture promoting strong induction and ongoing professional development needs to be a priority for administrators as the motivator factors of professional development and growth can lead to higher job satisfaction (Herzberg et al., 1959). Lastly, Billingsley (2010) and Bozonelos (2008) recommend administrators must be aware of the caseload size and instructional range of each special education teacher. In recognizing the demands, caseload size, and instructional range, Billingsley (2010) and Bozonelos (2008) each suggest reducing the number of coaching duties and administrative tasks expected of special education teachers. Additionally, Billingsley (2010) also recommended administrators should demonstrate consistent behavior expectation school wide as well as provide support for new teachers in learning how to work effectively with paraprofessionals.

Working Conditions. Billingsley's extensive research into special education teacher attrition has consistently yielded a teacher's working conditions encompassing role demands and school climate as one factor which causes teachers to leave (1993, 2004, 2019). In their work, Billingsley and Bettini (2019) used Ladd's definition of working conditions to include "physical features...organizational structure, and the sociological, political, psychological, and educational features of the work environment" (2011, p. 240). Adverse workplace conditions are most often associated with reasons special educators leave the field (Ingersoll & May, 2012; Leko & Smith, 2010;

McLeskey & Billingsley, 2008; Nance & Calabrese, 2009; Tyler & Brunner, 2014; Vittek, 2015). When the physiological and safety needs of an individual are unmet, the higher-level needs of the individual are also unmet (Maslow, 1954). The demands of special education teachers are linked to high attrition within the field in various studies due to the frustrations special education teachers experience on a daily basis (Bettini et al., 2017; Boe et al., 2008; Emery & Vandenberg, 2010). Daily frustrations often occur for beginning special education teachers, who are overwhelmed by the expectation of collaborating with general education teachers while still providing individualized instruction in their own classrooms (Bettini et al., 2017; Griffin et al., 2009). Beginning teachers often find the amount of paperwork burdensome and confusing, while also having little to no time to collaborate with colleagues (Griffin et al., 2009). Kaff (2004) found 48% of special educators planning to leave the profession reported too many demands interfered with taking care of students. More recently, Bettini et al. (2017) found a strong, indirect relationship between workload manageability and intent to stay when surveying special education teachers.

Job responsibilities of special education teachers include but are not limited to standard teacher paperwork (grading, school or district paperwork, etc.), creation of IEP paperwork, documentation supporting the student's IEP, scheduling and conducting IEP meetings, creation of individualized assignments in every class, and fulfilling supervisory duties as assigned by the school (Mehrenberg, 2013; Nance & Calabrese, 2009; Suter & Giangreco, 2009; Vittek, 2015). The most commonly mentioned component of the special education teacher's job design includes the time taken away from actually teaching as a result of time needed to complete paperwork and administrative tasks

(Billingsley & Bettini, 2019; Gee & Gonsier-Gerdin, 2018; Mehrenberg, 2013; Nance & Calabrese, 2009; Tyler & Brunner, 2014). Such factors create a sense of emotional exhaustion, depersonalization, and low levels of satisfaction with the job for special education teachers, resulting in burnout (Maslach, 2001; Williams & Dikes, 2015). Nance and Calabrese (2009) conducted a qualitative study of current and former special education teachers seeking to find why some teachers left and why other teachers stayed. Three of the four findings by Nance and Calabrese (2009) implied both groups of teachers were overwhelmed by legal and administrative requirements. The findings of the overwhelming amount of legal and administrative requirements had an influence on teachers' decisions to either stay or leave their current positions (Nance & Calabrese, 2009). The study found schools may improve the retention of special education teachers by better listening and seeking to understand the needs of special education teachers (Nance & Calabrese, 2009).

School climate is an important variable to consider in regard to teacher job satisfaction and attrition as the school's climate can address if a school or district is a positive place to work (Billingsley, 2004). School climate has been linked with teacher attrition of general educators and special educators since the early 1980s (Billingsley, 1993; Bloland & Selby, 1980; Chandler, 1983). Special educators experiencing a positive school climate are more likely to stay in their positions (Billingsley, 2004; Billingsley & Bettini, 2019). In two recent similar studies, researchers sought to determine special educators' intent to stay as a function of the climate and culture experienced in the schools (Conley & You, 2017; Jones et al., 2013). Jones et al. (2013) found special education teachers perceiving a climate of collective responsibility were

more committed to the school but the perception did not predict the teacher's commitment to the position. Special education teachers perceiving they were a strong fit with their school, were more committed to their teaching assignment and school (Billingsley & Bettini, 2019; Jones et al., 2013). Additionally, Conley and You (2017) found secondary special education teachers rating items of positive school climate highly demonstrated a higher intent to stay, work commitment, career commitment, and job satisfaction. Furthermore, earlier studies by Berry (2012) and Albrecht et al. (2009) produced similar findings regarding positive school climate as well (as cited by Billingsley & Bettini, 2019).

Summary

Research reveals schools retaining special education teachers is a national problem as teachers are experiencing high levels of burnout and low levels of job satisfaction (Billingsley, 2004; Billingsley & Bettini, 2019; Donne & Lin, 2013; Edgar & Pair, 2005; Fore et al., 2002; Kaff, 2004; Mehrenberg, 2013; Menlove et al., 2004; Mitchell & Arnold, 2004; Plash & Piotrowski, 2006; Tyler & Brunner, 2014; Whitaker, 2003). Researchers identify several reasons special education teachers leave the profession and the components necessary to encourage teachers to stay in the profession (Boe et al., 1999; Donne & Lin, 2013; Edgar & Pair, 2005; Langher et al, 2017; Spector, 2016). Factors such as low levels of job satisfaction can cause teachers to burnout and leave the classroom (Gee & Gonsier-Gerdin, 2018). Herzberg et al. (1959) found low levels of job satisfaction are a result of not meeting motivator needs. However, literature has shown administrators can have a significant impact on a special educators' intent to stay through the administrator's decision making process, induction programs, school

culture, and more (Berry, 2012; Cancio et al., 2013; Prather-Jones, 2011; Sayman et al., 2018). Administrators and district leaders ultimately implement policies and practices which can impact the job satisfaction of teachers (Billingsley & Bettini., 2019; Conley & You, 2017). Research has revealed consistent motivator incentives such as financial incentives, teacher induction programs, professional development, administrative support, and improved workplace conditions can increase the likelihood a teacher will stay in the profession (Billingsley, 1993; 2004; 2019). This study sought to determine the impact components have on a special education teacher's decision to renew his or her teaching contract for the next school year following administrative approval for rehire.

Chapter Two provided a thorough review of the literature pertaining to special educator attrition numbers and how the numbers were associated with teacher burnout. Legal landmarks regarding special education were highlighted as such legal decisions have contributed to teacher stress (Bettini et al., 2017; Mandlawitz, 2016; Wright, 2010). Incentives to retain quality special educators were detailed and included incentives were financial incentives, teacher induction programs, professional development, administrative support, and improved workplace conditions.

Chapter Three provides the study's methodology, including the purpose of the study, research questions, null hypotheses, participants, selection and sampling, research setting, design, instrumentation, procedures, and data analysis. Chapter Four includes the presentation of data collected, review of data organization, and the reporting and analysis of the findings of the quantitative study. Chapter Five summarizes findings, offers conclusions, proposes implications for practice, and makes recommendations for future research.

CHAPTER THREE

METHODOLOGY

Introduction

This study attempted to determine the ability of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) to predict contract renewal of special education teachers following administrative approval for rehire. Herzberg's et al. (1959) work on hygiene and motivator factors concluded hygiene factors are predictors of job dissatisfaction and motivator factors are vital in affecting job satisfaction (Foor & Cano, 2011; Ford, 1992). School districts are struggling to hire and retain special education teachers due to teacher burnout and low levels of job satisfaction (Billingsley & Bettini, 2019; Donne & Lin, 2013; Edgar & Pair, 2005; Plash & Piotrowski, 2006; Tyler & Brunner, 2014). Special education is an area identified as having a critical shortage by the United States Department of Education since 1990 (Williams & Dikes, 2015). Special education teachers leave the field at a rate of approximately 30% within the first three years and nearly 50% by the end of the fifth year of teaching (Donne & Lin, 2013; Edgar & Pair, 2005; Langher et al., 2017). Research has revealed consistent motivator incentives such as financial incentives, teacher induction programs, professional development, administrative support, and improved workplace conditions can increase the likelihood a teacher will stay in the profession (Billingsley, 1993; 2004; 2019). Teachers with high levels of job satisfaction are more likely to remain in their teaching position (Knox & Anfara, 2013). Spector's (1985) survey provided specific factors to review in determining the areas of the job leading to satisfaction in the job. This study

attempted to add to the research on what will aid in solving the problem of special education teacher shortages through the lens of job satisfaction.

Chapter Three presents the methodology used to analyze the data collected from special education teachers in Missouri public schools concerning the nine facets of the Job Satisfaction Survey (Spector, 1985) ability to predict contract renewal decisions. The chapter outlines the methodology used in collecting survey data for analysis. Within the chapter the following sections are discussed: purpose of the study, participants, selection/sampling, research setting, research design, and instrumentation.

Purpose for the Study

The purpose of this quantitative correlational study is to determine the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers in Missouri public schools to renew contracts following administrative approval for rehire. The independent variables of this study include pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication. The dependent variable includes the teacher's decision to renew the contract for the next academic school year. Correlational research was used to identify trends occurring naturally and the use of the data to make predictions for the given population (Simon, 2011). Relationships identified were used to predict contract renewal decisions following administrative approval for rehire of special education teachers.

Research Questions

RQ1: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **elementary special education teachers**?

RQ2: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **secondary special education teachers**?

RQ3: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **all special education teachers**?

Null Hypotheses

H₀1: The variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the **elementary special education teacher's** decision to renew the teaching contract following administrative approval for rehire.

H₀2: The variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the **secondary special education teacher's** decision to renew the teaching contract following administrative approval for rehire.

H₀₃: The-variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the decision of **all special education teacher's** to renew the teaching contract following administrative approval for rehire.

Participants

The participants targeted for this study included elementary and secondary special education teachers in Missouri public schools. Data provided by the Missouri Department of Elementary and Secondary Education (DESE) for the 2019-20 academic year showed student enrollment was approximately 881,000 students divided across 518 districts serving students from K-12. The 518 school districts employ 8,240 teachers in special education and of the 8,240 teachers, 8,029 were certified to teach special education (DESE, n.d.d.). Additionally, the average teacher salary in the state of Missouri was \$51,220 and nearly 13.5% of all students enrolled in Missouri schools are identified as students with special needs (DESE, n.d.d.).

Special education teachers come from different backgrounds as individuals may acquire a certification in special education through multiple routes in the state of Missouri. Missouri DESE (n.d.) lists six routes to obtaining a teacher certificate, five of which can lead to certification in special education. Individuals may apply for Missouri certification from out-of-state if individuals currently hold a special education certification in a different state. Additionally, individuals currently holding a doctorate degree in a content area may acquire a teaching certificate by passing a professional knowledge assessment. Moreover, individuals holding a content degree, such as math or English, may obtain a special education certificate through one of two alternative routes

through completing 30 college credit hours and passing the special education content assessment or completing a minimum of 24 hours, teaching for two years, and passing two exit exams. Each of the alternative routes allow individuals to teach while obtaining certification. However, the most popular path is the traditional route. The traditional route requires an individual to pass a four-year course of study at an approved Missouri college, complete a semester of student teaching, and then pass the appropriate content examination. The traditional route results in the receipt of a bachelor's degree and content certification. It is important to note the researchers did reach out for more quantitative data from state organizations, such as the Missouri Council of Administrators of Special Education, but received no response.

Selection/Sampling

Participants included in the research were all special education teachers in Missouri public schools, teaching in kindergarten to twelfth grade. Principals in each of the 518 Missouri public school districts identified by DESE were contacted to request permission to send the survey used for this study. Purposive sampling was used to choose a specific population to sample, thus producing the data necessary to meet the criteria examined (Creswell & Creswell, 2017) as current teachers of special education in Missouri public schools were purposely chosen to meet the researcher's need for study. The researcher chose not to include early childhood (pre-kindergarten) but instead chose to focus on primary and secondary teachers (K-12). In order to provide the most valid results, a survey was sent to all school districts of DESE in the state of Missouri outside of Kansas City, Springfield, and St. Louis who agreed to participate. The school districts of Kansas City, Springfield, and St. Louis were excluded as they are urban school districts

and did not fit the parameters of the study. For the protection of all participants, data were collected through an anonymous digital format and participants had no known risk. Names of schools and participants were anonymous and participants could remove themselves from the study at any time. Additionally, all responses were voluntary, the data from the study were kept on a password protected computer, and files were deleted once data were analyzed. The Job Satisfaction Survey (Spector, 1985) was used to gather demographic information and basic information regarding whether pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication influenced the special education teacher's decision to renew his/her contract for the following school year. The application Microsoft Forms was utilized as the application allowed for easy access to the data for the researcher as well as provided a convenient way for respondents to answer the questions. Furthermore, in accordance with the guidelines of Southwest Baptist University regarding the protection of human participants, a request for review was submitted to the Research Review Board for approval to send a survey to 515 school districts in the state of Missouri and only after receiving official approval did the researcher move forward with participant recruitment and data collection for the study.

Logistic regression is used when one or more independent variables determine an outcome, which are then measured as a dichotomous dependent variable. The dependent variable of this study was a dichotomous variable as the dependent variable had two possible outcomes. Data in this study was not linear but took on the shape of a logistic curve. Logistical regression requires a minimal sample size to be at least 10 times as many cases as the predictor variables (Fong, 2015; Peduzzi et al., 1996; Warner, 2013).

In the study, nine predictor variables (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) were used. Hosmer et al. stated, “There has been surprisingly little work on sample size for logistic regression.” (2013, p. 402). The authors (Hosmer et al., 2013) suggested following Peduzzi et al.’s (1996) conclusion to use a sample size of 10 events per predictor variables so this study needed at least N=90 samples. However, not all respondents could be on contract renewal and surveys could be incomplete upon submission. Thus, taking each of the factors into account, a reasonable goal of participants was N=250, however the study needing at least N=90 samples.

Research Setting

The research setting was limited to public elementary and secondary schools (kindergarten-twelfth grade) in the state of Missouri. The Missouri DESE is comprised of 518 districts with 567 high schools, an additional 341 schools which identify as middle schools or junior high schools, and 1,229 elementary schools. Public schools were chosen due to the ease of access to information regarding public schools through the Missouri DESE website. The top three demographics represented by Missouri public school students were approximately 70% White, 15% Black, and 7% Hispanic (DESE, n.d.d.). Nearly 13% of Missouri public school students are classified as special education and approximately 49% of Missouri public school students qualify for the federal Free and Reduced Lunch program (DESE, n.d.d.). Additionally, Missouri public schools have had a combined average graduation rate of around 88% and a dropout rate of less than 2% from 2017-2019 with the average expenditure per pupil in Missouri around \$11,000 (DESE, n.d.d.). Missouri’s 518 school districts employ 8,240 teachers in special

education with 8,029 of the teachers fully certified to teach special education (DESE, n.d.d.). Moreover, the average teacher salary in the state of Missouri was \$51,220 in 2019 (DESE, n.d.d.).

Each year the Department of Elementary and Secondary Education (DESE) of Missouri releases a report showing trends in teacher recruitment and retention. The 2019 Recruitment and Retention report shows, from 2013-2019, Missouri public schools have consistently had an annual attrition rate of 13-14%. Approximately 40% of Missouri teachers leave the profession within the first three years of teaching and approximately 55% leave within the first five years of teaching (DESE, n.d.d.). Additionally, for the 2018-2019 school year, Missouri hired more teachers combined and issued nearly 1,500 fewer initial certificates than in the previous five years combined which indicates a supply and demand concern. According to the report on teacher shortage areas released by the U.S. Department of Education in 2016, Missouri has increased the number of subject areas experiencing a shortage from five in 2012-2013 to 22 in 2016-2017.

Research Design

This study attempted to determine the ability of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) to predict contract renewal decisions of special education teachers following administrative approval for rehire. The study was a non-experimental, correlational design as a non-experimental design was chosen because the researcher did not have control over the values of the independent variables (Gay et al., 2009). Correlational research is used to identify trends occurring naturally and then uses the data to make predictions for the given population (Simon, 2011). The study intended to establish the relationship between each independent variable and the

dependent variable as the relationship or lack of relationship could add to the knowledge base of how public schools seek to retain special education teachers.

