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Retaining Special Education Teachers for Students within the Juvenile Justice System

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Retaining Special Education Teachers for Students Within the Juvenile Justice System

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Abstract

The number of juveniles with disabilities entering the juvenile justice system is growing at a rapid rate. Many juvenile justice facilities are unable to provide adequate special education services due to the nationwide shortage of special education teachers. This dissertation uses the theoretical framework of teacher efficacy to examine the correlation among the retention of special education teachers who serve students within the juvenile justice system and teacher efficacy, stress, support, workload stressors, and burnout. The participants of this study consisted of 155 special education teachers who currently or previously provided special education services to juveniles within the juvenile justice system. The research design for this quantitative study is a correlational research design that implements surveys as the data collection produces. The principal investigator used six multinomial logistic regression models were used to examine the relationships among the retention rate of special education teachers who serve students within the juvenile justice system and teacher efficacy, stress, workload stressors, burnout, and support. The results of this study indicated that teacher efficacy and workload stressors are significant predictors of support, support is a significant predictor of workload stressors, and support is a significant predictor of the retention of special education teachers who serve students within the juvenile justice system.

*Keyword*s: special education teachers, juvenile justice, retention, teacher efficacy, support, stress, burnout, workload stressors

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Chapter 1: Introduction

The U.S. Department of Education and the U.S Department of Justice (2014) have stated that the most powerful and effective tool with which to ensure the successful outcomes of juveniles within the juvenile justice system is providing superior educational services. Over 30% of juveniles within the juvenile justice system have disabilities. Furthermore, the recidivism rate for juveniles with disabilities is higher than for those without (Van, Asscher, Stams, & Moonen, 2014). Research has provided two theories intended to explain the high recidivism rate for juveniles with disabilities. Fink (1990) and Holmquist (2013) advanced school failure, which refers to a school's inability to address the academic and behavioral needs of students with disabilities due to inadequate teacher training or a lack of qualified teachers, as one theory. A second theory suggests that youth with disabilities are susceptible to delinquent behavior due to latent cognitive, behavioral, and personality deficits and that it is important for such individuals to receive adaptive and behavioral support to address the deficits resulting from their disabilities (Fink, 1990).

The Individuals with Disabilities Act (IDEA) mandates that youth with disabilities within the juvenile justice system to be provided with special education services, which include instructional strategies intended to address academic and behavioral deficits and transition services (U.S. Department of Education, 2016). However, juvenile justice programs are faced with a dilemma in the form of low retention among special education teachers. In comparison to the 7.6% attrition rate for general education teachers, the attrition rate for special education teachers is significantly greater at 12.3% (Keigher, 2010). Existing research has workload stressors, lack of support, professional isolation, limited funding, and lack of professional development as reasons for the low retention rate of special education teachers (Aldridge &

Fraser, 2016). Moreover, many special education teachers reported high levels of stress, burnout, self-doubt, and emotional distress influenced their decision to leave the field of special education (Billingsley, 2004). This quantitative study examines the relationships among teacher efficacy and stress, burnout, workload stressors, and support. Furthermore, this study adopts quantitative research methods to investigate whether workload stressors, teacher efficacy, stress, burnout, and support can be used to predict the retention of special education teachers who serve students within the juvenile justice system.

Background, Context, History of the Problem, and Conceptual Framework for the Problem

   Characteristics of youth within the juvenile justice system. Youths within the juvenile justice system or juvenile delinquents are juveniles who are considered a danger to society due to crimes against society (Djorobekova, 2012, p. 59). The Office of Juvenile Justice and Delinquency Prevention (OJJDP) (2016) stated that 82% of youth within the juvenile justice system are males, with most criminal behavior beginning at 15 years of age. In 2016, OJJDP reported that 42% of youth within the juvenile justice system were African Americans, 31% were Caucasian, and 22% were Hispanic (The Office of Juvenile Justice and Delinquency Prevention, 2016). The results of Nourollah, Fatemeh, and Farhad's (2016) descriptive-analytical study of 250 juveniles within the juvenile justice system indicated that family and social conditions were significant reasons for delinquent behavior. Over 80% of the participants were from areas characterized by high levels of poverty, and 39% indicated that their criminal behavior was a result of one or a combination of the following: peer pressure, living in poverty, or a family history of criminal behavior. Furthermore, 18% of the participants indicated that they had an addition to alcohol or drugs. Macomber, Skiba, Blackmon, Esposito, Hart, Mambrino, and Grigorenko's (2010) research found a relationship between Adverse Childhood Experiences

(ACEs) and juvenile delinquency. Mckelvey, Selig, and Whiteside-Mansell (2017) defined Adverse Childhood Experiences as prolonged periods of physical, emotional, sexual abuse, drug abuse, and domestic violence. Donisch, Bray, Gewirtz, Hanson, and Lang, (2016). Hunt, Slack, and Berger (2017) and Shin, Mcdonald, and Conley (2018) stated the characteristics of youth with who have suffered ACEs include the following:

- emotional impassiveness

- failure to experience positive emotions;

- extremely defiant behavior;

- unrelenting feelings of fear, anger, guilt, or shame; and

- hypervigilance.

Characteristics of students with disabilities. The results of a national survey of juveniles with disabilities within the juvenile justice system indicated that 20% of the individuals surveyed had emotional disabilities and 36% had specific learning disabilities (Holmquist, 2013). The IDEA defines an emotional disability as a continued behavior that negatively affects a juvenile's educational performance. A juvenile with an emotional disability may exhibit a one or more of the following: hyperactivity, high levels of aggression, self-injurious behavior, excessive fear or anxiety, poor coping skills, or learning difficulties (Vaughn, Bos, & Schumm, 2014).

A learning disability is a neurologically-based processing problem that interferes with learning basic academic skills such as math, reading, writing, and higher-level skills such as organization, time management, abstract reasoning, memory, and concentration (Hallahan, Kauffman, & Pullen, 2015). Juveniles with learning disabilities exhibit a variety of difficulties; for example, one juvenile may experience significant difficulties with reading, while another may encounter challenges with math (Hallahan, Kauffman, & Pullen, 2015). Bowe (2005) stated:

Juveniles with learning disabilities may Learn to adjust to [their learning disability] so well that they 'pass' as not having a disability, while others struggle throughout their lives to even do 'simple' things. Despite these differences, [a specific learning disability] always begins in childhood and always is a life-long condition (p. 71).

A juvenile with a specific learning disability may exhibit one or more of the following characteristics: extreme difficulties in reading, writing, or math, problem-solving and critical thinking, and processing and retrieving information (Hallahan, Kauffman, & Pullen, 2015). The most notable characteristic of a learning disability is a lack of social skills (Buonomo, Fiorilli, Geraci, & Pepe, 2017). Buonomo et al. (2017) indicated that approximately 80 % of juveniles with learning disabilities exhibit poor social skills, which leads to negative interactions with teachers, difficulty making friends, and loneliness.