The quantitative analysis was conducted using a binomial logistic regression. A binomial logistic regression model predicts the probability of an event to fall into one of two outcomes of the dichotomous dependent variable based on one of many independent variables (Pelham, 2013). The independent variables included the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) developed by Spector (1985). Each independent variable was continuous, measured on a numeric scale of one (1) to six (6) by the participants to demonstrate varying levels of agreement and disagreement. The dependent variable was dichotomous and represented the teachers' decision to renew contracts for the following academic school year. The dependent variable was measured with the answer of yes or no by the participant when completing the survey.

A survey design was chosen because a survey design provides a quantitative description of trends, attitudes, or opinions of a population by studying a sample of the population (Creswell & Creswell, 2017). The opinions and attitudes of special education teachers toward their job describes a great deal about their overall satisfaction with the job. The survey used was the Job Satisfaction Survey (JSS) by Spector (1985), with an additional section which was included for demographic data. The survey effectively measures the satisfaction of workers in a job based on nine facets and include: pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication. The survey was originally

developed to measure job satisfaction in the field of human services but has since been effectively used to measure job satisfaction in other fields of work as well (Franek & Vecera, 2008).

Instrumentation

The instrument chosen for this study was the Job Satisfaction Survey (JSS) by Spector (1985) and a demographic and professional practice questionnaire. The Job Satisfaction Survey, developed by Spector (1985), was created for the purpose of measuring job satisfaction for the human services sector. However, teachers are considered a part of the human services sector because the teaching profession is based on a high interaction with people (Maslach, 2001). The Job Satisfaction Survey (Spector, 1985) has been used in numerous studies (Fila et al., 2014; Talevich et al., 2014) and cited over 800 times, according to statistics represented on Google Scholar (2020). Spector (1985) was intentional in developing a survey which specifically addressed key issues in human service personnel. Spector allows the use of his survey free of charge on two conditions: (a) it is used for non-commercial educational or research purposes, and (b) the results are shared with Spector so he may continue to update the norms (Spector, 2019).

The Job Satisfaction Survey (JSS) (Spector, 1985) consists of nine facets closely related to the motivational and hygiene factors of Herzberg's Two Factor Theory (1959). The JSS was developed to measure employee job satisfaction applicable specifically to human service, public, and nonprofit sector organizations (Spector, 1985). The reliability of the survey is reported by Spector (1985) as an alpha of 0.91 with an acceptable reliability of coefficient of .70 or higher (Cortina, 1993). Appendix B contains a table of

reliabilities for each subscale which includes: pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication (Spector, 1985). Additionally, the Job Satisfaction Survey (JSS) (Spector, 1985) located in Appendix A is a 36-question assessment presented within a six-point Likert scale with choices ranging from ‘strongly disagree’ to ‘strongly agree.’ A value of one (1) is assigned to the strongest disagreement and ranges to a value of six (6) for the strongest agreement and values are reversed for negatively worded questions. The estimated time of completion for the survey is under 15 minutes. The JSS was utilized to measure the job satisfaction of elementary and secondary special education teachers as the “The JSS was predicated on the theoretical position that job satisfaction represents an affective or attitudinal reaction to a job” (Spector, 1985, p. 694). Thereby, the JSS was designed to measure both individual attitudinal facets as well as facets which work in combination with each other (Spector, 2016). The survey divides the data into nine subscales including pay, promotion, supervision, fringe benefits, operating conditions, contingent rewards, co-workers, nature of work, and communication, and includes an overall score for job satisfaction. The nine subscales are represented in Table 1.

Table 1

Facet Subscales of the Job Satisfaction Survey (JSS)

Facet Subscales	Survey Item Numbers
Pay	1,10,19,28
Promotion	2,11,20,33
Supervision	3,12,21,30

Table 1 (continued)

Fringe Benefits	4,13,22,29
Contingent Rewards	5,14,23,32
Operating Conditions	6,15,24,31
Coworkers	7,16,25,34
Nature of Work	8,17,27,35
Communication	9,18,26,36

The JSS has 36 items with nine facets or subscales with a theoretical minimum score of 36 to a possible maximum of 216. Each facet is assessed through four questions, producing a facet subscale score ranging from four to 24. A subscale score of the grouped four-item facet may be interpreted using the following representations: four to 12 represents dissatisfied, 13 to 15 signifies ambivalent, and 16 to 24 indicates satisfied. The total score of the 36-item survey can thus be interpreted: 36 to 108 represents dissatisfaction, 108 to 144 signifies ambivalent, and 144 to 216 indicates satisfaction (Fong, 2015). In addition to the 36-item JSS, the demographic and professional practice questionnaire, created by the researcher, was also implemented to gather information on age, ethnicity, marital status, highest level of educational attainment, licensure level, salary, number of schools taught at, years of teaching experience, belief in professional development, classroom autonomy, achievement of students, and mentor teacher experience.

Procedures

An application was submitted to Southwest Baptist University and approval for research was granted by the Research Review Board. An email (Appendix C) was sent to

building principals with a brief description of the study and a request for permission to survey teachers in his/her building. Included in the email was a request for the survey to be forwarded to the special education teachers in their buildings as well as the disclosure and privacy policy specifically detailing the participant's name would not be asked in the survey. Additionally, at the end of the email, a link to Microsoft Forms was provided for the teachers to access and take the Job Satisfaction Survey (JSS). When participants opened the link to Microsoft Forms, the participants were asked to give informed consent before beginning the survey and were then presented with the instructions for completing the survey once consent was given. After the participants read the instructions for the survey, the following page displayed basic demographic questions and the actual survey instrument.

All aspects of survey distribution and retrieval were set to be completed within a four-week time frame. Missouri principals were sent the questionnaire and given two weeks to respond. A follow-up email (Appendix D) was sent to districts not responding to email requests after two weeks once the survey had been sent. Two weeks were given to teachers in each district agreeing to participate in the study to complete the survey. A follow-up email was sent to teachers not responding in agreeing districts if the teacher had not completed the survey after 14 days. After downloading the completed survey data from Microsoft Forms, the results were cleaned in Microsoft Excel and further analyzed using the SPSS software.

Data Analysis

In order to address the research questions of this non-experimental correlational study, a binomial logistic regression was implemented on the data. The binomial logistic

regression model was chosen as the study contained only one dichotomous dependent variable potentially affected by nine independent variables (Fong, 2015; Gall et al., 2006). A binomial logistic regression (also called binomial regression) requires a set of assumptions be met. The assumptions for a binomial regression include the following: verifying the study contains the dependent variable is dichotomous, ensuring more than one independent variable, an existing linear relationship between continuous independent variables and the logit transformation of the dependent variable, and the categories on the dependent variable are assumed to be exhaustive and mutually exclusive (Warner 2013; Wright et al., 1995). Additionally, basic assumptions were met to move forward with running the statistic.

Spector's (1985) survey on Job Satisfaction (JSS) was used to collect the perceptions of special educators on their level of job satisfaction. Data was collected through Microsoft Forms for ease of use for the participants and for ease of data collection for the researcher. Demographic questions were also added by the researcher to the JSS asking the participants age range, marital status, ethnicity, level of education, salary, level of certification, years of experience, and number of schools taught in. Additionally, 12 other demographic questions were also added which sought to address areas of improvement needed in professional development, school autonomy, and mentorship. Data was reviewed for outliers and cleaned by using SPSS software to organize the raw data excel file upon receiving at least 135 survey responses, 150% of the 90 needed survey responses, and incomplete responses were removed to have complete data for analysis. After reviewing the data, SPSS software was used to run the binomial regression. Statistic variance models were created, and the fit of each model was

discussed using Cox & Snell R^2 and Nagelkerke R^2 . Classification tables were included to demonstrate the accuracy of the models provided through the binomial regression. The classification tables show the relationship between each of the nine facets of the JSS and the special education teacher's intent for contract renewal (Fong, 2015). Statistics were then categorized and organized to address each of the research questions.

In order to answer each research question, the independent variables were analyzed by looking at the variables of the binomial regression model. A separate binomial regression model was used to address each research question as each one posed the same basic question but focused on participants teaching from different grade levels. The Wald test was used to determine the statistical significance of each independent variable with regard to the outcome. The binomial regression models were ran at a significance level of $\alpha < .05$. An alpha value within the .05 threshold represents the rejection of the null hypotheses, whereas, an alpha value over .05 represents failure to reject the null hypotheses (Pelham, 2013). The alpha value measures the statistical significance between the variables measured, in this study included each of the nine facets and the intent of a special education teacher to choose to renew his or her contract.

Odds ratios of each independent variable were analyzed to determine the relationship between each variable and its outcome (Peduzzi et al., 1996). Odds ratios are the change in odds for the dependent variable for every one unit of increase for the independent variable (Peduzzi et al., 1996). Values larger than one indicate the odds of the outcome are greater by the ratio value for the given independent variable (Peduzzi et al., 1996). Values smaller than one indicate the odds of the outcome are lessened by the ratio value for the given independent variable (Peduzzi et al., 1996). For example, the

odds of a special education teacher renewing his or her contract are a value greater (odds > 1) or lessened (odds < 1) as a result of each unit of increase in regard to the rating of pay. Odds ratios are only reviewed for independent variables with statistical significance of $\alpha < .05$ (Pelham, 2013).

Summary

In Chapter Three, the researcher provided the methodology of the study. The variables were tested for a correlation and the variables found to have a correlation were identified, a binomial regression model fit to the data was completed, and included the model used to make the predictions. The manner of collection and interpretation of the data was detailed as well as the objective of the study and the three primary research questions. RQ1 focused on identifying the relationship of the nine facets of the JSS on contract renewal decisions following administrative approval for rehire of elementary special education teachers. RQ2 focused on identifying the relationship of the nine facets of the JSS on contract renewal decisions following administrative approval for rehire of secondary special education teachers. RQ3 focused on identifying the relationship of the nine facets of the JSS on contract renewal decisions following administrative approval for rehire of all special education teachers. Furthermore, demographic information was also collected in addition to the JSS to aid in disaggregating data. In Chapter Four, the researcher presents the collected data and findings of the study. Chapter Five provides a summary of the research, discussion of limitations, and recommendations for further study.

CHAPTER FOUR

ANALYSIS OF DATA

Introduction

The purpose of this quantitative correlational study was to determine the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) as part of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers in Missouri public schools to renew contracts following administrative approval for rehire. Chapter Four provides a brief review of the research process. In addition, Chapter Four also includes an analysis of the data, as discussed in Chapter Three, to address the research questions.

Special education teacher attrition has been at concerning levels across the United States for many years (Billingsley, 2004; Billingsley & Bettini, 2019; Tyler & Brunner, 2014). Nearly two-thirds of the total attrition of teachers is pre-retirement which is normally associated with job dissatisfaction (Fong et al., 2016; Ondrasek et al., 2020; Sutchter et al., 2016). Maslow's Hierarchy of Needs (1954), stating all humans require satisfactory fulfillment of their physiological and safety needs before moving to the next higher level, relates to teacher job satisfaction in how the needs of teachers are met. Additionally, Herzberg et al.'s (1959) Motivation and Hygiene Theory describes motivator factors can impact job satisfaction, and hygiene factors can reduce job dissatisfaction. Thus, employees not feeling satisfied with their jobs are more likely to leave their jobs (Spector, 2016). Accordingly, the purpose of this study was to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985)

and the contract renewal of special education teachers following administrative approval for rehire to help address the lack of literature regarding the job satisfaction of special education teachers.

The Job Satisfaction Survey (JSS) by Spector (1985) was utilized for this study as it has been used to reliably measure job satisfaction of individuals working in the human services sector (Franek & Vecera, 2008). The JSS, along with an included demographic survey, was distributed via email to building principals within each of the 518 school districts located in Missouri. Principals were asked to forward the email, containing the survey link, to the school's current special education teachers. Following four weeks after the initial email was sent, the survey was closed, and data was cleaned through the use of Microsoft Excel. Research data was then uploaded into the IBM Statistical Package for Social Sciences (SPSS) software program for analysis. Chapter Four provides a description of the analysis, which sought to determine whether the null hypotheses were accepted or rejected. Additionally, Chapter Four describes the sample and demographics of the participants, methods used to clean the data, and descriptive analysis in correlation to the levels of job satisfaction.

Research Questions

RQ1: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **elementary special education teachers**?

RQ2: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and

communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **secondary special education teachers**?

RQ3: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **all special education teachers**?

Null Hypotheses

H₀1: Each of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict an **elementary special education teacher's** decision to renew a teaching contract following administrative approval for rehire.

H₀2: Each of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict a **secondary special education teacher's** decision to renew a teaching contract following administrative approval for rehire.

H₀3: Each of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) do not significantly predict the decision of **all special education teachers** to renew a teaching contract following administrative approval for rehire.

Data Analysis and Findings

Surveys were sent to principals in each of the 518 Missouri school districts identified by DESE. Principals were requested to forward the survey to all special education teachers in the school building for completion. A four-week time period was

provided for participants to respond to the survey questions. The survey included Spector's (1985) survey on Job Satisfaction (JSS) as well as 13 demographic questions intended to help the researcher sort and organize the data. Survey results were collected through Microsoft Forms, with data cleaning completed through Microsoft Excel and the statistical tool, SPSS. The variables of Spector's survey (pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and coworkers) were analyzed in relation to the satisfaction of special education teachers. Any relation, if established, was then used to determine whether a special education teacher could be expected to renew his or her contract through the use of a logistic regression model.

Samples

Participants included in the research were special education teachers in non-urban Missouri public schools, currently teaching in kindergarten through twelfth grade. Surveys were completed by 161 special education teachers. The participant's gender is listed in Table 2 which shows the majority of participants were female ($N=140$) which consisted of 87.0%, while males made up 21 participants, which was 13.0%. Additionally, Table 3 demonstrates the age of participants was evenly distributed with 20% to 30% of the participants represented in each age category. Furthermore, Table 4 shows 119 (73.9%) participants were married, while 42 (26.1%) were non-married. Subsequently, a reasonable goal of participants was $N=250$, but the study needed at least $N=90$ samples.

Table 2*Gender of Participants*

Gender	<i>N</i>	%
Male	21	13.0%
Female	140	87.0%

Table 3*Age Distribution of Participants*

Age	<i>N</i>	%
21-30	33	20.5%
31-40	43	26.7%
41-50	51	31.7%
51+	34	21.1%

Table 4*Marital Status of Participants*

Marital Status	<i>N</i>	%
Married	119	73.9%
Non-Married	42	26.1%

Demographics

The Missouri Department of Elementary and Secondary Education is comprised of 518 districts with 567 high schools with an additional 341 schools middle schools or

junior high schools, and 1,229 elementary schools. Public schools were chosen due to the ease of access to information regarding public schools through the Missouri DESE website. Surveys were completed by 161 special education teachers. The ethnicity of the participants is displayed in Table 5 and shows 155 (96.3%) of the participants were White, 2 (1.9%) Black, 2 (1.9%) Hispanic, and 2 (1.9%) participants identified themselves as Other. Additionally, Table 6 demonstrates the yearly salary range for participants and 72 (44.7%) made less than \$43,000 and 39 (24.2%) made \$50,000 per year or more. Important to note in regard to the salary of the participants, the average yearly teacher salary in the state of Missouri was \$51,220 in 2019 (DESE, n.d.d.).

Table 5

Ethnicity of Participants

Ethnicity	<i>N</i>	%
White	155	96.3%
Black	2	1.2%
Hispanic	2	1.2%
Other	2	1.2%

Table 6*Yearly Salary Range of Participants*

Yearly Salary	<i>N</i>	%
\$35,000-\$42,999	72	44.7%
\$43,000-\$49,999	50	31.1%
\$50,000-\$58,999	21	13.0%
\$59,000+	18	11.2%

Data Cleaning

Data was collected using the Microsoft Forms application over a four-week period. Survey results were automatically stored in a Microsoft Excel document as a component of the application and for easier data dissemination. A total of 332 surveys were submitted, with 161 completed surveys used after following data cleaning through Excel. Data was then downloaded into and organized using the SPSS statistical tool. Through the process of organizing the data, values were adjusted for the negatively worded items in Spector's (1985) Job Satisfaction Survey. The negatively worded items comprised the first 36 items of the full survey used for the study and the items were renumbered by changing a rating of 1 to 6, 2 to 5, 3 to 4, 4 to 3, 5 to 2, and 6 to 1. Survey items related to each of the nine facets (Table 1) were totaled to determine the level of job satisfaction associated with each factor as the totals were needed to assist in answering each of the three research questions.

Each of the three research questions required a coding system for each of the responses regarding the grade level taught and teacher renewal. A value of one was used to indicate the participant was employed in an elementary building, and a value of two was used to indicate the participant was employed in a secondary building (middle school, junior high, high school). For teacher renewal, a value of one was used to indicate the participant intended to renew his or her contract for the next school year, while a value of two indicated the participant did not intend to renew his or her contract for the next school year. Using the coding system for the participant responses, a binomial logistic regression model was run through SPSS to reject or fail to reject the null hypotheses.

Research Question Analysis

Participants of the study included 161 special education teachers who provided complete responses to the survey. Of the 161 total responses, 65 were elementary teachers and 94 were secondary teachers (Table 7). Responses collected from each participant were used to address each of the three research questions:

- **RQ1:** What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of **elementary special education teachers**?
- **RQ2:** What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract

following administrative approval for rehire of **secondary special education teachers**?

- **RQ3:** What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher’s decision to renew the teaching contract following administrative approval for rehire of **all special education teachers**?

A binomial logistic regression model was conducted to determine the correlation between each of the independent variables and the dichotomous dependent variable. Due to the extreme ratio of yes to no responses regarding renewal (Table 8), a valid statistical model could not be generated to answer if the null hypotheses could be rejected or fail to be rejected. Additionally, Table 9 shows the Omnibus Test ($p = .359$) indicated the model was not statistically significant, hence the p -values for the factors could not be used. Furthermore, the Hosmer and Lemeshow Test (Table 10) returned a p -value of less than .001 ($p < .001$); which also confirmed the model was a poor fit. Finally, the p -values for all the coefficients were greater than .05 which also confirmed the model was not useful in predicting the renewal responses (Appendix E).

Table 7

Grade Levels of Participants

Grade Level	<i>N</i>	%
Elementary	67	41.6%
Secondary	94	58.4%

Table 8*Selection to Renew Contract*

Renewal	<i>N</i>	%
Yes	152	94.4%
No	9	5.6%

Table 9*Omnibus Tests of Model Coefficients*

		Chi-square	<i>df</i>	Sig.
Step 1	Step	38.462	36	0.359
	Block	38.462	36	0.359
	Model	38.462	36	0.359

Table 10*Hosmer and Lemeshow Test*

Step	Chi-square	<i>df</i>	Sig.
1	64.004	8	$p < .001$

Due to the fact a valid statistical model could not be generated with the data, the null hypotheses were unable to be rejected or fail to be rejected. Subsequently, data retrieved through the survey was run through descriptive analysis for the purpose of identifying trends and themes. The results of the descriptive analysis which represented levels of job satisfaction were subdivided into demographic factors of gender, grade level

of school, yearly teacher salary, feelings regarding professional development, and years of teaching.

Levels of Satisfaction

The data collected for the study included 161 surveys which were completed by elementary and secondary special education teachers from non-urban school districts. Spector's (1985) Job Satisfaction Survey (JSS) was initially developed to assess the level of satisfaction an individual has with their job. The survey has shown to be valid and reliable with employees of the human services job field, of which education is encompassed within (Franek & Vecera, 2008). Table 11 presents the number and percent breakdown of job satisfaction for the 161 participants based on each of the nine facets of the JSS.

Table 11*Overall Satisfaction of Special Education Teachers*

Overall Satisfaction	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	70	43.48	40	24.84	51	31.68
Promotion	78	48.45	43	26.71	49	30.43
Supervision	9	5.59	12	7.45	140	86.96
Fringe Benefits	36	22.36	42	26.09	83	51.55
Contingent Rewards	48	29.81	27	16.77	86	53.42
Operating Conditions	92	57.14	38	23.60	31	19.25
Coworkers	4	2.48	15	9.32	142	88.20
Nature of Work	3	1.86	8	4.97	150	93.17
Communication	22	13.66	28	17.39	111	68.94
Overall	8	4.97	65	40.37	88	54.66

Overall, 88 (54.66%) special education teachers participating in the study were satisfied with their jobs, which is more than the majority of teachers surveyed, with only 8 (4.97%) special education teachers were unsatisfied with their jobs. The areas of supervision, coworkers, and nature of work were identified as having the highest satisfaction by having at least 140 participants for each area. Accordingly, the same areas were shown to have the fewest number of participants unsatisfied as well, with each area having fewer than 10 participants identifying as unsatisfied with the area. Subsequently, areas of highest dissatisfaction were pay, promotion, and operating conditions, with

operating conditions representing more than half (57.14%) of participants were unsatisfied. Overall, the majority of participants were satisfied with the other fields (fringe benefits, contingent rewards, and communication).

Gender Analysis

Surveys were completed by 21 male teachers and 140 female teachers. Of the males surveyed, 17 (81.0%) taught at the secondary level, while 4 (19.0%) taught at the elementary level. Fourteen (66.7%) of the male participants were paid below \$50,000 per year, with 11 (52.4%) paid below \$43,000 per year. All 21 male participants indicated the intent to renew their teaching contract for the following school year.

Ratings to questions from Spector's (1985) Job Satisfaction Survey (JSS) are represented in Table 12. Totals were determined by the sum of the responses to the questions pertaining to each facet of the survey. Overall, male participants showed to be mostly satisfied with the facets of the JSS. Supervision, nature of work, and coworkers had the highest number indicated by the male participants satisfied, 20 (95.24%). Subsequently, males appeared to be most dissatisfied with operating conditions with nine (42.86%) unsatisfied, eight (38.1%) ambivalent, and only four (19.05%) respondents identified as satisfied with operating conditions.

Table 12*Satisfaction of Male Special Education Teachers*

Male Special Education Teachers	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	7	33.33	7	33.33	7	33.33
Promotion	3	14.29	6	28.57	12	57.14
Supervision	1	4.76	0	0	20	95.24
Fringe Benefits	8	38.1	5	23.81	8	38.1
Contingent Rewards	4	19.05	4	19.05	13	61.9
Operating Conditions	9	42.86	8	38.1	4	19.05
Coworkers	0	0	1	4.76	20	95.24
Nature of Work	0	0	1	4.76	20	95.24
Communication	2	9.52	5	23.81	14	66.67
Overall	0	0	9	42.86	11	52.38

Females comprised 86.96% of the participants who completed the survey for the study. Of the female respondents, 77 (55%) taught at the secondary level and 63 (45%) taught at the elementary level. Moreover, 108 (77.1%) female participants made below \$50,000 for their yearly salary.

Ratings to questions from Spector's (1985) Job Satisfaction Survey (JSS) are represented in Table 13 with totals determined by the sum of responses to the questions pertaining to each facet of the survey. Females identified areas of higher dissatisfaction

than the males with seven facets of the JSS. Female participants were the most unsatisfied with the operating conditions of their job, 83 (59.29%) than any other facet. Pay and promotion also showed high levels of dissatisfaction. Additionally, 45% of the female participants were shown to be unsatisfied with the pay of their position, with only 31.4% indicating satisfaction. Furthermore, similar results were found with opportunities for promotion as 68 (48.57%) were unsatisfied and 37 (26.43%) were satisfied. Subsequently, areas of highest satisfaction of the female participants included supervision, nature of work, and coworkers which was identical to the highest levels of satisfaction indicated by the responses of the male participants as well.

Table 13

Satisfaction of Female Special Education Teachers

Female Special Education Teachers	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	63	45	33	23.57	44	31.43
Promotion	68	48.57	35	25	37	26.43
Supervision	8	5.71	12	8.57	120	85.71
Fringe Benefits	28	20	37	26.43	75	53.57
Contingent Rewards	44	31.43	23	16.43	73	52.14
Operating Conditions	83	59.29	30	21.43	27	19.29
Coworkers	4	2.86	14	10	122	87.14
Nature of Work	3	2.14	7	5	130	92.86
Communication	20	14.29	23	16.43	97	69.29

Overall	8	5.71	56	40	76	54.29
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Grade Level of School

A total of 161 completed surveys were collected from special education teachers, with 67 participants from elementary schools and 94 participants from secondary schools (Table 7). Of the 67 elementary participants, 54 (80.6%) received a yearly salary less than \$50,000. Fifty-eight elementary teachers (86.6%) found value in professional development opportunities, whereas 9 (13.4%) participants found no value in regard to professional development. The participants teaching in elementary schools were represented by 63 female teachers and 4 male teachers.

Ratings to questions from Spector's (1985) Job Satisfaction Survey (JSS) are represented in Table 14. Totals were determined by the sum of responses to the questions pertaining to each facet of the survey. Overall, a high percentage of elementary teachers were satisfied with the supervision, nature of work, and coworkers within their school. Furthermore, communication also was shown as an area of satisfaction for elementary teachers. Subsequently, areas of concern shown by low levels of satisfaction included promotion and operating conditions, with 37 (55.22%) of the participants responding they were unsatisfied with the operating conditions of their school.

Table 14*Satisfaction of Elementary Special Education Teachers*

Elementary Special Education Teachers	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	22	32.84	22	32.84	23	34.33
Promotion	30	44.78	19	28.36	18	26.87
Supervision	2	2.99	5	7.46	60	89.55
Fringe Benefits	12	17.91	16	23.88	39	58.21
Contingent Rewards	18	26.87	12	17.91	37	55.22
Operating Conditions	37	55.22	16	23.88	14	20.90
Coworkers	1	1.49	8	11.94	58	86.57
Nature of Work	0	0	2	2.99	65	97.01
Communication	11	16.42	8	11.94	48	71.64
Overall	4	5.97	20	29.85	43	64.18

Teachers of secondary special education students comprised 58.4% of the participants of the study (Table 7). Of the 94 secondary participants, 68 (72.3%) received a yearly salary less than \$50,000. Eighty-three secondary teachers (88.3%) found value in professional development opportunities, whereas 11 (11.7%) secondary teachers found no value in professional development. The participants teaching in secondary schools were represented by 77 female teachers and 17 male teachers.

Table 15 presents the cumulative ratings for each of the nine facets from the questions from Spector's (1985) Job Satisfaction Survey for secondary special education

teachers. Overall, secondary teachers responded in the same manner as elementary teachers by finding satisfaction with supervision, coworkers, and nature of work. Furthermore, secondary teachers found a higher level of dissatisfaction with pay, along with operating conditions, and promotion, with 48 (51.06%) of the participants responding they were unsatisfied with the pay/compensation for their current position.

Table 15

Satisfaction of Secondary Special Education Teachers

Secondary	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	48	51.06	18	19.15	28	29.79
Promotion	41	43.62	22	23.40	31	32.98
Supervision	7	7.45	7	7.45	80	85.11
Fringe Benefits	24	25.53	26	27.66	44	46.81
Contingent Rewards	30	31.91	15	15.96	49	52.13
Operating Conditions	55	58.51	22	23.40	17	18.09
Coworkers	3	3.19	7	7.45	84	89.36
Nature of Work	3	3.19	6	6.38	85	90.43
Communication	11	11.70	20	21.28	63	67.02
Overall	4	4.26	45	47.87	45	47.87

Professional Development

Participants were asked to answer the question, ‘Do you feel professional development opportunities are meaningful?’ Responses were rated on a 3-point Likert

scale with 1 representing ‘Not at all,’ 2 indicating ‘Sometimes,’ and 3 denoting ‘Most of the time.’ The scores on Spector’s (1985) Job Satisfaction Survey for each participant were sorted based on the rating to the professional development question. Table 16 shows the distribution of satisfied to unsatisfied teachers who selected ‘Not at all’ in regard to professional development.

Table 16

Satisfaction of Teachers Rating PD Opportunities as Not Meaningful

Not at all	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	15	75.00	3	15.00	2	10.00
Promotion	15	75.00	2	10.00	3	15.00
Supervision	3	15.00	2	10.00	15	75.00
Fringe Benefits	6	30.00	5	25.00	9	45.00
Contingent Rewards	14	70.00	1	5.00	5	25.00
Operating Conditions	14	70.00	3	15.00	3	15.00
Coworkers	1	5.00	2	10.00	17	85.00
Nature of Work	2	10.00	2	10.00	16	80.00
Communication	8	40.00	2	10.00	10	50.00
Overall	3	15.00	12	60.00	5	25.00

Participants who indicated professional development opportunities were meaningless, demonstrated a high level of dissatisfaction in several areas: pay, promotion, contingent rewards, and operating conditions. Each of the four facets indicated more than half of participants were unsatisfied with that part of their job. Additionally, of the

20 special education teachers who found professional development meaningless, three (15%) were fully unsatisfied, five (25%) were satisfied, while the majority of the participants, 12 (60%), were ambivalent regarding their job.

Table 17

Satisfaction of Teachers Rating PD Opportunities Sometimes Meaningful

Sometimes	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	46	42.20	30	27.52	33	30.28
Promotion	46	42.20	32	29.36	31	28.44
Supervision	5	4.59	8	7.34	96	88.07
Fringe Benefits	26	23.85	33	30.28	50	45.87
Contingent Rewards	31	28.44	20	18.35	58	53.21
Operating Conditions	60	55.05	31	28.44	18	16.51
Coworkers	1	0.92	11	10.09	97	88.99
Nature of Work	1	0.92	6	5.50	102	93.58
Communication	13	11.93	22	20.18	74	67.89
Overall	5	4.59	47	43.12	57	52.29

Overall, participants who found professional development opportunities as ‘sometimes’ meaningful, demonstrated an increased level of dissatisfaction in the areas of pay, promotion, and operating conditions. Also, the same participants indicated satisfaction in the areas of supervision, coworkers, and nature of work. Subsequently, of the 109 participants, 57 (52.29%) were overall satisfied with their jobs, while only 5 (4.59%) were unsatisfied.

Table 18*Satisfaction of Teachers Rating PD Opportunities Meaningful Most of the Time*

Most of the Time	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	9	28.13	7	21.88	16	50.00
Promotion	10	31.25	7	21.88	15	46.88
Supervision	1	3.13	2	6.25	29	90.63
Fringe Benefits	4	12.50	4	12.50	24	75.00
Contingent Rewards	3	9.38	6	18.75	23	71.88
Operating Conditions	18	56.25	4	12.50	10	31.25
Coworkers	2	6.25	2	6.25	28	87.50
Nature of Work	0	0	0	0	32	100
Communication	1	3.13	4	12.50	27	84.38
Overall	0	0	6	18.75	26	81.25

Participants who indicated professional development opportunities were meaningful most of the time, demonstrated an increased level of dissatisfaction in only one area which included operating conditions. Also, more than half of the same group of participants found satisfaction in seven of nine facets: pay, supervision, fringe benefits, contingent rewards, coworkers, nature of work, and communication. Furthermore, all 32 participants indicated satisfaction with their nature of work with 26 (81.25%) of the participants indicating overall satisfaction with their jobs and none indicating dissatisfaction.

Yearly Teacher Salary

Of the 161 individuals participating in the survey, 122 participants made less than \$50,000 a year for teaching special education, while 39 participants made \$50,000 or more per year. Furthermore, 72 (44.7%) participants made less than \$43,000 for teaching special education. Subsequently, Table 19 and Table 20 show the levels of satisfaction of special education teachers in this study, sorted by participants who made less than \$50,000 per year and participants who made \$50,000 or more per year, respectively.

Table 19

Satisfaction of Teachers with a Yearly Salary of Less Than \$50,000

Yearly Salary < \$50,000	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	56	45.90	31	25.41	35	28.69
Promotion	50	40.98	35	28.69	37	30.33
Supervision	7	5.74	7	5.74	108	88.52
Fringe Benefits	30	24.59	33	27.05	59	48.36
Contingent Rewards	34	27.87	19	15.57	69	56.56
Operating Conditions	69	56.56	28	22.95	25	20.49
Coworkers	3	2.46	8	6.56	111	90.98
Nature of Work	3	2.46	7	5.74	112	91.80
Communication	18	14.75	16	13.11	88	72.13
Overall	7	5.74	46	37.70	69	56.56

Participants who made less than \$50,000 yearly in salary demonstrated an increased level of dissatisfaction in the areas of pay, promotion, and operating conditions, with more than half (56.56%) of the participants unsatisfied with operating conditions. Additionally, the same participants found satisfaction with the areas of supervision, coworkers, nature of work, and communication. Overall, of the 122 participants, 69 (56.56%) of the participants were satisfied with their jobs, while only 7 (5.74%) of the participants were unsatisfied.