History of the problem. Despite a study conducted by Houchins et al. (2009) that indicated that three states had spent over $85 million on public education, states' juvenile justice facilities still lack the materials, supplies, and technology required to instruct incarcerated juveniles effectively. One teacher in the study conducted by Houchins et al. (2009) indicated limited supplies, such as textbooks and other educational resources. Another teacher stated that the facility should provide age-appropriate materials and Internet access in classrooms. In a 2004 study of three state juvenile detention centers and seven juvenile alternative-to-detention centers, Macomber et al. discovered that, among the teachers surveyed, only 41% had access to instructional materials (e.g., interactive whiteboards, specialized reading programs, science kits), and only 1% had access to educational software. Koyama's (2012) study of 340 juvenile detention facilities in 47 U.S. states found a lack of resources to be a significant problem. One teacher stated that "We are limited to one classroom with six computer stations; when the

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classroom space is needed for other activities…we cannot provide educational services and meet the minimum state guidelines; there is no other location to provide the service in" (Koyama, 2012, p. 51).

Nance and Calbrese's (2009) case study of 40 current and former special education teachers explored the reasons behind the low retention rates among special education teachers. One participant claimed that her school's administration does not adequately support special education teachers. One participant, a current teacher, stated that "We shouldn't have to beg…to get the materials for our students" (Nance & Calbrese, 2009, p. 435). Both current and former teachers identified the stressors related to managing the workload of a special education teacher as an influencing factor on the retention of special education teachers. A current teacher stated that the additional time needed to complete administrative tasks made it more challenging to provide providing services to students. Another current teacher stated that "The increased paperwork, trying to keep on top of best practice in the field, and the ever-changing technology in the field is time-consuming. I find that I usually work 10-hour day[s]" (Nance & Calbrese, 2009, p. 437). Former teachers indicated that the time administrative tasks took away from teaching impacted their decisions to leave their teaching positions (Nance & Calbrese, 2009). Several participants who were former special education teachers reported that "the time it took them to complete the increased paperwork took them away from students and may have played a role in their attrition" (Nance & Calbrese, 2009, p. 437).

Gersten, Keating, Yovanoff, and Harniss' (2001) study supports the connections among the retention of special education teachers, stress, and support. A study conducted by Gersten et al. (2001) that focused on 887 special education teachers from three large urban school districts examined the variables that lead to special education teacher attrition and retention. The study

participants completed Morvant, Gersten, Blake, and Howard's (1992) Working in Special Education survey. The results of the survey suggested that a lack of administrative support, a lack of professional development opportunities, role dissonance, and stress strongly influenced the attrition and retention of special education teachers.

A study conducted by Plash and Piotrowsk (2006) further supports the existence of relationships among stress, the stressors connected with managing the workload of a special education teacher, and the retention of special education teachers. Plash and Piotrowsk's (2006) study of 117 special education teachers was intended to determine why special education teachers leave the profession; it found that stress and lack of planning time due to the workload directly influenced the participants' decision not to remain in the profession.

Conceptual framework. Teacher efficacy refers to a teacher's ability to teach their students effectively (Bandura, 1986). Research suggests a relationship between teacher efficacy and support. For example, teacher collaboration, a form of support, provides opportunities to share effective instructional practices and classroom management techniques intended to improve student achievement (Guo, Justice, Sawyer, & Tompkins 2011). Furthermore, research has suggested a relationship between teacher efficacy and stress. Special education teachers are responsible for providing direct instructions intended to address problematic behaviors (e.g., impulsivity, short attention span, hyperactivity) and academic deficits, as well as for completing the administrative duties (e.g., preparing individualized education plans, progress reports, behavioral intervention plans, etc.) connected with providing special education services. Many special education teachers have reported that the combination of working with challenging behaviors, attending to academic gaps, and completing the required paperwork increases their

stress levels while decreasing their personal belief in their ability to positively impact their students (Ali, Abdullah, & Majid, 2014; Ewald, Ulrich, Reinhard, Annika, & Sabine, 2016).

Many schools provide special education teachers with additional planning time in which to complete their additional administrative responsibilities. However, the time allotted for special education teachers to complete their administrative tasks is not sufficient for them to develop and execute effective lessons to meet the needs of their students, hence the implied relationship between the stressors correlated with managing the workload of a special education teacher and teacher efficacy (Billingsley, 2004).

Research has also proposed a relationship between teacher efficacy and burnout. Studies have indicated that special education teachers experience high levels of frustration and emotional exhaustion due to continued exposure to negative experiences. Many special education teachers have stated that the increasing number of administrative responsibilities that they are responsible for and the lack of support they receive in addressing students' academic and behavioral concerns increase their feelings of inadequacy and likelihood of experiencing burnout (Gersten, Keating, Yovanoff, & Harniss, 2001; Prilleltensky, Neff, & Bessell, 2016; Hagaman & Casey, 2018.). Therefore, the conceptual framework for this study is the relationship between teacher efficacy, workload stressors, support and stress, and burnout of special education teachers who provide services to students within the juvenile justice system.

Statement of the Problem

The educational facilities that serve students within the juvenile justice system lack the educational resources, including textbooks, instructional technologies, qualified education staff, and other necessities, required to properly address the academic and behavioral needs of juveniles with disabilities (Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009).

Furthermore, Klassen and Chin (2010) indicated a relationship between the behaviors of juveniles with disabilities within the juvenile justice system and increased stress levels for teachers and low levels of teacher efficacy. Research has implied that increased administrative responsibilities, lack of support from school leaders and general education teachers, limited opportunities for professional development, and feelings of burnout are correlated with the retention rate of special education teachers working within the juvenile justice system (Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009; Moody, 2003; Sariçam & Sakiz, 2014). This study, therefore, investigates the following problem: What is the relationships among teacher efficacy, stress, burnout, support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system?

Purpose of the Study

The purpose of this study is to examine the relationships among teacher efficacy, stress, burnout, support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system.

Research Questions

R1. To what extent do the following variables predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, stress, burnout, and teacher efficacy?

R2. To what extent do the following variables predict stress for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, burnout, and support?

R3. To what extent do the following variables predict the workload stressors for special education teachers who provide services to juveniles within the juvenile justice system: stress, teacher efficacy, burnout, and support?

R4. To what extent do the following variables predict the level burnout for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, stress, and support?

R5. To what extent do the following variables predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system: support, workload stressors, stress, and burnout?

R6. To what extent do the following variables predict retention of special education teachers who provide services to juveniles within the juvenile justice system: teacher efficacy, support, workload stressors, stress, and burnout?