Table 20

Satisfaction of Teachers with a Yearly Salary of \$50,000 or More

Yearly Salary \geq \$50,000	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	14	35.90	9	23.08	16	41.03
Promotion	21	53.85	6	15.38	12	30.77
Supervision	2	5.13	5	12.82	32	82.05
Fringe Benefits	6	15.38	9	23.08	24	61.54
Contingent Rewards	14	35.90	8	20.51	17	43.59
Operating Conditions	23	58.97	10	25.64	6	15.38
Coworkers	1	2.56	7	17.95	31	79.49
Nature of Work	0	0	1	2.56	38	97.44
Communication	4	10.26	12	30.77	23	58.97
Overall	1	2.56	19	48.72	19	48.72

Participants who made a salary of \$50,000 per year or more showed an increased level of dissatisfaction in the areas of promotion and operating conditions, with more than half (58.97%) of participants unsatisfied with operating conditions. Also, the same participants indicated satisfaction in the areas of supervision, fringe benefits, coworkers, nature of work, and communication with 18 of the 39 participants having taught 21 years or more. Additionally, of the 39 participants, only 1 (2.56%) indicated dissatisfaction. Interestingly, the same number of participants 19 (48.72%) were ambivalent to their job as participants who indicated satisfaction. Moreover, a higher percentage, (56.56%) of participants who made less than \$50,000 per year were satisfied with their job when compared to the participants (48.72%) who made \$50,000 or more per year.

Years of Teaching

Of the 161 participants who participated in the survey, 42 participants were in their first five years of teaching, while 35 participants were veterans with 21 years or more years of experience teaching. Data was divided into ten-year increments of 0-10 years, 11-20 years, and more than 21 years teaching. Subsequently, Table 21 highlights the time of highest attrition by displaying the data for teacher participants with five or less years of teaching experience.

Table 21*Satisfaction of Teachers Within the First 5 Years*

Years 1-5	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	21	50.00	11	26.19	10	23.81
Promotion	19	45.24	10	23.81	13	30.95
Supervision	4	9.52	1	2.38	37	88.10
Fringe Benefits	11	26.19	8	19.05	23	54.76
Contingent Rewards	12	28.57	5	11.90	25	59.52
Operating Conditions	24	57.14	9	21.43	9	21.43
Coworkers	1	2.38	2	4.76	39	92.86
Nature of Work	0	0	6	14.29	36	85.71
Communication	8	19.05	3	7.14	31	73.81
Overall	3	7.14	15	35.71	24	57.14

Participants within their first five years of teaching showed a higher level of dissatisfaction in the areas of pay and operating conditions. Additionally, the same participants also found satisfaction in the areas of supervision, coworkers, nature of work, and communication. Overall, of the 42 participants, 27 (57.14%) were satisfied with their jobs, while only three (7.14%) were unsatisfied. Furthermore, participants within the first 10 years of teaching experience showed similar levels of satisfaction as the beginning teachers. A slight increase in satisfaction with pay and nature of work was present, but overall satisfaction levels were when years 5-10 were included (Table 22).

Table 22*Satisfaction of Teachers Within the First 10 Years*

Years 1-10	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	34	47.22	19	26.39	19	26.39
Promotion	32	44.44	18	25	22	30.56
Supervision	6	8.33	3	4.17	63	87.50
Fringe Benefits	17	23.61	16	22.22	39	54.17
Contingent Rewards	24	33.33	9	12.50	39	54.17
Operating Conditions	39	54.17	21	29.17	12	16.67
Coworkers	3	4.17	6	8.33	63	87.50
Nature of Work	2	2.78	6	8.33	64	88.89
Communication	12	16.67	10	13.89	50	69.44
Overall	5	6.94	29	40.28	38	52.78

Table 23 provides the levels of satisfaction for teachers with 11-20 years of experience. Again, satisfaction with pay and nature of work with participants having 11-20 years of experience indicated a slight increase. While several other factors slightly decreased in satisfaction, special education teachers with 11-20 years of experience slightly increased (53.70%) when compared with the teachers in the first 10 years of teaching (52.78%). Furthermore, the overall percentage of unsatisfied teachers decreased with more years of experience from 6.94% of teachers with 10 or less year of experience to 3.70% of teachers with 11-20 years of experience.

Table 23*Satisfaction of Teachers With 11-20 Years of Experience*

Years 11-20	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	25	46.30	12	22.22	17	31.48
Promotion	24	44.44	15	27.78	15	27.78
Supervision	2	3.70	6	11.11	46	85.19
Fringe Benefits	11	20.37	15	27.78	28	51.85
Contingent Rewards	15	27.78	12	22.22	27	50
Operating Conditions	35	64.81	8	14.81	11	20.37
Coworkers	1	1.85	6	11.11	47	87.04
Nature of Work	1	1.85	2	3.70	51	94.44
Communication	6	11.11	10	18.52	38	70.37
Overall	2	3.70	23	45.59	29	53.70

Participants with more than 20 years of teaching experience were the most satisfied in seven of nine factors. Additionally, the veteran teachers were the most satisfied overall when compared to the other subgroups of participants with less than 20 years of experience with 60% of teachers satisfied and one (2.86%) participant unsatisfied. All 35 participants with more than 20 years of experience were satisfied with the nature of work. Subsequently, however, the veteran teachers were still mostly unsatisfied with operating conditions of their job (51.43%). Furthermore, the overall percentage of teachers unsatisfied decreased at each level of experience from 6.94% of

teachers with 10 or less year of experience to 3.70% of teachers with 11-20 years of experience, to 2.86% of teachers with more than 20 years of experience.

Table 24

Satisfaction of Teachers with More than 20 Years of Experience

Years > 20	Unsatisfied		Ambivalent		Satisfied	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Pay	11	31.43	9	25.71	15	42.86
Promotion	15	42.86	8	22.86	12	34.29
Supervision	1	2.86	3	8.57	31	88.57
Fringe Benefits	8	22.86	11	31.43	16	45.71
Contingent Rewards	9	25.71	6	17.14	20	57.14
Operating Conditions	18	51.43	9	25.71	8	22.86
Coworkers	0	0	3	8.57	32	91.43
Nature of Work	0	0	0	0	35	100
Communication	4	11.43	8	22.86	23	65.71
Overall	1	2.86	13	37.14	21	60

Open-Ended Question

To better understand the effect of a national pandemic on teacher belief systems, an open-ended question was asked at the end of the survey. The open-ended question asked, ‘How has the current virtual learning environment because of COVID-19 influenced your beliefs in the context of operating procedures, nature of work, and communication?’ The researcher reviewed all 161 responses to the open-ended question by initially reading through the responses twice before developing a list of preliminary

categories and themes. After reading through the responses, several themes emerged and were given initial codes using the cells within a Microsoft Excel document. Responses not pertaining to the study (i.e. ‘Too little too late, knee jerk reaction to changing conditions’) and isolated responses not creating a theme with any other response were removed. After cleaning the data, 128 responses remained, creating seven themes, which were: benefits, communication critical, disadvantage students, equity, flexibility, harder, and stress. Second themes were also identified and noted when present in the respondent’s answer as well. Furthermore, the themes were organized by elementary level teachers and secondary level teachers in relation to the research questions.

Although responses varied overall, most participants indicated the pandemic negatively impacted their beliefs. From the responses of the participants, three themes emerged as having the greatest impact. First, the largest number of responses, 36 (28.1%) participants identified communication was critical in making the education process work within a pandemic learning environment and identified the importance of clear communication. Specific responses for participants included, “Communication is more important than ever” and “There has to be a uniform, clearly communicated set of expectations and procedures from administration on how teachers should operate their virtual instruction; otherwise, the educational experience of kids learning virtually will deteriorate quickly.”

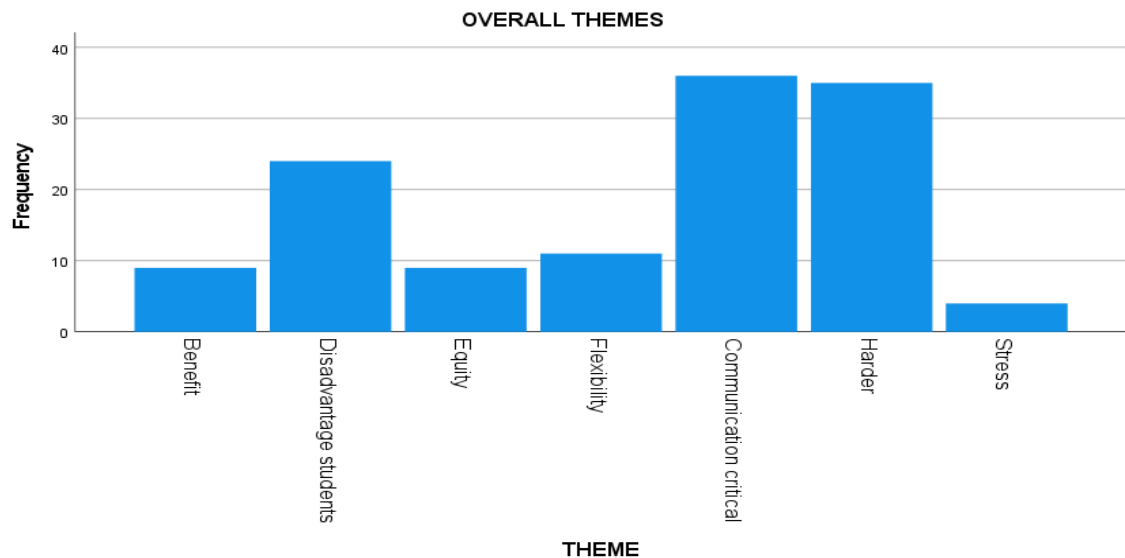
Next, special education teachers felt the pandemic made their jobs more challenging. The terms ‘harder’ and ‘difficult’ were cited 27 times in responses from participants. Both elementary and secondary teachers responded with statements identifying the challenges and difficulties presented by working with special education

students in a virtual learning environment. A secondary teacher stated, “My students and I work harder during virtual than when present... What takes 5 minutes in school takes 30 outside.”

Finally, 24 (18.8%) participants indicated the COVID-19 pandemic resulted in a disadvantage for students with special needs. The virtual learning environment made it more difficult for students with special needs to receive appropriate instruction and accommodations. Responses included, “Virtual learning is not as effective as in person for anyone” and “I feel the transition to virtual learning is a disadvantage to the vast majority of all students and an extreme disadvantage to special education students.”

Figure 1

Themes of COVID-19 Impact on Teacher Beliefs



Summary

Chapter Four presented the analysis and findings of the quantitative study. Completed surveys were received from 161 special education teachers from non-urban, public school districts in Missouri. The surveys were intended to answer the three

research questions: What is the ability of pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication to predict the teacher's decision to renew the teaching contract following administrative approval for rehire of 1) elementary special education teachers; 2) secondary special education teachers; 3) all special education teachers. Of the 161 completed surveys, 152 teachers responded 'yes' which indicated an intent to renew their teaching contract for the next year. Due to the skewness of the data, with 94.41% of participants responding 'yes', a valid regression model was unable to be found. Thus, the researcher was unable to either reject or fail to reject the null hypotheses of the study.

Data was analyzed utilizing the SPSS statistical software, with descriptive statistics run on the individual facets of Spector's (1985) Job Satisfaction Survey which includes the facets of pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. Data were organized by the number of participants found to be satisfied, ambivalent, and unsatisfied with each of the nine facets and overall satisfaction as well. The researcher sought to find patterns in the data by disaggregating the data into the categories of gender, grade level taught, yearly teacher salary, feelings toward professional development, and years taught. Overall, the data revealed special education teachers were consistently satisfied with the nature of work and coworkers regardless of how the data was viewed. In addition, an open-ended question was analyzed which connected the data to the COVID-19 pandemic.

Chapter Five provides a summary of the findings and conclusions drawn from the data. Additionally, Chapter Five provides the methods used to collect and analyze the

data, findings and recommendations for future research, practical implications, and conclusions. Furthermore, recommendations are provided for further study on the topic of special education teacher retention and attrition relating to job satisfaction.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to determine the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers in Missouri public schools to renew contracts following administrative approval for rehire. Special education has been an area identified as having a critical shortage by the United States Department of Education since 1990 (Williams & Dikes, 2015). Between 2006 and 2016, the number of special education teachers decreased by 17%, while the number of students receiving special education services dropped by only 1% (Samuels, 2018). In response to the decrease of special education teachers, the researcher attempted to address the gap in literature regarding the motivation behind high levels of special education teacher attrition.

In the review of literature, job satisfaction was found to be related to teacher retention, as low levels of job satisfaction can influence a teacher's decision to stay in the profession (Gee & Gonsier-Gerdin, 2018; Griffin et al., 2009). Special education teachers are often described as suspect to increased stress, low job satisfaction, and ultimately burnout (Emery & Vanderberg, 2010). Herzberg et al. (1959) found when motivator factors such as professional development are not met by an organization, the individual can experience a lack of job satisfaction. When the motivator factors for teachers are not met, teachers are often led to leave the teaching profession (Billingsley, 2004). Teachers with higher-level, motivator needs of esteem and self-actualization tend

to be more satisfied with their jobs (Herzberg, et al., 1959). The Job Satisfaction Survey (JSS) (Spector, 1985) consisting of nine facets closely related to the motivational and hygiene factors of Herzberg's Two Factor Theory (1959) were the underlying framework for this study. Accordingly, the quantitative study was conducted to determine the relationship between the facets of the JSS and a special education teacher's decision to return to their teaching position. Chapter Five provides a summary of the methods used to collect and analyze the data, findings and recommendations for future research, practical implications, and conclusions.

Summary of Findings

The research for this study was focused on determining the relationship between the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers to renew contracts following administrative approval for rehire. Surveys were sent via email to 1,911 administrators in non-urban, public school district in Missouri, with only 161 completed surveys returned. Once surveys were returned, a binomial logistic regression was implemented with the data to address the research questions since the study contained only one dichotomous dependent variable which could potentially be affected by nine independent variables (Fong, 2015; Gall et al., 2006). Due to the extreme ratio of yes to no responses regarding renewal, a valid statistical model could not be generated to answer if the null hypotheses could be rejected or fail to be rejected.

Unable to address the research questions, the researcher chose to determine if any relationships existed between the nine facets of the JSS and the level of job satisfaction of

the special education teachers participating in the study. A descriptive analysis was conducted on the data which showed 88 of 161 participants (54.66%) were satisfied overall with their job. Furthermore, only eight (4.97%) special education teachers indicated dissatisfaction with their job. The data collected from the surveys were analyzed in five subgroups: gender, grade level of school, yearly teacher salary, view on professional development, and years of teaching. Of the nine facets analyzed, pay was shown to have the greatest variance from one subgroup to another.

Overall, results of the gender subgroup were very similar between males and females even through a much larger number of participants were female (140) than male (21). Likewise, areas of highest satisfaction for both females and males were supervision, nature of work, and coworkers. Additionally, a high number of participants in both groups were unsatisfied with operating conditions. Furthermore, a low number of participants in both groups satisfied with operating conditions. Subsequently, males were much more satisfied with promotion opportunities in their jobs (57.14%) as opposed to females' satisfaction with promotional opportunities (26.43%).

Results of the subgroup grade level of school were very similar between elementary special education teachers and secondary special education teachers. Areas of highest satisfaction for both elementary and secondary special education teachers were supervision, nature of work, and coworkers. Additionally, a high number of participants in both groups were unsatisfied with operating conditions. Furthermore, a low percentage, 19% of participants in each group was satisfied with operating conditions. Subsequently, secondary teachers were much more dissatisfied with pay in their jobs (51.06%) than elementary teachers (32.84%).

Results of the professional development subgroup were separated into three areas based on the participant's response to the question, 'Do you feel professional development opportunities are meaningful?' Twenty participants responded 'Not at all' to the question with 70% of the 20 participants indicating dissatisfaction in the areas of pay, promotion, contingent rewards, and operating conditions. Five participants indicated overall satisfaction with their jobs, and only three participants indicated dissatisfaction with their job. The second group of participants stated professional development was sometimes meaningful with the teachers in this group more satisfied in all areas than the teachers in group one. Overall, 52.29% of the 109 teachers in group two were satisfied with their job, with 4.59% of the participants dissatisfied. The third group of participants rated professional development opportunities meaningful most of the time as this group showed the highest overall level of job satisfaction at 81.25% for 32 participants. Additionally, zero participants were unsatisfied with their current job and all areas analyzed showed an increase in the overall percent of satisfied participants.