Research Hypotheses

$H1_0$: Teacher efficacy, workload stressors, stress, and burnout do not predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

$H1_A$: Teacher efficacy, workload stressors, stress, and burnout predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

$H2_0$: Teacher efficacy, workload stressors, support, and burnout do not predict stress for special education teachers who provide services to juveniles within the juvenile justice system.

H2$_A$: Teacher efficacy, workload stressors, support, and burnout predict the level of stress for special education teachers who provide services to juveniles within the juvenile justice system.

H3$_0$: Teacher efficacy, support, stress, and burnout do not predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

H3$_A$: Teacher efficacy, support, stress, and burnout predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

H4$_0$: Teacher efficacy, workload stressors, stress, and support do not predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

H4$_A$: Teacher efficacy, workload stressors, stress, and support predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

H5$_0$: Support, workload stressors, stress, and burnout do not predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

H5$_A$: Support, workload stressors, stress, and burnout predict the teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

H6$_0$. Teacher efficacy, workload stressors, stress, support, and burnout do not predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

H6$_A$. Teacher efficacy, workload stressors, stress, support, and burnout predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

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Rationale, Relevance, and Significance of the Study

Research has indicated that students with disabilities within juvenile justice facilities earn their high school diplomas at a lower rate than students without disabilities, find it difficult to transition back to public schools. Also, students with disabilities have a higher recidivism rate because they did not receive the necessary academic, behavioral, and transition support from qualified special education teachers (Van, Asscher, Stams, & Moonen, 2014).

Houchins, Shippen, Schwab, and Ansely (2017) stated that special educators who provide services to students within the juvenile justice system have a personal desire to have a positive impact on students with disabilities who have experienced continued failures within the public-school system. However, the stress associated with managing the workload, lack of support, emotional exhaustion, feelings of inadequacy, and high levels of stress experienced among special education teachers within the juvenile justice system decrease their levels of job satisfaction; studies have suggested that this, in turn, decreases their retention rate (Houchins, Shippen, Schwab, & Ansely, 2017). Houchins, Shippen, Schwab, and Ansely (2017) noted that "to provide high-quality educational services to incarcerated students, it is important to recruit and retain a high-quality teaching staff" (p. 217). Therefore, it is imperative to investigate the conceptual framework underlying the relationships among teacher efficacy, stress, workload stressors, burnout, and support as it relates to the retention of special education teachers who teach students within the juvenile justice system.

Definition of Terms

Burnout. Burnout is defined as the inability "to cope with work-related stress [which causes] long-term exhaustion and diminished interest in the profession" (Sariçam & Sakiz, 2014, p. 423).

Disability. For a child to receive special education services, The Individuals Disabilities Education Act (IDEA) states that a child's academic and behavior deficits must fall under at least one of the following 13 disabilities categories: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment (including Attention Deficit Hyperactivity Disorder), specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment, including blindness (U.S. Department of Education, 2006).

Individualized education program (IEP). An IEP consists of a written plan for a child with a disability. The plan must be developed and revised by the Individualized Disability Education Act. The plan must detail the student's present academic and functional levels, academic and functional goals, special education services, a plan to monitor the student's progress, the duration of services to be provided, accommodations for access to the general curriculum, state testing accommodations, and post-secondary transition goals and services for students 13 years of age and older (U.S. Department of Education, 2006).

Individuals with disabilities education act. IDEA provides free appropriate public education that is designed to meet the individual needs of children with disabilities and prepare children with disabilities for employment and independent living (U.S. Department of Education, 2010).

Juvenile justice system. A system of laws, procedures, and policies designed to regulate the processing and treatment of juvenile offenders (in most cases youth under the age of 18) for criminal behavior. Each U.S. state is required to maintain a state level juvenile justice system (Office of Juvenile Justice and Delinquent Prevention, 1994).

Special education. Specially designed instruction (provided by a certified special education teacher) to meet the individual needs of a child with a disability (U.S. Department of Education, 2010).

Special education teacher. Special education teachers provide special education services to students with disabilities. Special education teachers provide the skills needed to adapt to general education, specifically in reading, writing, and math. Special education teachers also promote the development of the adaptive, social, and transition skills needed for independent living. Special education teachers are also responsible for administrative duties associated with special education, such as creating, implementing, and monitoring individualized education programs (U.S. Department of Education, 2006, U.S. Department of Education, 2010).

Stress. Stress is an imbalance of risk and protective factors (Prilleltensky, Neff, & Bessell, 2016).

Teacher efficacy. Teacher efficacy refers to teachers' belief in their ability to promote students' learning (Hoy, 2000).

Teacher retention. Teacher retention refers to whether teachers stay at their schools, move to different schools, or leave the profession (Thornton, Peltier, & Medina, 2007).

Support. For this study, support refers to the provision of the services and resources that teachers require to improve their overall teaching ability and performance. Examples of teacher support include providing access to supplies, offering professional development programs, and promoting collaboration with school leadership and other teachers (Aldridge & Fraser, 2016).

Workload Stressors. The negative external or internal stimuli associated with managing the quantity of work that one has to do within the workplace (Nuri, Demirok, & Direktör 2017).

Assumptions

The survey instrument employed in this study was designed using original survey items from Tschannen-Moran and Hoy's (2001) short version of the Teachers' Sense of Efficacy Scale (TSES) and from Maslach, Jackson, and Leiter's (1996) Maslach Burnout Inventory-Educators Survey (MBI-ES) and modified questions from the National Center for Education Statistics' *(2009)* Schools and Staffing Survey Teacher Follow-Up Survey (SASS-TFS). Therefore, this study's survey instrument can accurately measure the constructs investigated in this study, namely teacher efficacy, burnout, stress, support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system. Furthermore, it is assumed that the participants were truthful and responded to the survey from the perspective of special education teachers who work with or have previously worked with students within the juvenile justice system.

Limitations

Chapter 3 discusses the limitations of this study's methodology. However, this study has two fundamental limitations. First, the participants were only given 15 days to complete the survey. Hence, there was the threat of participants not completing the survey before the closing date.   Second, the participants voluntarily participated in the study. Therefore, the sample may not adequately represent teachers who are experiencing burnout, high levels of stress, high levels of stressors related to managing their workloads, low teacher efficacy, or lack of support.

Delimitations

The delimitations of this study are discussed in Chapter 3. To limit its scope, this study only includes former and current special education teachers who provide(d) services to students within the juvenile justice system. Also, the results of the study are only used to develop claims

concerning the retention rate of special education teachers who serve(d) students within the juvenile justice system.

Summary

Special education teachers are vital to the success of students with disabilities within the juvenile justice system. However, research suggests that correlation among stress, lack of support, the stressors associated with managing the workload of a special education teacher low teacher efficacy, burnout and the retention rate of special education teachers who provide services to such students. This study examines the relationships among the retention of special education teachers who provide services to students within the juvenile justice system and support, burnout, stress, the stressors connected with managing the workload of a special education teacher, and teacher efficacy.

Chapter 2 discusses the conceptual and theoretical framework of this study. It also includes a literature review that discusses the dilemmas associated with providing special education services within the juvenile justice system and the retention of special education teachers and the probable connections among teacher retention, support, stress, burnout, workload stressors, and teacher efficacy. The methodology section of Chapter 2 reviews, the limitations of the quantitative and qualitative research discussed in the literature review, provides a synthesis of the findings from the literature, and a critique of the literature's claims, methods, and the findings. Chapter 3 discusses the research design, the target population and sample, the instrument, the operationalization of variables, data methods, the limitations and delimitations of the research design, the internal and external threats to the validity of the study, the expected findings, and the ethical issues. Chapter 4 discusses the results of the survey and includes a detailed analysis of the survey results. Finally, Chapter 5 discusses the results as they relate to

the literature review conducted in Chapter 2, the limitations of this study, suggestions for future

practice, and policies and recommendations for future research.

Chapter 2: Literature Review

Introduction to the Literature Review

The U.S. Juvenile Court Assessment Validation Study stated that youth with intellectual disabilities are responsible for 27% of criminal misdemeanors and 28% of felonies committed by juveniles (Van, Asscher, Stams, & Moonen, 2014). IDEA mandates that students with disabilities should receive educational services from qualified special education teachers to address their academic, behavioral, and social deficits (U.S. Department of Education, 2004). The National Office of Justice Programs, which is responsible for the juvenile justice system requires that correctional facilities provide "outcome-driven services and programs" to reduce the number of incarcerated youth and adults (Office of Justice Programs, 2017). Such programs and services must include an education reflective of the state's requirements for public education. It is plausible that for youth with disabilities within the juvenile justice system, educational services provided by qualified special education teachers are the missing element that prevents juveniles within the juvenile justice system from re-entering society successfully (Foley, 2001). However, Thornton, Peltier, and Medina (2007) identified several reasons for the low retention rate among special education teachers including high levels of stress, extreme workload stressors, lack of support, low motivation, discipline problems, and poor student progress.

Study Topic

The purpose of this quantitative study is to examine the relationships among teacher efficacy and stress, burnout, workload stressors, and support. Furthermore, this study employs quantitative research methods to investigate the relationships among teacher efficacy, stress,

burnout, workload stressors, support, and the retention of special education teachers who serve students within the juvenile justice system.

Context

There is research that indicates intense workload stressors, support, burnout, and stress lower teacher efficacy. Furthermore, Grant's (2017) research supports the existence of relationships among teacher efficacy, support, burnout, workload, stress and the low retention of special education teachers. Therefore, this study will examine the relationships among stress, support, teacher efficacy, burnout, and workload stressors. Further, this study investigates if workload stressors, support, stress, and burnout predicts teacher efficacy. Lastly, this study examines if teacher efficacy, support, workload stressors, stress, burnout predict the retention of special education teachers who provide services to students within the juvenile justice system. This study will include special education teachers from the juvenile justice system, alternative schools for students within the juvenile justice system, public schools with large populations of students within the juvenile justice system, and educational programs that provide educational services for students within the juvenile justice system.

Significance

The Office of Juvenile Justice and Delinquent Prevention or OJJDP (1994) indicated a deficit exists in terms of providing quality special education services to students within the juvenile justice system. Atkins and Bartuska's (2010) qualitative study described the characteristics of the education programs that serve students within the juvenile justice system. One program did not follow the state's curriculum, and the head teacher was the program administrator, and the staff's only certified teacher, who happened to be a special education teacher. A second program did not have an on-site special education teacher to provide special

education services but instead depended on the local school district to provide special education services to students. Unfortunately, the school district could not spare a special education teacher to provide daily special education services to the students. Macomber, Skiba, Blackmon, Esposito, Hart, Mambrino, and Grigorenko's (2010) mixed method study of three state detention centers and seven alternative-to-detention centers indicated that the lack of qualified special educators resulted in less rigorous classroom instruction, which increased the achievement gap between incarcerated students with disabilities and their grade-level peers. This finding is related to the findings of Morris and Morris's (2006) study, which found that poor academic programs within the juvenile justice system do not improve the juveniles' likelihood of success.

The results of this study should prove helpful in terms of assisting policymakers, educational directors within the juvenile justice system, and other public-school administrators to understand the relationships among special education teachers reported self-efficacy, stress levels, the stressors associated with managing the workload of a special education teacher, burnout, and support and the retention of such teachers within the juvenile justice system. The participants should benefit from the findings of this study through being encouraged to reflect on their own teaching experiences as they relate to stress, burnout, support, self-efficacy, and managing the workload of a special education teacher.

Problem Statement

The Office of Justice Programs (2017) and the Office of Juvenile Justice and Delinquent Prevention (1994) stated the juvenile justice process begins with a referral to the juvenile justice system. If the juvenile is found delinquent, he or she is incarcerated in a juvenile justice facility or placed on probation. Each state's juvenile justice system maintains a school intended to serve incarcerated students. The juvenile justice system also uses residential facilities, district-

supported alternative schools, and wilderness camps to provide educational services for students within the juvenile justice system. Youth on probation are allowed to attend public schools, but many states require students who are involved with the juvenile justice system to attend an alternative school for 45 to 90 days before returning to their home school (Moody, 2003; The Office of Justice Programs, 2017; The Office of Juvenile Justice and Delinquent Prevention, 1994).

IDEA states that schools who serve students within the juvenile justice system must adhere to Public Law 94-142, which requires that students with disabilities must receive special education services. Based on the IDEA mandates, juvenile justice programs must provide students with disabilities with appropriate special education services (U.S. Department of Education, 2004). U.S. Department of Education (2015) has indicated that only 46% of incarcerated youth with disabilities received special education services, while Hale's (2015) study reported shortages of special education teachers in 49 U.S. states the juvenile justice system is reducing the requirements for such educators to accommodate the growing demand for special education teachers. For example, the teacher requirements for a northwestern state's juvenile justice program do not require a highly qualified status or specialized certification on the part of special education teachers (Moody, 2003).

The use of unqualified special educators to teach students with disabilities is a direct violation of IDEA 2004 (U.S. Department of Education, 2006). The IDEA 2004 incorporates the 2004 amendments to the IDEA, which include the requirement that all elementary and secondary special educators be highly qualified (U.S. Department of Education, 2006). Therefore, it is important to investigate the retention of special education teachers who serve students within the juvenile justice system by examining the relationships among teacher efficacy and support, the

stressors correlated with managing the workload of a special education teacher, burnout, and stress.