Results of the yearly teacher salary subgroup were separated into two areas: teachers with salaries less than \$50,000 per year (group one) and teachers with salaries of \$50,000 or more per year (group two). Results varied as group one produced a higher percentage of teachers satisfied with their job (56.56%), than group two (48.72%), even though group one earned less pay. In fact, group two resulted in a higher percentage of satisfied teachers in four of nine areas: pay, promotion, fringe benefits, and nature of work. Additionally, group one teachers were more satisfied with contingent rewards (56.56%) than group two teachers (43.59%). Conversely, however, group two teachers

were much more satisfied with fringe benefits (61.54%) than group one teachers (48.36%).

Results of the years taught subgroup were very similar between beginning special education teachers with five years or less, and veteran special education teachers with 10 years or more teaching experience. Of the 42 beginning teachers, 27 (57.14%) were overall satisfied with their jobs, while only three (7.14%) were unsatisfied. Likewise, the results were similar to the overall satisfaction of the veteran teachers which resulted with 56.18% participants satisfied and 3.37% participants unsatisfied. Furthermore, veteran special education teachers were more satisfied than beginning teachers in only two areas: pay and nature of work.

To better understand the effect of a national pandemic on teacher belief systems, the researcher asked an open-ended question of special education teachers, ‘How has the current virtual learning environment because of COVID-19 influenced your beliefs in the context of operating procedures, nature of work, and communication?’ The data collected from the open-ended question resulted in seven themes which emerged from the responses: benefits, communication as critical, disadvantages students, equity, flexibility, harder, and stress. Moreover, three themes stood out from the others: communication as critical, disadvantages students, and harder. Each of the three themes referred to the COVID-19 pandemic having a negative impact on education with only nine responses indicating the pandemic was beneficial to education.

Discussion

The intent of the researcher was to identify a relationship between facets of the Job Satisfaction Survey by Spector (1985) and the intent of a special education teacher to

renew his or her contract for the following year. The data was skewed with 94.4% of participant responses indicating an intent to renew contracts for the following year.

Although the retention of special education teachers was a positive result for schools in retaining special education teachers, the results were unable to fit into a regression model; thus, the research questions were unable to be fully addressed. Consequently, the results contradicted the research regarding special education teacher attrition rates as well as overall teacher attrition rates (McDowell, 2017; Plash & Piotrowski, 2006; Vittek, 2015; Williams & Dikes, 2015). As a result, with such a high retention rate present in the study, further analysis was completed to discover patterns of data which implied the various reasons such a large proportion of participants remained in the teaching position for the following school year. Thus, the researcher analyzed the data in relation to Herzberg et al.'s (1959) Motivation and Hygiene Theory to determine how job satisfaction comprised of the nine facets related to the key findings of literature with the data reflecting participants had a 94.4% retention rate for the following school year.

The study was limited by the study's design which relied on building administration's willingness to distribute the survey to the special education teachers in their respective buildings. A variety of school districts had protocols which limited the number of surveys distributed to the teachers within specific districts. Additionally, responses were sent to the researcher from building principals which indicated the principals were too busy to distribute surveys. The number of participants who completed the survey was a substantial limitation as only 161 completed surveys were returned. The low return rate of the surveys could have been a result of the time period of the study, as the surveys were distributed during the third quarter of the school year,

amidst a time of virtual education due to the COVID-19 pandemic. As indicated by many of the 161 participants, workload and stress had increased during the school year, which could have caused a teacher to place the survey as a low priority or ignore the survey altogether. Additionally, the sample may not have been representative of the entire population with such a low return rate. Finally, the results could be transferable to other school districts in Missouri and states of similar geographic nature mostly across the Midwest.

Monetary income and financial benefits have been a major topic of discussion when recommendations have been made to address the special education teacher shortage. Overall, limited studies have illuminated an increase in pay can increase teacher retention, but monetary income unable to meet the needs of the individual can cause dissatisfaction with a job (Herzberg et al., 1959). The average yearly teacher salary in the state of Missouri the time of this study was \$51,220 (DESE, n.d.d.). More than 75% of the participants in this study earned less than \$50,000 per year, with 44.7% earning less than \$43,000 per year. Generally, the participants, even though a high percentage were unsatisfied with their pay (45.90%), only 5.74% indicated dissatisfaction with their jobs. In comparison, teachers earning \$50,000 or more per year demonstrated a satisfaction rate of 48.72%, which was less than the rate of teachers earning less than \$50,000 per year with a satisfaction rate of 56.56%. The finding aligns with literature stating increased pay has not increased job satisfaction as a motivation factor (Fong, 2015).

Professional development (PD) generated noteworthy results as well as participants were asked to answer the question, ‘Do you feel professional development

opportunities are meaningful?’ Special education teachers who rated PD opportunities as not meaningful were (25% satisfied) dramatically less satisfied with their jobs.

Conversely, special education teachers who rated PD opportunities as meaningful most of the time were the most satisfied individuals in the study with 81.25% of the participants indicating job satisfaction. Thus, the findings of this study support the literature as prior research has identified professional development is positively associated with special education teacher retention (Billingsley, 2010; Billingsley & Bettini, 2019; Langher et al., 2017; Thornton et al., 2007). Special education teachers remaining in their teaching positions have rated professional development as valuable in research, and when done effectively can assist with classroom management, which can contribute to higher levels of academic success (Billingsley & Bettini, 2019; Cornelius et al., 2019; Darling-Hammond et al., 2017; Ondrasek et al., 2020). The connection between each of the variables is unknown as to whether the low satisfaction levels caused the teacher’s perception of PD, or if the teacher’s perception of PD impacted the level of satisfaction the teacher felt toward different areas of the job. Regardless of which variable caused the other, a connection between effective professional development and job satisfaction in special education teachers is evident.

Research is clear regarding how the support special education teachers receive from administration can impact the teacher’s decision to remain in the teaching profession (Billingsley, 2004; Billingsley & Bettini, 2019). Moreover, teachers often feel more appreciated and more confident when administration is supportive, as administrative decisions can affect the physiological needs as well as the esteem needs of a teacher (Conley & You, 2017; Sayman et al., 2018). Supervision is the facet of

Spector's (1985) survey related to administrative support. Subsequently, supervision yielded one of the levels of satisfaction in the study as 75% or more special education teachers, ranging across every subgroup, were satisfied with administrative supervision and support. Schnorr (1995) noted special education teachers reported, the top incentive to teach was having a supportive principal. Additionally, administrative support was referenced in several responses to the open-ended question regarding the effect of the COVID-19 pandemic on teacher beliefs. Emphasis was placed on the value of the administrator, which made the changes occurring to the educational process possible and bearable for teachers during a difficult season. Responses to the open-ended question included, "There has to be a uniform, clearly communicated set of expectations and procedures from administration on how teachers should operate...", "The administration in my district is doing a GREAT job coordinating AMI/AMIX and communicating expectations to us," and "collaboration between the administration and the staff needs to be continuous." The study demonstrated special education teachers having a 94.4% retention rate had only 5.59% of the participants unsatisfied with administrative supervision. Moreover, only one of the nine special education teachers who chose to not renew a teaching contract was unsatisfied with administrative supervision. Subsequently, this implies dissatisfaction with administration is not enough to cause a special education teacher to leave his or her position.

Administrators are responsible for fostering a collaborative culture where special education teachers are included in decision making and working together with general education teachers (Billingsley & Bettini, 2019; Conley & You, 2017). The feelings of special education teachers toward coworkers included another facet with consistently

high levels of satisfaction in the study and had a consistent percentage of 85% in each of the subgroups. As stated in Chapter Two, the creation and fostering of a collaborative culture, allowing inclusive interaction between special education teachers and teachers in general education, can attribute to higher attrition rates (Billingsley & Bettini, 2019; Conley & You, 2017). Ultimately, special educators need to feel respected by their general education colleagues.

Working conditions for special education teachers have historically been stressful and frustrating (Yell, 2019). When working conditions are stressful, such conditions can lead to a teacher's physiological and safety needs not met and can lead to higher levels of dissatisfaction (Maslow, 1954; Herzberg et al., 1959). This study consistently yielded results of 50% or more of special education teachers unsatisfied with the workplace or operating conditions. Special education teachers at every level, every gender, regardless of pay, or years taught yielded high levels of dissatisfaction with operating conditions. The demands of special education teachers, with IEP paperwork, creation of individualized assignments, and fulfilling supervisory duties, have shown to result in emotional exhaustion which can wear the teacher down. Literature identifies emotional exhaustion can eventually lead a teacher to burnout (Maslach, 2001). Subsequently, the special education teachers in this study indicated a high level of dissatisfaction with their operating conditions but still maintained overall satisfaction with their jobs. Such findings are an encouraging and unexpected aspect of this study indicating helping a special education teacher find satisfaction in other areas of their job can help balance the burden created by the operating conditions special to respective positions.

The COVID-19 pandemic impacted the realm of education by requiring teachers to educate students through means of virtual platforms and other forms of distance learning. Participants of the study identified three major themes which stood out from all others: communication as critical, disadvantages students, and harder. The results of the study identified only nine teachers felt the pandemic had been beneficial to education. The three major themes referenced the negative impact the pandemic had on education which resulted with more work on the teachers and made communication more difficult between teachers and students. Prior to the pandemic, special education teachers often already felt overwhelmed by expectations and time constraints (Bettini et al., 2017; Griffin et al., 2009). A participant response received which demonstrated the feeling of increased difficulty was, “The hardest year of teaching. Ridiculous workload and expectations even during a year of ‘grit and grace.’” Increased workloads and excessive stress can lead to higher attrition rates, but the stages of burnout as a result of emotional exhaustion can take time to reach the point of the teacher leaving (Maslach, 2001). Prior to completing the study, the researcher’s expectation was the stress and exhaustion from changes due to the COVID-19 pandemic would result in more teacher attrition as such are characteristics of burnout (Maslach, 2001). However, even in the face of changing expectations during the pandemic, special education teachers continued to stay in their teaching positions for the following year. Thus, further research is recommended on studying how special education teachers managed the increased work and stress following the pandemic.

Professional Implications

Retaining special education teachers is a daunting task for schools across the United States. Likewise, the intent of this study was to determine how levels of job satisfaction related to a special education teacher's intent to renew contracts for the following school year. Consequently, the null hypotheses were neither able to be rejected nor fail to be rejected due to the skewness of the data so a more descriptive analysis was performed on the data collected. Subsequently, this study benefits administrators and school district leaders by identifying factors which could contribute to school districts retaining special education teachers. Additionally, the study challenges the belief regarding one area of dissatisfaction could cause a special education teacher to leave his or her teaching position.

Research suggests factors can influence a special education teacher to leave the job, but a direct relationship between any individual factor and intent to leave was not identified (Billingsley & Bettini, 2019; Tyler & Brunner, 2014). Based on results of the study, special education teachers unsatisfied with any single factor, such as operating conditions, were very likely to renew the contract for the following school year. Prevalent in the data from the study, the set of special education teachers choosing to not renew their teaching contract were unsatisfied in several areas, while the set of special education teachers did choose to renew teaching contracts were unsatisfied with operating conditions. Additionally, the data revealed the set of special education teachers in this study were very satisfied with the nature of their work, regardless of other factors, thus, suggesting teachers can manage an area of dissatisfaction when they see the purpose of their work and take pride in it. In fact, comments to the open-ended question

demonstrated how a special education teacher will stay committed even when not satisfied during a pandemic, “As a special educational teacher, the environment has been anything but precedent and normal. Although each day our students and teachers face many challenges to overcome the severe nature of our work, I can whole-heartedly say that this time has only restored my faith in teachers and education.” Maslach’s (2003) Hierarchy of Needs Theory on burnout suggested the stress of the dissatisfaction can result in burnout and result in the teacher not renewing his or her contract. Subsequently, school leaders need to prioritize placing value and purpose on the work completed by special education teachers.

Another point illuminated by the data identified the impact of financial incentives in regard to the retention of special education teachers. Government entities and school districts should not put their efforts solely into financial incentives to retain special education teachers. Teachers in the study who earned less than \$50,000 per year which is less than the state average yearly salary, were more satisfied with their jobs than teachers who made \$50,000 or more per year. Overall, pay and benefits were not high areas of satisfaction found in this study, which suggests putting money toward the retention problem in schools may not be the best answer.

The results of the study indicated the perception of special education teachers toward professional development was related to satisfaction in many facets of the survey. Participants valuing professional development as beneficial most of the time were the most likely to be satisfied with their jobs. Likewise, the level of satisfaction could also be interpreted special education teachers who are satisfied with their jobs tend to view professional development beneficial most of the time as none of the teachers were

dissatisfied with their jobs. Furthermore, participants finding little to no value in professional development were the least satisfied teachers of the study. Interestingly, the only statistically significant relationship found in the research was the impact of effective mentoring as professional development and the first-year SPED teacher's plans to remain in SPED (Whitaker, 2000). Planning and implementing professional development for teachers can be time-consuming, but school leaders should make time for SPED teachers to receive effective professional development.

The COVID-19 pandemic caused a significant change in normal teaching methods across the world. The study asked the perspectives of special education teachers regarding their feelings about teaching during the pandemic. The results, discussed earlier in Chapter Five, revealed special education teachers felt the change, which was a result of the pandemic, was burdensome and negatively impacted the special education student population. Even teachers who saw the benefit with virtual learning acknowledged the stress and extra work involved. However, with further training, virtual learning could be beneficial for students with disabilities. Overall, however, in the time of a pandemic with little to no training, teachers felt students were unable to have their needs met and virtual learning was more difficult for students with disabilities. As a result of such a drastic change in teaching methods and delivery, the need for effective communication between all stakeholders was highlighted. Though such a shift with teaching methods was necessary given the pandemic, school leaders should have worked to assist special education teachers and made the necessary adjustments to use such methods for the advantage of students with disabilities.

As a result of the findings of this study, school leaders should not place priority on addressing attrition numbers through teacher pay. Instead, school leaders should attempt to place more intentional emphasis on a) assisting special educators to find the value and purpose within their positions; b) avoiding financial incentives as an emphasis for effort; c) providing effective professional development which is seen as meaningful by special educators; and d) assisting special educators with adjusting to alternative methods of instruction introduced as a result of the COVID-19 pandemic. Furthermore, this study included only participants teaching in non-urban schools in Missouri and is generalizable to other school districts in states of similar geographic nature, mostly across the Midwest.

Recommendation for Future Research

After completing the study, it is recommended the study be replicated with a larger sample. Consequently, the small number of complete responses comprised of 161 participants limited the effectiveness of the data when running the regression model for prediction purposes. A larger sample would provide more diverse data, and also make the descriptive and statistical analysis more valid in answering the research questions. The results of the study did not indicate a relationship between the nine facets of the Job Satisfaction Survey by Spector (1985) and a special education teacher's intent to renew his or her contract for the following school year. A relationship between the nine facets of the Job Satisfaction Survey (Spector, 1985) and renewal of special education teacher contracts needs further research.

The findings of this study lead to some practical recommendations for further research. Given the findings regarding the relationship between levels of satisfaction and

teacher perspective on professional development, the researcher recommends a causal comparative study be run to test the impact of one variable on the other. Subsequently, efforts must continue in seeking a solution to the attrition problem of special education teachers as the outcome of the results of the study suggest further exploration.

Additionally, the timing of the survey could be adjusted as this survey was distributed nearly one year after the beginning of the COVID-19 pandemic which shut down virtually all schools across the U.S. As a result of the pandemic, teachers were forced to educate students through virtual learning platforms, which for many teachers was a new experience to implement virtual learning with students and could have impacted levels of job satisfaction. Moreover, a delimitation of the study was to only survey non-urban public schools in Missouri. Thus, future considerations should include the urban public school districts of Kansas City, St. Louis, and Springfield to receive a more representative sample of school districts in Missouri. Furthermore, this study could be replicated by comparing satisfaction levels and renewal intent of non-urban districts with urban districts as teachers in urban public schools face different challenges than teachers in rural or suburban schools which could contribute to varying levels of job satisfaction.

Additionally, the study could be replicated by comparing the satisfaction levels and renewal intent of special education teachers teaching in public schools with teachers in both private and charter schools to broaden the field of study. Furthermore, given the consistently high satisfaction rate for nature of work, further research is also recommended for finding the causes of such high levels of satisfaction, which can contribute high levels of special education teacher retention. The results of additional

research could be used to further aid administrators with implementing ways to retain special education teachers.