Organization

The conceptual framework is used to examine the relationships among teacher efficacy, support, burnout, stress, and workload stressors. The theoretical framework discusses the concepts of self-efficacy and teacher efficacy. The literature review describes the dilemmas associated with providing special education services within the juvenile justice system, discusses the retention of special education teachers, and explores the connections among teacher retention, support, stress, burnout, and workload stressors, and teacher efficacy. The methodology section reviews and discusses the limitations of the quantitative and qualitative research discussed in the literature review. The synthesis examines the research findings to support the existence of relationships among stress, burnout, workload stressors, support, teacher efficacy, and the retention of special education teachers who serve students within the juvenile justice system. Finally, the critique of the literature evaluates the claims, methods, and findings of the literature used to support this dissertation.

Conceptual Framework

When investigating the reasons for the low retention rate among special education teachers who provide services to students within the juvenile justice system, it becomes apparent why there is such a shortage of such teachers. Houchins, Shippen, and Cattret (2004) surveyed 338 general and special education teachers to examine the factors associated with the attrition and retention of teachers within a state's juvenile justice system. The study identified the stressors related to managing the workload of a special education teacher, lack of resources, and

lack of support from school administration as the reasons for the low retention rate among special education teachers.

There is existing research that indicates the existence of relationships among the low retention rate of special education teachers and burnout, stress, lack of support, and excessive stressors connected with managing the workload of a special education teacher (Houchins, Shippen, & Cattret, 2004). Furthermore, there is existing research that supports the existence of relationships among teacher efficacy and stress, burnout, lack of support, and workload stressors. (Berry, Petrin, Gravelle, & Farmer, 2011; Bettini, Jones, Brownell, Conroy, & Leite, 22018). However, there is a lack of research that discusses the retention of special education teachers who provide services to students within the juvenile justice system. Furthermore, there is little research that explores the relationships among teacher efficacy, stress, burnout, lack of support, workload stressors and the retention of special education teachers who provide services to students within the juvenile justice system (Skaalvik & Skaalvik, 2007). Figure 1 depicts the conceptual framework for this study. The conceptual framework focuses on the relationships among the retention of special education teachers who teach students within the juvenile justice system and teacher efficacy, stress, support, workload stressors, and burnout.
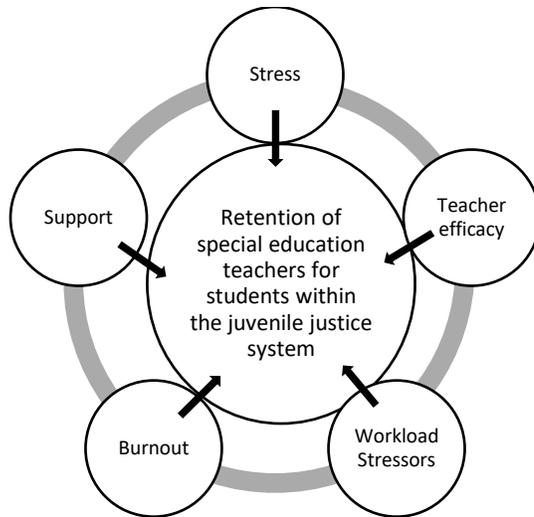
Figure 1. Conceptual Framework: The relationships among the retention of special education teachers for students within the juvenile justice system and support, stress, teacher efficacy, burnout, and workload stressors.

Theoretical Framework

According to Bandura (1986), self-efficacy is defined "as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391). Self-efficacy is a component of the social cognitive theory, which holds that people's beliefs about their attributes directly influence their actions, meaning that people are "self-organizing, proactive, self-regulating, and self-reflecting" (Bandura, 1986, p. 391). Self-efficacy beliefs determine a person's choices, such as the amount of effort or time that he or she devotes to an obstacle, opportunity, specific thought, or activity (Bandura, 1986). Bandura (1986) contended that self-efficacy consists of four significant dimensions: mastery experiences, vicarious experiences, verbal persuasions, and physiological states.

Mastery experiences. Bandura (1986) described mastery experiences as involving the successful completion of a task. The experience of completing a task improves self-efficacy; however, failing to complete a task or inadequately completing a task can weaken self-efficacy.

For example, special education teachers may experience an increase in self-efficacy when their instructional practices result in high student academic performances. Martins, Costa, and Onotre's (2015) study investigated the practicum experiences of 141 teachers to determine the impact that self-efficacy had on their teaching — provided evidence of a relationship between mastery experiences and self-efficacy. For example, a participant expressed high self-efficacy due to her instructional practices having strengthened her students' academic achievements.

      Vicarious experiences. Bandura (1986) defined vicarious experiences as observing people similar to oneself succeed at the same challenges. Observing another's successes with personally relevant challenges increases the observer's self-efficacy. Vicarious experiences enhance an individual's belief that he or she possesses the abilities required to achieve mastery because he or she has observed others with similar abilities overcome obstacles and reach their goals. For example, Steenekamp, Van der Merwe, and Mehmedova's (2018) qualitative study of student teachers indicated a relationship between vicarious experiences and increased confidence in their teaching abilities.

      Furthermore, Hagen, Gutkin, Wilson, and Oats' (1998) experimental study of 89 pre-service teachers investigated whether vicarious experiences increased the self-efficacy of the participants. The study consisted of two groups of participants. The first group was shown a videotape demonstrating effective instructional and classroom management practices, which included recommendations concerning best practices in presenting instructional content and classroom management from teachers from experienced teachers. The control group was shown a video depicting "societal discrimination against people with handicaps" (p. 172). After viewing the videos, the participants completed the Teacher Efficacy Scale-Revised (TES-R) and the Self-Efficacy Vignettes. The TES-R was used to measure teacher efficacy, while the Self-Efficacy

Vignettes required participants to indicate their level of confidence about seven common classroom problems. The survey results indicated a higher level of teacher efficacy and more advanced classroom management skills on the part of members of the first group when compared with those in the control group. The results from Hagen, Gutkin, Wilson, and Oats' (1998) study indicate that positive vicarious experiences improve self-efficacy.

Verbal persuasion. Verbal persuasion affects self-efficacy when a message is perceived to convey quality information from a professed expert. Martins, Costa, and Onofre (2015) stated that "Verbal persuasion supplies positive information that enhances individual motivation to overcome difficulties" (p. 264). Martins, Costa, and Onotre's (2015) study examined constructive feedback, which is considered to be a form of verbal persuasion. A group of pre-service teachers participated in observations, which were followed by a post-conference. The purpose of the post-conference was to receive feedback from their supervising teachers, a member of their school's administration, or other pre-service teachers. One pre-service teacher stated that "We listen to the opinions of our colleagues who were observing things that we, at times, don't notice, and then it's the opinion of someone [the cooperating teacher] with more experience and who is there to help us" (p. 272) Simply stated, the verbal persuasion, of observing experienced teachers, increased the teacher efficacy of the pre-service teachers.