Conclusion

Several factors can influence the decision of special education teachers to stay or leave a position. Some influencing factors focus on working conditions and can include burdensome paperwork, lack of administrative support, low financial compensation, and poor school climate (Billingsley & Bettini, 2019; Tyler & Brunner, 2014). Other factors more focused on teacher preparation and can include teacher preparation programs, teacher induction done at the district level, and continued effective professional development (Billingsley, 2004; Darling-Hammond et al., 2017; Ondrasek et al., 2020). However, literature showing a relationship between special education teachers and job satisfaction is limited. Based on the theories of Maslow (1954) and Herzberg et al. (1959), the study attempted to show a relationship between special education teacher satisfaction and the decision of a teacher to renew a teaching contract. Though no relationship was established, as a regression model was unable to fit the data, the study demonstrated a connection between feelings toward professional development and the level of teacher satisfaction. Thus, teachers who placed more value on professional development found more satisfaction with their jobs through personal growth opportunities. Additionally, the findings of this study have contributed to the research on how teacher pay is to level of job satisfaction as teachers making more money were less satisfied overall instead of more satisfied.

The purpose of this study was to determine the relationship of the nine facets (pay, promotion, supervision, fringe benefits, performance-based rewards, operating

procedures, coworkers, nature of work, and communication) of the Job Satisfaction Survey (JSS) by Spector (1985) and the decision of special education teachers in Missouri public schools to renew contracts following administrative approval for rehire. Due to the extreme ratio of yes to no responses regarding renewal, a valid statistical model could not be generated to answer if the null hypotheses could be rejected or fail to be rejected. Although a valid statistical model could not be generated was an unfortunate result; however, the researcher believes this study could be replicated with a larger sample to produce data which is less skewed.

The descriptive analysis of this study illuminated a connection between feelings toward professional development and the level of teacher satisfaction. The relationship between professional development and teacher satisfaction supports Herzberg et al.'s (1959) Hygiene-Motivator Theory on job satisfaction, as effective professional development can provide feelings of personal development and growth and can lead to higher job satisfaction (Pinder, 1984). Motivator factors, according to Herzberg et al.'s (1959) Hygiene-Motivator Theory, promote job satisfaction but do not prevent job dissatisfaction. Though not in support of Herzberg et al.'s (1959) Hygiene-Motivator Theory regarding motivator factors, no special education teacher who indicated value in professional development was dissatisfied with his or her job. Thus, the findings highlight more emphasis should be placed on planning effective professional development by school leaders as more than 80% of teachers specifying professional development as meaningful most of the time were satisfied, and 0% were unsatisfied. The greatest difference in satisfaction numbers were from teachers who found professional development meaningful most of the time. Therefore, the time spent on

professional development must be meaningful to the special education teacher as the professional development assists teachers with classroom management, lowering stress levels, and contributing to teachers experiencing higher levels of success (Darling-Hammond et al., 2017). Overall, teachers need to feel value in themselves and what they do to avoid experiencing Maslach's (2003) stages of burnout over time. Likewise, effective professional development can not only deter burnout but can help teacher's reach a higher level of esteem and self-actualization. Subsequently, administrators must be aware of the needs of the teachers to satisfy this expectation as each school will have varied professional development needs. Accordingly, many schools seek to make professional development a priority by adjusting calendars to four-day school weeks or implementing early release days for students to provide professional development time for teachers during the normal school day. Further study into this relationship could be of significant benefit to school leaders when determining how to allocate district funds to provide and implement most effective teacher support and improvement.

The COVID-19 pandemic caused a significant change in education for special education teachers and students in every school district. During the shift to virtual learning, most special education teachers felt more burden for the education of their students with disabilities as most teachers were unable to use familiar methods to aid instruction. This study found in spite of a time of increased unfamiliarity, special education teachers still chose to renew their contracts. Prior to completing the study, the researcher's expectation was the stress and exhaustion from changes due to the COVID-19 pandemic would result in more teacher attrition as such factors are the beginning characteristics of burnout according to Maslach (2003). However, in the face of

changing expectations, special education teachers continued to stay in their teaching positions for the following year. Moreover, teaching during the pandemic has also highlighted the importance of communication to teachers. When traditional methods of communication and teaching are no longer available, becoming familiar with new methods is stressful, but also necessary to master to be effective as a teacher. If teacher attrition was caused by one factor, such as stress from workplace conditions, then the teaching environment during the COVID-19 pandemic would have resulted in much higher turnover. However, the special education teachers showed a high level of dissatisfaction with their operating conditions while still maintaining overall satisfaction with their jobs. Such findings are an encouraging and unexpected aspect indicating helping a special education teacher find satisfaction in other areas of their position can help balance the burden created by the workplace conditions special to their respective job positions. Special education teachers can manage an area of dissatisfaction when they see the purpose of their work and take pride in it. Accordingly, a stand-alone factor resulting in such dissatisfaction which prompts special education teachers not to renew a contract did not surface from the data collected from the study. Many special education teachers make a difference in ways general education teachers have limited training as special education teachers are trained to meet the unique needs of students who require extra support or varying methods of support, both of which take unique training. Thus, school leaders are tasked with the job of meeting specific needs to reduce the attrition rates of special education teachers across the nation.

REFERENCES

- Abiyou, M. L. (2017). Stress and the Resiliency of Teachers. (OCLC No. 1037097705)
[Doctoral dissertation, University of Missouri-St. Louis]. Retrieved from
<https://irl.umsl.edu/cgi/viewcontent.cgi?article=1679&context=dissertation>
- Albrecht, S. F., Johns, B. H., Mounstevan, J., & Olorunda, O. (2009). Working
conditions as risk or resiliency factors for teachers of students with emotional and
behavioral disabilities. *Psychology in the Schools, 46*(10), 1006-1022. doi:
10.1002/pits.20440
- Allegretto, S. A., & Mishel, L. (2016). The teacher pay gap is wider than ever: Teachers'
pay continues to fall further behind pay of comparable workers. *Economic Policy
Institute*. Retrieved from ERIC database. (ED568892)
- American Association for Employment in Education. (2008). *Educator supply and
demand in the United States*. Columbus, OH: Author.
- Artz, B. (2010). Fringe benefits and job satisfaction. *International Journal of Manpower, 31*(6), 626-644. doi:10.1108/01437721011073346
- Baker, B. D., Sciarra, D. G., & Farrie, D. (2014). Is school funding fair? A national report
card. *Education Law Center*. Retrieved from ERIC database. (ED570455)
- Berry, A. B. (2012). The relationship of perceived support to satisfaction and
commitment for special education teachers in rural areas. *Rural Special Education
Quarterly, 31*(1), 3–14. Retrieved from ERIC database. (EJ1147842)
- Berry, A. B., Petrin, R. A., Gravelle, M. L., & Farmer, T. W. (2011). Issues in special
education teacher recruitment, retention, and professional development:

- Considerations in supporting rural teachers. *Rural Special Education Quarterly*, 31(1), 3-14. <https://doi.org/10.3102/0034654319862495>
- Berry, B., & Shields, P. M. (2017). Solving the teacher shortage: Revisiting the lessons we've learned. *Phi Delta Kappan*, 98(8), 8–18. <https://doi.org/10.1177/0031721717708289>
- Bettini, E., Jones, N., Brownell, M., Conroy, M., Park, Y., Leite, W., Crockett, J., & Benedict, A. (2017). Workload manageability among novice special and general educators: Relationships with emotional exhaustion and career intentions. *Remedial and Special Education*, 38(4), 246-256. <https://doi.org/10.1177/0741932517708327>
- Billingsley, B., Israel, M., & Smith, S. (2011). Supporting new special education teachers: How online resources and Web 2.0 technologies can help. *Teaching Exceptional Children*, 43(5), 20-29. doi: 10.1177/004005991104300502
- Billingsley, B. S. (1993). Teacher retention and attrition-in special and general education: A critical review of the literature. *The Journal of Special Education*, 27(2), 137-174. <https://doi.org/10.1177/002246699302700202>
- Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38(1), 39-55. Retrieved from ERIC database. (EJ693730)
- Billingsley, B. S. (2007). A case study of special education teacher attrition in an urban district. *Journal of Special Education Leadership*, 20(1). Retrieved from ERIC database. (EJ802302)

- Billingsley, B. S. (2010). Work contexts matter: Practical considerations for improving new special educators' experiences in schools. *Journal of Special Education Leadership, 23*(1). Retrieved from ERIC database. (EJ886011)
- Billingsley, B., & Bettini, E. (2019). Special Education Teacher Attrition and Retention: A Review of the Literature. *Review of Educational Research, 89*(5), 697–744. <https://doi.org/10.3102/0034654319862495>
- Billingsley, B. S., & McLeskey, J. (2004). Critical issues in special education teacher supply and demand: Overview. *The Journal of Special Education, 38*(1), 2-4. Retrieved from ERIC database. (EJ693727)
- Bloland, P. A., & Selby, T. J. (1980). Factors associated with career change among secondary school teachers: A review of the literature. *Educational Research Quarterly, 5*(3), 13-24. Retrieved from ERIC database. (EJ241572)
- Boe, E. E. (2006). Long-Term Trends in the National Demand, Supply, and Shortage of Special Education Teachers. *The Journal of Special Education, 40*(3), 138–150. <https://doi.org/10.1177/00224669060400030201>
- Boe, E. E., Barkanic, G., & Leow, C. S. (1999). Retention and attrition of teachers at the school level: National trends and predictors. Data Analysis Report No. 1999-DAR1. Retrieved from ERIC database. (ED436485)
- Boe, E. E., Bobbitt, S. A., & Cook, L. H. (1997). Whither didst thou go? Retention, reassignment, migration, and attrition of special and general education teachers from a national perspective. *The Journal of Special Education, 30*(4), 371-389. <https://doi.org/10.1177/002246699703000402>

- Boe, E. E., & Cook, L. H. (2006). The chronic and increasing shortage of fully certified teachers in special and general education. *Exceptional Children*, 72(4), 443-460. <https://doi.org/10.1177/001440290607200404>
- Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Exceptional Children*, 75, 7-31. <https://doi.org/10.1177/001440290807500101>
- Bolger, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administrative Quarterly*, 37, 662-683. Retrieved from ERIC database. (EJ671410)
- Boser, U., & Straus, C. (2014). Mid-and Late-Career Teachers Struggle with Paltry Incomes. *Center for American Progress*. Retrieved from ERIC database. (ED564594)
- Bozonelos, J. (2008). Retention in special education: Reducing attrition through supportive administrative interventions. *International Journal of Learning*, 15(1), 149-158. doi: 10.18848/1447-9494/CGP/V15I01/45597
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681-711. <https://doi.org/10.1353/etc.2014.0032>
- Cancio, E. J., Albrecht, S. F., & Johns, B. H. (2013). Defining administrative support and its relationship to the attrition of teachers of students with emotional and behavioral disorders. *Education and Treatment of Children*, 36(4), 71-94. Retrieved from ERIC database. (EJ1070250)

- Cannon, S. (2013). Building on Maslow to meet director and staff needs. *Exchange*, 211, 8-11. Retrieved from <http://ehis.ebscohost.com.logon.lynx.lib.usm.edu/ehost/>
- Carlson, E., Chen, L., Schroll, K., & Klein, S. (2003). Study of personnel needs in special education (SPeNSE): Final report. *US Department of Education Office of Special Education*.
- Carpenter, L. B., & Dyal, A. (2001). Retaining quality special educators: A prescription for school principals in the 21st century. *Catalyst for Change*, 30(3), 5-8.
- Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Palo Alto, CA: Learning Policy Institute.
- Chandler, H. N. (1983). The loneliness of the special education teacher. *Journal of Learning Disabilities*, 16(2), 126-27. Retrieved from ERIC database (EJ280962).
- Chapman, D. W. (1982). Career satisfaction of teachers. *Educational Research Quarterly*, 7(3), 40-50. doi: 10.1146/annurev.ps.29.020178.002001
- Clotfelter, C. T., Glennie, E. J., Ladd, H. F., & Vigdor, J. L. (2008). Teacher bonuses and teacher retention in low-performing schools: Evidence from the North Carolina \$1,800 teacher bonus program. *Public Finance Review*, 36(1), 63-87. doi: 10.1177/1091142106291662
- Conley, S., & You, S. (2017). Key influences on special education teachers' intentions to leave: The effects of administrative support and teacher team efficacy in a mediational model. *Educational Management Administration & Leadership*, 45(3), 521-540. <https://doi.org/10.1177/1741143215608859>

- Cook, L. H., & Boe, E. E. (2007). National trends in the sources of supply of teachers in special and general education. *Teacher Education and Special Education, 30*(4), 217-232. <https://doi.org/10.1177/088840640703000402>
- Cornelius, K. E., Rosenberg, M. S., & Sandmel, K. N. (2019). Examining the impact of professional development and coaching on mentoring of novice special educators. *Action in Teacher Education, 42*(3), 253-270.
doi: 10.1080/01626620.2019.1638847
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98.
<https://doi.org/10.1037/0021-9010.78.1.98>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles, CA: Sage Publications.
- Danielson, C. (2002). *Enhancing student achievement: A framework for school improvement*. Association for Supervision and Curriculum Development (ASCD), Alexandria, VA. Retrieved from ERIC database. (ED472616)
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership, 60*(8), 6-13. Retrieved from ERIC database. (EJ666108)
- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach?. *Journal of Teacher Education, 53*(4), 286-302. <https://doi.org/10.1177/0022487102053004002>
- Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.

- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession*. Washington, DC: National Staff Development Council, 12. Retrieved from ERIC database. (ED536383)
- DeMik, S. A. (2008). Experiencing attrition of special education teachers through narrative inquiry. *High School Journal*, 92(1), 22–32.
<https://doi.org/10.1353/hsj.0.0009>
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181-199. <https://doi.org/10.3102/0013189X08331140>
- Donne, V., & Lin, F. Y. (2013). Special education teacher induction: The wiki way. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*, 86(2), 43-47. <https://doi.org/10.1080/00098655.2012.735279>
- Edgar, E., & Pair, A. (2005). Special education teacher attrition: It all depends on where you are standing. *Teacher Education and Special Education*, 28(3-4), 163-170.
<https://doi.org/10.1177/088840640502800403>
- Emery, D. W., & Vandenberg, B. (2010). Special education teacher burnout and ACT. *International Journal of Special Education*, 25(3), 119-131. Retrieved from ERIC database. (EJ909042)
- Espinoza, D., Saunders, R., Kini, T., & Darling-Hammond, L. (2018). Taking the long view: State efforts to solve teacher shortages by strengthening the profession. *Learning Policy Institute*. Retrieved from [https://learningpolicyinstitute.org/sites/default/files/productfiles/Long_View_REP ORF.pdf](https://learningpolicyinstitute.org/sites/default/files/productfiles/Long_View_REP_ORF.pdf)

Esteves, K. J., & Rao, S. (2008). The evolution of special education. *Principal*, 88(2), 1.

Retrieved from

https://digitalcommons.butler.edu/cgi/viewcontent.cgi?referer=http://scholar.google.com/&httpsredir=1&article=1074&context=coe_papers

Every Student Succeeds Act of 2015, Pub. L. No. 114-95. Retrieved from

<https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>

Feng, L., & Sass, T. R. (2017). Teacher quality and teacher mobility. *Education Finance and Policy*, 12(3), 396-418. Retrieved from ERIC database. (EJ1146651)

Fila, M. J., Paik, L. S., Griffeth, R. W., & Allen, D. (2014). Disaggregating job

satisfaction: Effects of perceived demands, control, and support. *Journal of*

Business and Psychology, 29(4), 639-649. [https://doi.org/10.1007/s10869-014-](https://doi.org/10.1007/s10869-014-9358-5)

9358-5

Fish, W. W., & Stephens, T. L. (2010). Special education: A career of choice. *Remedial*

and Special Education, 31(5), 400-407. doi: 10.1177/0741932509355961

Fong, A. B., Makkonen, R., & Jaquet, K. (2016). *Projections of California teacher*

retirements: A county and regional perspective (REL 2017-181). U.S. Department

of Education. ies.ed.gov/ncee/edlabs/regions/west/pdf/REL_2017181.pdf

Fong, B. (2015). Job satisfaction and dissatisfaction factors influencing contract renewal

of Generation Y and Non-Generation Y teachers working at international schools

in Asia (Accession No. 5FE7E6AC9AFB219D) [Doctoral dissertation, Liberty

University]. EBSCOHost Open Dissertations.