Physiological states. Bandura (1995) referred to "emotional states" when describing physiological states or physiological responses as they relate to self-efficacy (p. 4). Bandura (1995) stated that feelings of anxiety and stress lead to poor performance. A person's mood also affects their self-efficacy. For example, the stress posed by the need to complete administrative paperwork may cause a special education teacher to believe that their instructional practices are ineffective, thus resulting in low self-efficacy. Bandura (1995) stated that the best way to change

self-efficacy beliefs is to "…reduce stress and negative emotional proclivities, and correct misinterpretations of bodily states" (p. 5). Kennedy and Smith's (2013) study of 661 teachers analyzed the relationship between stress and efficacy. It found that the stress associated with student achievement scores, classroom observations, and parent conferences lowered the participants' efficacy levels.

Teacher efficacy. A person's level of self-efficacy is related to achieving personal goals and the ability to monitor and regulate actions that produce favorable outcomes (Bandura, 1986). Teacher efficacy refers to a teacher's belief in their ability to positively affect student outcomes (Hoy, 2000). Johnson and Birkeland's (2003) qualitative study of 50 new teachers examined the factors that affect teacher retention. They found the strongest predictor of teacher retention to be a teacher's belief in their ability to teach students effectively. The participants indicated the teaching assignments, administrative responsibilities, and support from administration and other teachers "either supported or stymied them in that search for success" (p. 583). Perrachione, Rosser, and Petersen's (2008) quantitative study of 300 K–5 elementary school teachers examined the relationship between job satisfaction and retention. The study found a strong positive relationship among teacher retention, support, workload stressors, and teacher efficacy. The participants indicated that their ability to become successful teachers depended on the support from administration, managing the stressors related with their workloads, and the availability of resources

When examining Bandura's (1986) theory of teacher efficacy and its relationship to the retention of special education teachers who provide services to students within the juvenile justice system, external factors are directly related to teacher efficacy (Nuri, Demirok, & Direktör, 2017). For example, Paneque and Barbetta's (2006) study examined the teacher

efficacy levels of 202 special education teachers. The teachers identified external factors such as parental support, opportunities for professional development, and collaboration with other teachers as the leading contributors to high levels of teacher efficacy. Nuri, Demirok, and Direktör's (2017) study examined the teacher efficacy of 70 special education teachers within a particular state's juvenile justice system. Seventy percent of special education teachers reported they had the training and experience required to teach students with learning and emotional disabilities effectively, could motivate challenging students and were pleased with the academic and social progress of their students. However, external factors such as excessive administrative requirements (heavy workload) and lack of support from leadership inhibited teacher efficacy. The teachers stated the lack of support and high levels of workload stressors led to nervousness, stress, and anxiety. Despite the participants training, they indicated that their negative emotional state affected their personal ability to teach their students and many questioned if they should continue their career in special education.

According to the model depicted in Figure 2, there is a connection among stress, support, workload stressors, burnout, and teacher efficacy. The figure shows that stress, burnout, workload stressors, and support all influence teacher efficacy.
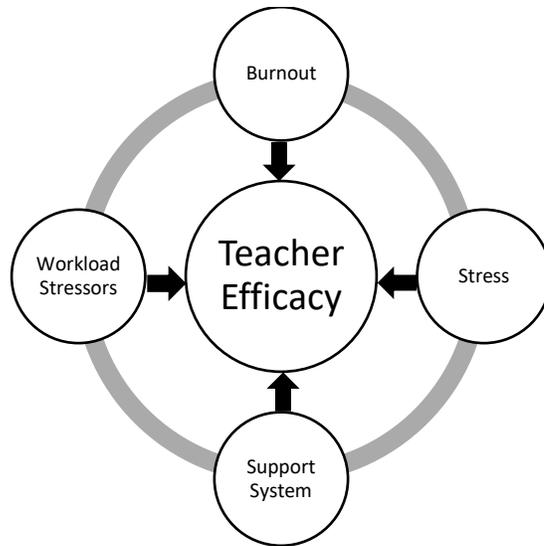
Figure 2. Theoretical Framework: The Relationship Among Burnout, Stress, Support, Workload Stressors, and Teacher Efficacy. The workload stressors along with their support, stress, and feelings of burnout, is correlated with their level of teacher efficacy.

The retention of special education teachers and teacher efficacy. Nuri, Demirok, and Direktör (2017) studied the relationships among teacher efficacy, burnout, and the retention of special education teachers by surveying 46 special education teachers. Their study indicated a positive relationship between teacher efficacy and the retention of special education teachers. The participants completed the Maslach Burnout Scale and the Teacher Self-Efficacy Scale to determine the correlation between high levels of frustration and burnout and low teacher efficacy. The Maslach Burnout Scale includes three subscales intended to measure emotional exhaustion, depersonalization, and personal accomplishment. The emotional exhaustion subscale measures the level of emotional distress caused by a person's work responsibilities, the depersonalization scale measures personal connection to the job, and the personal accomplishment scale measures a person's belief in their ability to achieve workplace success. The Teacher Self-Efficacy Scale implemented Bandura's (1986) theories of self-efficacy. This scale measures teacher efficacy by asking participants to rate their abilities in terms of classroom

management, instructional strategies, and student engagement. The results of the study indicated the participants who planned to leave the profession within a year had the highest emotional distress, the lowest personal success levels, and the lowest scores on the Teacher Self-Efficacy Scale.

Support and teacher efficacy. Support—as it relates to teacher efficacy—refers to the services and resources provided to improve teacher effectiveness (Aldridge & Fraser, 2016). Aldridge and Fraser (2016) surveyed 781 teachers to study the relationship between job satisfaction and teacher efficacy. The researchers found a positive relationship between collaboration with peers and support from school administration and high levels of teacher efficacy.

Teacher collaboration is a form of support because teacher collaboration involves the sharing of practices and experiences (*verbal persuasion*) to increase the number of *mastery experiences*. Most importantly, collaboration promotes reflection, which is beneficial in developing profound learning experiences for students (Weißenrieder, Roesken-Winter, Schueler, Binner & Blömeke, 2015; Da Fonte & Barton-Arwood, 2017). Guo, Justice, Sawyer, and Tompkins (2011) studied 48 preschool teachers to determine how collaboration, along with other variables, affected student engagement and teacher efficacy. The study found positive relationships among student engagement, collaboration, and teacher efficacy. The teachers reported that frequent collaboration improved their efficacy because they learned new strategies and techniques from experienced teachers (*verbal persuasion*). The teachers noted that such new strategies led to increased student achievement (*mastery experiences,* Bandura, 1986).

Providing effective special education services requires collaboration between general education teachers and special education teachers. Poggi and Rineer-Hershey (2010) stated that

general education and special education teachers are expected to collaborate to identify best practices for providing effective services that best meet students' needs. Furthermore, general education teachers are expected to have a basic understanding of their students' IEPs, specifically students' academic goals and any accommodations or modifications necessary to give the student access to the general curriculum. However, Moody's (2003) research indicated that special education teachers are unable to effectively collaborate with general education teachers due to the latter's lack of knowledge of special education. Moody's (2003) quantitative study of general education teachers within a juvenile justice program examined the participants' level of comfort with providing special education services. The study indicated that the teachers of Moody's (2003) study lacked knowledge of how to read and implement an IEP and how to make appropriate accommodations.

The studies of Moody (2003), Houchins et al., (2009), and Ware and Kitsantas (2001) indicated the need for professional development in supporting special education teachers who provide services for students within the juvenile justice system. Althauser (2015) noted that professional development improves an educator's knowledge of effective practices intended to improve student achievement. Mathur, Clark, and Schoenfeld (2009) suggested that insufficient professional development opportunities may cause special education teachers to believe they are not effective when it comes to teaching students with disabilities within the juvenile justice system. Mathur, Clark, and Schoenfeld (2009) found that students with disabilities within the juvenile justice system have greater educational, psychological, medical, and social needs than most students with disabilities. Special education teachers may have the educational knowledge required to provide specialized instruction to students with disabilities but may not be fully prepared to work with such students within the juvenile justice system. Althauser's (2015) study

of 35 teachers, who participated in a two-year mathematics professional development program, illustrated the relationship between relevant professional development and teacher efficacy. The study found a significant increase in teacher efficacy after the participants had to complete the professional development program. For example, the mean score for the question "I teach math effectively" improved from 4.83 to 5.23, indicating a strong positive relationship between professional development and teacher efficacy.

Nance and Calabrese (2009) indicated the mandates of IDEA increased the workload for special education teachers. Houchins et al. (2009) indicated that members of the school leadership of several states' juvenile justice systems did not understand the federal mandates associated with special education. The juvenile justice teachers surveyed by Houchins et al. (2009) stated that "administrators should hold a degree from an accredited school, abide by the laws and…receive education specifically related to being an effective administrator in a juvenile justice setting" (p. 161). DiPaola and Walther-Thomas (2003) stated that principals do not need to be experts in special education but must understand the fundamental policies and procedures associated with implementing special education services. However, "most principals lack the course work and field experience needed to lead local efforts to create learning environments that emphasize academic success for students with disabilities" (p. 11). The findings of Ninkovic and Floric's (2018) study of 120 teachers indicated the existence of a relationship between teacher efficacy and support from school leaders. The results of this study suggest school leaders can positively influence teacher efficacy by encouraging collaboration among teachers by engaging verbal persuasion and support adapted to their individual needs.

Stress and teacher efficacy. Prilleltensky, Neff, and Bessell (2016) described teacher stress as arising from an imbalance between risk and protective factors, specifically when risk

factors outweigh protective factors. Examples of risk factors for teachers may include poor student achievement and negative experiences with parents, while examples of protective factors for teachers are administrative support and instructional resources. McCarthy, Lambert, O'Donnell, and Melendres (2009) surveyed 451 elementary teachers to explore the relationships among support, risk factors, and protective factors. The results indicated that "teachers may be more susceptible to [high levels of stress] if they perceive an imbalance between the demands they face in their jobs and the resources they have for coping with these demands" (p. 238). Special education teachers are not only subject to the demands of general education teachers but are also responsible for the administrative and instructional tasks associated with teaching students with disabilities. Ewald, Ulrich, Reinhard, Annika, and Sabine (2016) stated that, in comparison to general education teachers, special education teachers are at a higher risk of psychiatric distress and mental illness due to the immense workload stressors.

Ewald, Ulrich, Reinhard, Annika, and Sabine (2016) found that managing the behavior of students with disabilities played a primary role in the high-stress levels of special education teachers. Common problematic behaviors displayed by students with disabilities include noncompliance, impulsivity, short attention spans, and hyperactivity (Ali, Abdullah, & Majid, 2014). As previously discussed, the majority of students within the juvenile justice system exhibit challenging characteristics (Mckelvey, Selig, & Whiteside-Mansell, 2017).; Macomber et al., 2010). Klassen and Chin's (2010) study of 1,430 teachers examined the relationships among years of teaching experience, teacher characteristics, self-efficacy, stress, and job satisfaction. The researchers found strong positive relationships among student behaviors, stress, and teacher efficacy and stated that those "teachers who perceived higher levels of stress from student misbehavior reported lower levels of self-efficacy for classroom management" (p. 748).

Furthermore, Kelly (1997) indicated that teaching at a juvenile justice program was stressful due to students' behaviors. Kelly found that a classroom management plan aided in controlling some student behaviors but that the frequent student outbursts and verbal and physical altercations between students led her to question her teaching abilities.

Workload and teacher efficacy. The workload of a special education teacher may include providing, inclusionary practices, indirect services, and IEP program management (Council of Exception Children, 2017). Specialized instruction includes direct instruction from a special education teacher to help students meet their IEP goals and objectives. Inclusionary practices may include co-teaching with general education teachers or providing push-in services, such as having a speech and language pathologist provide a lesson in the general education classroom. Indirect services include holding consultations with the students, general education teachers, and other service providers to modify or adjust instructional techniques to meet the individual needs of students in the general education classroom (Council of Exception Children, 2017). Management of IEPs involves the organization of IEP meeting documents, creating IEPs, monitoring IEP goals, performing annual reviews of IEPs, overseeing the process for performing the initial evaluation or re-evaluation for special education services, and using functional behavior assessments to develop and monitor students' behavioral intervention plans (National Education Association, 2016).

The National Education Association (2016) used input from special education teachers to determine the average minutes per week needed to manage the workload of a special education teacher. The teachers stated specialized instruction requires an average of 815 weekly minutes, 150 weekly minutes for indirect services, 550 weekly minutes for inclusionary practices, and 480 weekly minutes for IEP management. The average weekly workload is 1,995 minutes. A typical

school day is approximately 430 minutes (8:15am-3:10 pm) or 2,150 minutes a week. Teachers are usually given one planning period a day and an occasional duty-free lunch, which is approximately 500 minutes a week. The weekly available time is approximately 1650 minutes a week. According to the calculations developed by the National Education Association (2016), special education teachers need an additional 345 minutes to manage their workload effectively.