- Foor, R. M., & Cano, J. (2011). Predictors of job satisfaction among selected agriculture faculty. *Journal of Agricultural Education*, 52(1), 30-39. doi: 10.5032/jae.2011.01030
- Ford, M. E. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. Newbury Park, CA: Sage Publications.
- Fore, C., Martin, C., & Bender, W. N. (2002). Teacher burnout in special education: The causes and the recommended solutions. *The High School Journal*, 86(1), 36-44. <https://doi.org/10.1353/hsj.2002.0017>
- Fowler, R. C. (2003). Massachusetts signing bonus program for new teachers. *Education Policy Analysis Archives*, 11, 13. Retrieved from ERIC database. (EJ680083)
- Franek, M., & Vecera, J. (2008). Personal characteristics and job satisfaction. *E & M Ekonomie a Management*, 11, 63-76. Retrieved from https://dspace5.zcu.cz/bitstream/11025/17256/1/06_franek.pdf
- Gall, M. D., Gall, J. P., & Borg, W. R. (2006). *Educational research: An introduction*. New York, NY: Pearson.
- Gamson, D. A., McDermott, K. A., & Reed, D. S. (2015). The elementary and secondary education act at fifty: Aspirations, effects, and limitations. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 1(3), 1-29. doi:10.7758/rsf.2015.1.3.01
- Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications*. Cranbury, NJ: Pearson Education.
- Gearheart, B. R. (Ed.). (1972). *Education of the exceptional child: History, present practices, and trends*. University Press of America.

- Gee, K., & Gonsier-Gerdin, J. (2018). The first year as teachers assigned to elementary and middle-school special education classrooms. *Research and Practice for Persons with Severe Disabilities*, 43(2), 94-110. doi: 10.1177/1540796918771708
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, 67(4), 549-567. <https://doi.org/10.1177/001440290106700408>
- Gilmour, A. F., & Wehby, J. H. (2019). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology*, 112(5), 1042–1060. <https://doi.org/10.1037/edu0000394>
- Goetzinger, E. K. (2006). *Burnout among special educators: Do experience, certification, caseload, and school size make a difference?* (UMI Number: 3237516) [Doctoral dissertation, University of Oklahoma]. ProQuest Dissertations.
- Goldring, R., Taie, S., & Riddles, M. (2014). Teacher attrition and mobility: Results from the 2012-13 teacher follow-up survey. First look. NCES 2014-077. *National Center for Education Statistics*.
- Grasso, P. C. (2008). Perceptions and knowledge of special education law among building administrators in a selected Georgia school district. (1202) [Doctoral dissertation, University of Southern Mississippi]. Retrieved from <https://aquila.usm.edu/dissertations/1202/>
- Griffin, C. C., Kilgore, K. L., Winn, J. A., Otis-Wilborn, A., Hou, W., Garvan, C. W. (2009). First-year special educators: The influence of school and classroom

- context factors on their accomplishments and problems. *Teacher Education and Special Education*, 32(1), 45-63. <https://doi.org/10.1177/0888406408330870>
- Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education*, 41(4), 277-291. <https://doi.org/10.1177/0888406417725797>
- Hardman, M. L., & Nagle, K. (2004). Public policy. In A. McCray Sorrells, H. Rieth, & P. T. Sindelar (Eds.), *Critical Issues in Special Education* (pp. 277-291). Boston, MA: Pearson Education.
- Hendricks, M. D. (2012). Does it pay to pay teachers more? Evidence from Oklahoma's minimum salary schedule. *Journal of Public Economics*, 109(2014), 50-63. <http://dx.doi.org/10.1016/j.jpubeco.2013.11.001>
- Henley, J., Milligan, J., McBride, J., Neal, G., Nichols, J., & Singleton, J. (2010). Outsiders looking in? Ensuring that teachers of the gifted and talented education and teachers of students with disabilities are part of the 'in-crowd'. *Journal of Instructional Psychology*, 37(3), 203-209. Retrieved from ERIC database. (EJ952122)
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work* (2nd ed.). New York, NY: John Wiley & Sons, Inc.
- Hofmans, J., De Gieter, S., & Pepermans, R. (2013). Individual differences in the relationship between satisfaction with job rewards and job satisfaction. *Journal of Vocational Behavior*, 82(1), 1-9. doi: 10.1016/j.jvb.2012.06.007.
- Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, N.J: Prentice-Hall.

- Horrison-Collier, A. (2013). Special education teacher retention: The relationship between mentoring, job satisfaction and the retention of special education teachers. (863) [Doctoral dissertation, Georgia Southern University]. Retrieved from <https://digitalcommons.georgiasouthern.edu/etd/863>
- Hosmer, D. W., Jr., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (Vol. 398). New York, NY: John Wiley & Sons.
- Hough, H. J. (2012). Salary incentives and teacher quality: The effect of a district-level salary increase on teacher recruitment. Center for Education Policy Analysis. Palo Alto, CA.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison Wesley.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
<https://doi.org/10.3102/00028312038003499>
- Ingersoll, R. M., & May, H. (2012). The magnitude, destinations, and determinants of mathematics and science teacher turnover. *Educational Evaluation and Policy Analysis*, 34(4), 435-464. <https://doi.org/10.3102/0162373712454326>
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124(4), 605–614. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=eue&AN=507921787&site=ehost-live&custid=084-800>
- Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of*

Autism and Developmental Disorders, 33(6), 583-593.

<https://doi.org/10.1023/B:JADD.0000005996.19417.57>

Jones, N. D., Youngs, P., & Frank, K. A. (2013). The role of school-based colleagues in shaping the commitment of novice special and general education teachers. *Exceptional Children*, 79(3), 365-383.

doi: 10.1177/001440291307900303

Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior*, 77(2), 157-167. doi:

10.1016/j.jvb.2010.04.002

Kaff, M. S. (2004). Multitasking is multitaxing: Why special educators are leaving the field. *Preventing School Failure*, 48(2), 10. Retrieved from ERIC database.

(EJ744570)

Kamman, M. L., & Long, S. K. (2010). One district's approach to the induction of special education teachers. *Journal of Special Education Leadership*, 23(1), 21-29.

Kaufman, R. C., & Ring, M. (2011). Pathways to leadership and professional development: Inspiring novice special educators. *Teaching Exceptional Children*, 43(5), 52-60. <https://doi.org/10.1177/004005991104300505>

Kerr, M. M., & Brown, E. L. (2016). Preventing school failure for teachers, revisited: Special educators explore their emotional labor. *Preventing School Failure: Alternative Education for Children and Youth*, 60(2), 143-151. Retrieved from ERIC database. (EJ1090284)

- Ketron, S. M. (2007). *An examination of career persistence among special education teachers in cross-categorical settings* (Publication No. 1179495310) [Doctoral dissertation, University of Cincinnati]. Retrieved from http://rave.ohiolink.edu/etdc/view?acc_num=ucin1179495310
- Knox, J. A., & Anfara, V. A. (2013). Understanding job satisfaction and its relationship to student academic performance. *Middle School Journal*, 44(3), 58-64. Retrieved from <http://ehis.ebscohost.com.logon.lynx.lib.usm.edu/ehost/>
- Kode, K. (2017). *Elizabeth Farrell and the history of special education*. Council for Exceptional Children, Arlington, VA.
- Ladd, H. F. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement?. *Educational Evaluation and Policy Analysis*, 33(2), 235-261. <https://doi.org/10.3102/0162373711398128>
- Langher, V., Caputo, A., & Ricci, M. E. (2017). The potential role of perceived support for reduction of special education teachers' burnout. *International Journal of Educational Psychology*, 6(2), 120-147. Retrieved from ERIC database. (EJ1146821)
- Leigh, A. (2012). Teacher pay and teacher aptitude. *Economics of Education Review*, 31(3), 41-53. doi: 10.2139/ssrn.961144
- Leko, M. M., & Smith, S. W. (2010). Current topics in review Andrea M. Babkie, associate editor: Retaining beginning special educators: What should administrators know and do?. *Intervention in School and Clinic*, 45(5), 321-325. <https://doi.org/10.1177/1053451209353441>

- Leung, D. Y., & Lee, W. W. (2006). Predicting intention to quit among Chinese teachers: Differential predictability of the components of burnout. *Anxiety, Stress, and Coping, 19*(2), 129-141. doi: 10.1080/10615800600565476
- Liu, E., Johnson, S., & Peske, H. G. (2004). New teachers and the Massachusetts signing bonus: The limits of inducements. *Educational Evaluation and Policy Analysis, 26*(3), 217-236. <https://doi.org/10.3102/01623737026003217>
- Major, A. E. (2012). Job design for special education teachers. *Current Issues in Education, 15*(2), 1-7. Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/900>
- Mancuso, S. V., Roberts, L., Weston, D., White, G. P., & Yoshida, R. K. (2011). Strategies to improve teacher retention in American overseas schools in the near East South Asia region: A qualitative analysis. *Journal of School Leadership, 21*(6), 819. Retrieved from http://go.galegroup.com.ezproxy.liberty.edu:2048/ps/i.do?id=GALE%7CA290622758&v=2.1&u=vic_liberty&it=r&p=AONE&sw=w&asid=fb79d3daa7ddb24470934566db296bc4.
- Mandlawitz, M. (2016). Special education after 40 years: What lies ahead? *Policy Priorities, 22*(1), 1-7. Retrieved from <http://www.ascd.org/publications/newsletters/policy-priorities/vol22/num01/Special-Education-After-40-Years@-What-Lies-Ahead%C2%A2.aspx>

- Markow, D., Macia, L., & Lee, H. (2013). *The MetLife survey of the American teacher: Challenges for school leadership*. New York, NY: Metropolitan Life Insurance Company.
- Maslach, C. (2001). What have we learned about burnout and health?. *Psychology & Health, 16*(5), 607-611.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science, 12*(5), 189-192.
<https://doi.org/10.1111/1467-8721.01258>
- Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1986). *Maslach burnout inventory* (Vol. 21, pp. 3463-3464). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper & Brothers.
- McDowell, J. R. (2017). Burning out: The effect of burnout on special education. *BYU Education & LJ, 2017*(1), 99-123. Retrieved from
<https://digitalcommons.law.byu.edu/elj/vol2017/iss1/4>
- McLeskey, J., & Billingsley, B. S. (2008). How does the quality and stability of the teaching force influence the research-to-practice gap? A perspective on the teacher shortage in special education. *Remedial and Special Education, 29*(5), 293-305. <https://doi.org/10.1177/0741932507312010>

- Mehrenberg, R. L. (2013). Red tape and green teachers: The impact of paperwork on novice special education teachers. *International Journal of Special Education, 28*(1), 80-87. Retrieved from ERIC database. (EJ1013680)
- Mendel, P. C. (1987). An investigation of factors that influence teacher morale and work conditions. (3282824) [Doctoral dissertation, University of Oregon]. ProQuest Dissertations and Theses Global.
- Menlove, R., Garnes, L., & Salzberg, C. (2004). Why special educators leave and where they go. *Teacher Education and Special Education, 27*(4), 373-383.
<https://doi.org/10.1177/088840640402700405>
- Miller, M. D., Brownell, M. T., & Smith, S. W. (1999). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children, 65*(2), 201-218.
<https://doi.org/10.1177/001440299906500206>
- Mills v. Board of Education of District of Columbia*, 348 F. Supp. 866 (D.D.C. 1972).
- Mitchell, A., & Arnold, M. (2004). Behavior management skills as predictors of retention among south Texas special educators. *Journal of Instructional Psychology, 31*(3), 214-219. Retrieved from ERIC database. (EJ774093)
- Moore, C. M. (2012). The role of school environment in teacher dissatisfaction among U.S. public school teachers. *Sage Open, 2*, 1-16. doi:
[10.1177/2158244012438888](https://doi.org/10.1177/2158244012438888).
- Nance, E., & Calabrese, R. L. (2009). Special education teacher retention and attrition: The impact of increased legal requirements. *International Journal of Educational Management, 23*(5), 431-440. Retrieved from ERIC database. (EJ859088)

- National Center for Education Statistics (NCES). (2013). *Schools and staffing survey*. Washington, DC: U.S. Department of Education.
- Ondrasek, N., Carver-Thomas, D., Scott, C., & Darling-Hammond, L. (2020). *California's special education teacher shortage*. Palo Alto, CA: Policy Analysis for California Education. Retrieved from <https://learningpolicyinstitute.org/product/pace-california-special-education-teacher-shortage-report>
- Otto, S. J., & Arnold, M. (2005). A study of experienced special education teachers' perceptions of administrative support. *College Student Journal*, 39(2). Retrieved from ERIC database. (EJ725570)
- Owens, A. (2010). *The Massachusetts teacher workforce: Status and challenges*. Cambridge, MA: Harvard Kennedy School. Retrieved from http://www.hks.harvard.edu/content/download/68761/1247854/version/1/file/owens_teachers.pdf
- Peduzzi, P., Concato, J., Kemper, E., Holford, T. R., & Feinstein, A. (1996). A simulation of the number of events per variable in logistic regression analysis. *Journal of Clinical Epidemiology*, 99(12), 1373-1379. doi:10.1016/S0895-4356(96)00236-3
- Pelham, B. W. (2013). *Intermediate statistics: A conceptual course*. Thousand Oaks, CA: Sage.
- Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania*, 343 F. Supp. 279 (E.D. Pa. 1972). Retrieved from <https://www.pubintl.org/wp-content/uploads/2012/04/PARC-Consent-Decree.pdf>

- Pinder, C. C. (1984). *Work motivation: Theory, issues, and application*. Glenview, IL: Foresman and Company.
- Plann, S. (1991). Fray Pedro Ponce de Leon: Myth and reality. In *First International Conference on the History of Deafness*, Washington, DC.
- Plash, S., & Piotrowski, C. (2006). Retention issues: A study of Alabama special education teachers. *Education*, 127(1), 125-129. Retrieved from ERIC database. (EJ765810)
- Podolsky, A., & Kini, T. (2016). *How effective are loan forgiveness and service scholarships for recruiting teachers*. Palo Alto, CA: Learning Policy Institute, 42-48.
- Prather-Jones, B. (2011). How school administrators influence the retention of teachers of students with emotional and behavioral disorders. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(1), 1-8.
doi: 10.1080/00098655.2010.489387
- Presidential Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Retrieved from <http://nrcl.org/about/publications/digests/digest1.html>
- Provost, J. (2009). Special education personnel needs: Matters of quality as well as quantity. *Journal of Special Education Leadership*, 22(2), 105-107. Retrieved from ERIC database. (EJ869338)
- Pulliam, J. D., & Van Patten, J. J. (2006). *History of education in America* (9th ed.). Upper Saddle River, NJ: Pearson Education.

- Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50(1), 4-36.
<https://doi.org/10.3102/0002831212463813>
- Rowe, J. R. (2004). High school exit meet IDEA-an examination of the history, legal ramifications, and implications for local school administrators and teachers. *BYU Education. & LJ*, 2004(1), 75-137. Retrieved from
<https://digitalcommons.law.byu.edu/elj/vol2004/iss1/4>
- Samuels, C. (2018). Why special educators really leave the classroom: It's not just about paperwork, parents, and hard-to-manage students. *Education Week*, 37(8), 15.
- Sanchez, J. E., Williams, S., & Ferrara, M. (2018). Teachers' perceptions of professional development experiences: An ongoing concern. *Journal for Educators, Teachers and Trainers*, 9(1), 102-115. Retrieved from
<https://scholarworks.unr.edu/bitstream/handle/11714/5243/TPPDE.pdf?sequence=1&isAllowed=y>
- San Francisco Unified School District. (2019). *Quality Teacher and Education Act*. Retrieved from <https://archive.sfusd.edu/en/about-sfusd/voter-initiatives/quality-teacher-and-education-act/overview.html>
- Sayman, D., Chiu, C. L., & Lusk, M. (2018). Critical Incident Reviews of Alternatively Certified Special Educators. *Journal of the National Association for Alternative Certification*, 13(1), 3-14. Retrieved from ERIC database. (EJ1178666)
- Schnorr, J. M. (1995). Teacher retention: A CSPD analysis and planning model. *Teacher Education and Special Education*, 18(1), 22-38.
<https://doi.org/10.1177/088840649501800104>

- Shen, B., McCaughtry, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology*, 85(4), 519-532. <https://doi.org/10.1111/bjep.12089>
- Shen, J., Leslie, J. M., Spybrook, J. K., & Ma, X. (2012). Are principal background and school processes related to teacher job satisfaction? A multilevel studying using Schools and Staffing Survey 2003-04. *American Educational Research Journal*, 49(2), 200-230. doi:10.3102/0002831211419949
- Simms-Robinson, C. A. (2019). *The Relationship between Professional Development and Job Efficacy of Missouri Section 504 Coordinators (49790152)* [Doctoral dissertation, Southwest Baptist University]. ProQuest Dissertations and Theses Global.
- Simon, M. K. (2011). *Dissertation and scholarly research: Recipes for success*. College Grove, OR: Dissertation Success, LLC.
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059-1069. <https://doi.org/10.1016/j.tate.2009.11.001>
- Smith, J. D. (2004). The historical contexts of special education. In A. McCray-, Sorrells, H., Rieth, & P. T. Sindelar (Eds.), *Critical Issues in Special Education*, (pp. 1-14) Boston, MA: Pearson Education.
- Spector, P. (2019, July 11). *Conditions for using these assessments*. <http://paulspector.com/scales/pauls-no-cost-assessments/conditions-for-using-these-assessments/>.

- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology, 13*(6), 693-713. <https://doi.org/10.1007/BF00929796>
- Spector, P. E. (2016). Industrial and organizational psychology. *Research and Practice (7th ed.)*. Hoboken, N.J.: Wiley and Sons.
- Stein, M. K., Smith, M. S., & Silver, E. (1999). The development of professional developers: Learning to assist teachers in new settings in new ways. *Harvard Educational Review, 69*(3), 237-270. <https://doi.org/10.17763/haer.69.3.h2267130727v6878>
- Stempien, L. R., & Loeb, R. C. (2002). Differences in job satisfaction between general education and special education teachers: Implications for retention. *Remedial and Special Education, 23*(5), 258-267. <https://doi.org/10.1177/07419325020230050101>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* [Report]. Learning Policy Institute. learningpolicyinstitute.org/product/coming-crisis-teaching
- Suter, J. C., & Giangreco, M. F. (2009). Numbers that count: Exploring special education and paraprofessional service delivery in inclusion-oriented schools. *The Journal of Special Education, 43*(2), 81-93. <https://doi.org/10.1177/0022466907313353>
- Talevich, J. R., Read, S. J., & Walsh, D. A. (2014). Goal Impact: a goal systems domain-general prediction tool, applied to voluntary job turnover. *Basic and Applied Social Psychology, 36*(1), 35-50. <https://doi.org/10.1080/01973533.2013.856784>

- Thornton, B., Peltier, G., & Medina, R. (2007). Reducing the special education teacher shortage. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 80(5), 233-238. <https://doi.org/10.3200/TCHS.80.5.233-238>
- Turner, M. J. (2019). Investigating Attrition Among Special Educators in Relation to Bronfenbrenner's Ecological Theory. (6747) [Doctoral Dissertation, Walden University]. Walden Dissertations and Doctoral Studies.
- Tyler, T. A., & Brunner, C. C. (2014). The case for increasing workplace decision-making: Proposing a model for special educator attrition research. *Teacher Education and Special Education*, 37(4), 283-308. doi: 10.1177/0888406414527118
- Vannest, K. J., Soares, D. A., Harrison, J. R., Brown, L., & Parker, R. I. (2010). Changing teacher time. *Preventing School Failure: Alternative Education for Children and Youth*, 54(2), 86-98. <https://doi.org/10.1080/10459880903217739>
- Vittek, J. E. (2015). Promoting special educator teacher retention: A critical review of the literature. *SAGE Open*, 5(2). 2158244015589994
- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, Calif.: SAGE Publications.
- Wasburn-Moses, L. (2006). A practical proposal for special education teacher induction. *Mid-Western Educational Researcher*, 19(4), 20-23. Retrieved from ERIC database. (EJ839575)
- Westling, D. L., & Whitten, T. M. (1996). Rural special education teachers' plans to continue or leave their teaching positions. *Exceptional Children*, 62(4), 319-335. <https://doi.org/10.1177/001440299606200403>

- Whitaker, S. D. (2000). Mentoring beginning special education teachers and the relationship to attrition. *Exceptional Children*, 66(4), 546-566.
<https://doi.org/10.1177/001440290006600407>
- Whitaker, S. D. (2003). Needs of beginning special education teachers: Implications for teacher education. *Teacher Education and Special Education*, 26(2), 106-117.
<https://doi.org/10.1177/088840640302600204>
- Williams, J., & Dikes, C. (2015). The implications of demographic variables as related to burnout among a sample of special education teachers. *Education*, 135(3), 337-345. Retrieved from ERIC database. (EJ1095411)
- Wilsford, A. (2018). *The Impact of Teaming on Teacher Attrition in Missouri Middle Schools* (46363306) [Doctoral dissertation, Southwest Baptist University]. ProQuest Dissertations and Theses Global.
- Winzer, M. A. (1998). A tale often told: The early progression of special education. *Remedial and Special Education*, 19(4), 212-218.
<https://doi.org/10.1177/074193259801900404>
- Wright, P. (2010, November 29). *The History of Special Education Law in the United States by Peter W.D. Wright, Esq. - Wrightslaw*.
<https://www.wrightslaw.com/law/art/history.spec.ed.law.htm>
- Wright, R. E., Grimm, L. G., & Yarnold, R. R. (1995). Logistic regression. *Reading and understanding multivariate statistics*, 373(9), 217-244.
- Yell, M. L. (2019). *The law and special education*. Upper Saddle River, NJ: Pearson.

- Yell, M. L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What a long, strange trip it's been!. *Remedial and Special Education, 19*(4), 219-228. <https://doi.org/10.1177/074193259801900405>
- Yell, M. L., & Shriner, J. G. (1997). The IDEA amendments of 1997: Implications for special and general education teachers, administrators, and teacher trainers. *Focus on Exceptional Children, 30*(1), 1-19. Retrieved from ERIC database. (EJ555502)
- Yell, M. L., Shriner, J. G., & Katsiyannis, A. (2006). Individuals with disabilities education improvement act of 2004 and IDEA regulations of 2006: Implications for educators, administrators, and teacher trainers. *Focus on Exceptional Children, 39*(1), 1-24. <https://doi.org/10.17161/foec.v39i1.6824>
- Youngs, P., Jones, N., & Low, M. (2011). How beginning special and general education elementary teachers negotiate role expectations and access professional resources. *Teachers College Record, 113*(7), 1506-1540. Retrieved from ERIC database. (EJ938072)
- Yuan, K., Le, V. N., McCaffrey, D. F., Marsh, J. A., Hamilton, L. S., Stecher, B. M., & Springer, M. G. (2013). Incentive pay programs do not affect teacher motivation or reported practices results from three randomized studies. *Educational Evaluation and Policy Analysis, 35*(1), 3-22. doi:10.3102/0162373712462625
- Zettel, J. J., & Ballard, J. (1979). The education for all handicapped children act of 1975 PL 94-142: Its history, origins, and concepts. *Journal of Education, 161*(3), 5-22. <https://doi.org/10.1177/002205747916100303>

APPENDIX A

The Job Satisfaction Survey by Paul E. Spector

The information requested in this section of the instrument is to help with the interpretation of the results of the study. The confidentiality of information provided is assured. Read carefully, as some of the questions are worded positive and others are worded negative. Please complete the following by selecting the best answer.

JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida Copyright Paul E. Spector 1994, All rights reserved.		Disagreeverymuch	Disagreemoderately	Disagreelightly	Agreeslightly	Agreemoderately	Agreeverymuch
PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.							
1	I feel I am being paid a fair amount for the work I do.	1	2	3	4	5	6
2	There is really too little chance for promotion on my job.	1	2	3	4	5	6
3	My supervisor is quite competent in doing his/her job.	1	2	3	4	5	6
4	I am not satisfied with the benefits I receive.	1	2	3	4	5	6
5	When I do a good job, I receive the recognition for it that I should receive.	1	2	3	4	5	6
6	Many of our rules and procedures make doing a good job difficult.	1	2	3	4	5	6
7	I like the people I work with.	1	2	3	4	5	6
8	I sometimes feel my job is meaningless.	1	2	3	4	5	6
9	Communications seem good within this organization.	1	2	3	4	5	6
10	Raises are too few and far between.	1	2	3	4	5	6
11	Those who do well on the job stand a fair chance of being promoted.	1	2	3	4	5	6

12	My supervisor is unfair to me.	1	2	3	4	5	6
13	The benefits we receive are as good as most other organizations offer.	1	2	3	4	5	6
14	I do not feel that the work I do is appreciated.	1	2	3	4	5	6
15	My efforts to do a good job are seldom blocked by red tape.	1	2	3	4	5	6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1	2	3	4	5	6
17	I like doing the things I do at work.	1	2	3	4	5	6
18	The goals of this organization are not clear to me.	1	2	3	4	5	6
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places.	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5	6
22	The benefit package we have is equitable.	1	2	3	4	5	6
23	There are few rewards for those who work here.	1	2	3	4	5	6
24	I have too much to do at work.	1	2	3	4	5	6
25	I enjoy my coworkers.	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organization.	1	2	3	4	5	6
27	I feel a sense of pride in doing my job.	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases.	1	2	3	4	5	6
29	There are benefits we do not have which we should have.	1	2	3	4	5	6
30	I like my supervisor.	1	2	3	4	5	6

31	I have too much paperwork.	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be.	1	2	3	4	5	6
33	I am satisfied with my chances for promotion.	1	2	3	4	5	6
34	There is too much bickering and fighting at work.	1	2	3	4	5	6
35	My job is enjoyable.	1	2	3	4	5	6
36	Work assignments are not fully explained.	1	2	3	4	5	6

APPENDIX B

Below are internal consistency reliabilities (coefficient alpha) for the Job Satisfaction Survey by Spector (1985), based on a sample of 2,870.

Scale	Alpha	Description
Pay	.75	Pay and remuneration
Promotion	.73	Promotion opportunities
Supervision	.82	Immediate supervisor
Fringe Benefits	.73	Monetary and nonmonetary fringe benefits
Contingent Rewards	.76	Appreciation, recognition, and rewards for good work
Operating Procedures	.62	Operating policies and procedures
Coworkers	.60	People you work with
Nature of Work	.78	Job tasks themselves
Communication	.71	Communication within the organization
Total	.91	Total of all facets

APPENDIX C

I am a doctoral student at Southwest Baptist University and a fellow principal in Missouri. Please take time to review the remainder of this email. Your time to forward this on to your special education teachers is appreciated and could be beneficial to administrators. Feel free to reach out to me if you have concerns about your teachers taking this survey or any questions pertaining to the study.

CONSENT TO PARTICIPATE IN RESEARCH

FACTORS LEADING TO RETENTION AND ATTRITION OF SPECIAL EDUCATION TEACHERS

You are asked to participate in a research study conducted by Jarad Rinne enrolled in the Educational Administration program at Southwest Baptist University. You are invited to participate in this research project because you are a current special education teacher in Missouri. The purpose of this research project is to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) and the contract renewal of special education teachers following administrative approval for rehire.

Your participation in this research study is voluntary. You may choose not to participate or skip any question that you are not comfortable in answering. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized.

The procedure involves completing an online survey that will take approximately 5 minutes. As this is an online survey, participants can complete the survey in the location of his/her choice. Your responses will be confidential, and we do not collect identifying information such as your name, email address or IP address.

The questions presented in the survey are focused on determining job satisfaction of current special education teachers. The questions are designed to solicit information about

Data gathered will be completely confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the surveys will not contain information that will personally identify you. The results of this study will be used for scholarly purposes only.

If you have any questions or concerns about the research study, please contact Jarad Rinne at jrinne10@gmail.com. You may contact the RRB for questions or concerns regarding this study at rrb@sbuniv.edu.

Clicking on the survey link below indicates that:

- You have read the above information.
- You have voluntarily agreed to participate.
- You are at least 18 years of age.

https://forms.office.com/Pages/ResponsePage.aspx?id=t2YXN8xH_0-sR6IM3Ib0GpS7UMcWL01MpnIWpTaaJZ9UQ0U0SUtMUE5FREVT1JCRDVYVTQ5Sk9ZMi4u

	<u>Fill Job Satisfaction Survey</u>
	/
	forms.office.com

Mr. Jarad Rinne
High School Principal

APPENDIX D

About two weeks ago you received an email requesting for you to forward the attached survey for me. It will assist my research for my doctoral dissertation. I know there are many things on your plate during this school year, but I would appreciate if you would follow up with your SPED teachers. A minimum number of responses is needed for my study to be beneficial. Your support and efforts are appreciated more than you know. I have attached a link to survey again below if needed. Feel free to contact me with any questions pertaining to the study or survey. Thank you again.

CONSENT TO PARTICIPATE IN RESEARCH

FACTORS LEADING TO RETENTION AND ATTRITION OF SPECIAL EDUCATION TEACHERS

You are asked to participate in a research study conducted by Jarad Rinne enrolled in the Educational Administration program at Southwest Baptist University. You are invited to participate in this research project because you are a current special education teacher in Missouri. The purpose of this research project is to determine the relationship of the nine facets of the Job Satisfaction Survey (JSS) by Spector (1985) and the contract renewal of special education teachers following administrative approval for rehire.

Your participation in this research study is voluntary. You may choose not to participate or skip any question that you are not comfortable in answering. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized.

The procedure involves completing an online survey that will take approximately 5 minutes. As this is an online survey, participants can complete the survey in the location of his/her choice. Your responses will be confidential, and we do not collect identifying information such as your name, email address or IP address.

The questions presented in the survey are focused on determining job satisfaction of current special education teachers. The questions are designed to solicit information about

Data gathered will be completely confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the surveys will not contain information that will personally identify you. The results of this study will be used for scholarly purposes only.

If you have any questions or concerns about the research study, please contact Jarad Rinne at jrinne10@gmail.com. You may contact the RRB for questions or concerns regarding this study at rrb@sbuniv.edu.

Clicking on the survey link below indicates that:

- You have read the above information.
- You have voluntarily agreed to participate.
- You are at least 18 years of age.

https://forms.office.com/Pages/ResponsePage.aspx?id=t2YXN8xH_0-sR6IM3Ib0GpS7UMcWL01MpnIWpTaaJZ9UQ0U0SUtMUE5FREVVY1JCRDVYVTQ5Sk9ZMi4u



Mr. Jarad Rinne
High School Principal

APPENDIX E

Table 25

Significance of Regression Model for Individual Questions

	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Q1	1.331	0.665	1	0.415	0.338	0.025	4.591
Q2	0.816	0.099	1	0.753	0.774	0.156	3.828
Q3	2.146	0.826	1	0.364	7.029	0.105	471.776
Q4	1.345	0.722	1	0.395	3.137	0.225	43.825
Q5	4.998	1.313	1	0.252	0.003	0.000	58.442
Q6	0.852	0.032	1	0.859	1.164	0.219	6.183
Q7	2.304	0.003	1	0.955	1.138	0.012	103.980
Q8	0.970	0.111	1	0.738	0.723	0.108	4.842
Q9	1.933	0.516	1	0.473	4.008	0.091	177.023
Q10	1.037	0.671	1	0.413	2.339	0.306	17.850
Q11	1.849	0.155	1	0.694	2.070	0.055	77.625
Q12	1.524	0.017	1	0.898	1.217	0.061	24.121
Q13	0.927	0.344	1	0.558	0.581	0.095	3.571
Q14	2.578	0.899	1	0.343	11.518	0.074	1801.745
Q15	1.620	0.571	1	0.450	3.398	0.142	81.257
Q16	1.564	0.386	1	0.534	0.378	0.018	8.114
Q17	2.585	0.453	1	0.501	5.699	0.036	903.660
Q18	2.738	0.859	1	0.354	0.079	0.000	16.936

Q19	2.800	1.156	1	0.282	20.319	0.084	4915.885
Q20	3.751	1.298	1	0.255	0.014	0.000	21.724
Q21	2.302	0.903	1	0.342	0.112	0.001	10.220
Q22	2.047	1.058	1	0.304	8.212	0.149	453.632
Q23	3.812	0.960	1	0.327	41.862	0.024	73564.759
Q24	2.154	1.002	1	0.317	0.116	0.002	7.886
Q25	4.607	0.803	1	0.370	0.016	0.000	134.475
Q26	1.933	0.385	1	0.535	0.302	0.007	13.319
Q27	5.982	1.512	1	0.219	1566.467	0.013	193727757.687
Q28	2.932	1.170	1	0.279	0.042	0.000	13.138
Q29	1.453	0.928	1	0.335	0.247	0.014	4.255
Q30	1.674	0.460	1	0.498	0.321	0.012	8.552
Q31	2.855	0.996	1	0.318	17.270	0.064	4652.263
Q32	1.667	0.313	1	0.576	2.541	0.097	66.656
Q33	1.917	0.778	1	0.378	5.427	0.127	232.494
Q34	1.084	0.043	1	0.835	0.798	0.095	6.672
Q35	3.888	1.484	1	0.223	0.009	0.000	17.894
Q36	2.340	1.627	1	0.202	0.051	0.001	4.958
Constant	12.930	0.600	1	0.439	22308.427		