Even though the research from the National Education Association (2016) indicated that teachers were allotted time for direct instruction, there is research that has indicated a limitation on instructional time due to excessive administrative responsibilities, such as creating and managing IEPs and behavioral intervention plans (BIPs), facilitating IEP meetings, and completing progress monitoring reports (Billingsley, 2004; Gersten, Keating, Yovanoff, & Harniss, 2001; Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009; Hagaman, & Casey, 2018). Billingsley (2004) observed that "if teachers' roles are structured in a way that does not allow them to use their expertise and if substantial teaching time is lost because of nonteaching tasks, [there is an increase] in frustration and work-related stress and [a decrease in] teacher efficacy" (p. 373).

Huberman's (1993) study of 160 secondary teachers investigated the connections among workload stressors, stress, burnout, and teacher efficacy. The participants reported workload stressors led to an increase in overall stress levels. They also noted that undue stress created feelings of anxiety and worry. The feelings associated with stress, anxiety, and worry led to "a period of self-doubt [and] disenchantment" (p. 56). The consequent reduced teacher efficacy and caused the participants to question the future of their teaching careers. Houchins, Shippen, McKeand, Viel-Ruma, Jolivette, and Guarino's (2010) study of three states' juvenile justice systems correlates with the findings of Huberman's (1993) research. The study conducted by

Houchins et al. (2010) noted that juvenile justice high school teachers are required to provide students with instruction toward earning the state-mandated credit needed for a high school diploma. However, incarceration times vary from a few months to several years. The special education teachers consulted in Houchins et al. (2010) study reported that the stress of attempting to prepare a transient population for graduation while taking into considering students' IEP goals, along with the possibility that the students' hard work may go unrecognized, negatively affected their teacher efficacy.

Burnout and Teacher Efficacy. Freudenberger (1974) developed the concept of burnout, describing it as fatigue or frustration due to negative professional experiences. Subsequent research by Maslach (1982) found that burnout consists of three elements: emotional exhaustion, depersonalization, and personal accomplishment. The difference between stress and burnout is that a stressful situation does not necessarily result in burnout. However, situations that cause prolonged periods of stress may lead to burnout (Prilleltensky, Neff, & Bessell, 2016). For instance, Gersten, Keating, Yovanoff, and Harniss' (2001) conducted a quantitative study of 887 special education teachers to examine the retention rate of special education teachers. Their findings suggested that burnout resulting from prolonged exposure to stressful conditions, such as lack of support, is the leading cause of the low retention rates among special education teachers. Sariçam and Sakiz's (2014) quantitative study of 118 special education teachers illustrated the connection between the elements of burnout and teacher efficacy. This study employed the Maslach Burnout Inventory (MBI) and the Teacher Sense of Teacher Efficacy Scale to examine the correlation between burnout and the teacher efficacy of special education teachers. The results indicated a positive correlation between high personal accomplishment scores and teacher efficacy as well a positive correlation between low scores on the emotional

exhaustion and depersonalization subscales and low levels of teacher efficacy. Hopman's et al. (2018) study further supported the findings of Sariçam and Sakiz's (2014) quantitative study. Hopman et al. (2018) research indicted indicated a relationship between classroom disruption, emotional exhaustion, and low teacher efficacy.

Quantitative Studies

When examining the population of special education teachers, particularly their retention rates, researchers often use surveys to explore a hypothesis or to better explain a phenomenon (Skinner, Tagg, & Holloway, 2000). For example, Andrews and Brown (2015) used the Perceptions of Success Inventory for Beginning Teachers survey to obtain insight into the perceptions and experiences of 14 special education teachers. The goal of the study was to identify the variables that promote teacher efficacy. The survey consisted of six sections, which measured support from colleagues, parents, and administration, the levels of stress, teamwork, staff autonomy, and access to resources, respectively. The study indicated a significant difference between the special education teachers' expectations and present experiences. It found that the support provided by the respondents' parents, school leaders, and colleagues were significantly lower than their ideal expectations. As a result, there was a significant difference between the participants' initial and current teacher efficacy. Houchins, Puckett-Patterson, Crosby, Shippen, and Jolivette (2009) surveyed teachers from three juvenile justice facilities to gather data concerning what general education and special education teachers considered barriers to providing quality education. The study indicated a relationship between teacher efficacy and inadequate administrative support, limited instructional materials, and inadequate facilities.

When examining teacher efficacy, researchers have often investigated the relationships between certain variables and teacher efficacy. Creswell (2014) stated that an essential element

of quantitative research involves exploring the connection(s) between two or more variables. A study conducted by Lee, Patterson, and Vega (2011) examined the relationships between special education teachers' perceived levels of support and responsibilities (variable one) and teacher efficacy (variable two). The researchers measured teacher efficacy among 154 intern special education teachers. The study's results suggested that working conditions, lack of support, lack of resources, high levels of workload stressors, and the absence of instructional and planning time had a direct influence on the respondents' teacher efficacy. Sariçam and Sakiz's (2014) study examined the variables of teacher burnout and teacher efficacy. The study used the Teachers' Sense of Scale and the Maslach Burnout Inventory to measure teacher efficacy and levels of burnout. The participants indicated that they received adequate support in terms of developing impactful instructional strategies and effective classroom management techniques. They also reported low levels of burnout due to the perceived levels of support. Furthermore, the participants indicated a high level of teacher efficacy due to positive emotional states. A study conducted by Dicke et al. (2014) surveyed 1,740 new teachers to investigate the relationships between emotional exhaustion (variable one) and professional knowledge (variable two) and teacher efficacy. The researchers found a strong positive relationship between emotional exhaustion and teacher efficacy. However, professional knowledge was not found to improve teacher efficacy, but it did reduce emotional exhaustion.

Stempien and Loeb (2002) applied data obtained via questionnaires conducted among general education and special education teachers in two one-way analyses of variance (ANOVAs) and correlations to identify the relationships between class size (variable one), administrative duties (variable two), planning (variable three), and collaboration opportunities (variable four) and teacher efficacy as it relates to job satisfaction. The study found strong

positive correlations between low job satisfaction and high levels of frustration due to large class sizes, lack of collaboration time with other special education teachers, little to no planning time, and the stressors correlated with managing the workload of a special education teacher.

Quantitative research can also identify the need for intervention intended to solve a social problem (Creswell, 2014). When researching the retention of education teachers for youth within the juvenile justice system, Bullock and McAuthur (1994) used survey data from several juvenile justice databases to determine the need for a teacher preparation program for the juvenile justice system. The study reported that over 40% of incarcerated youth were juveniles with disabilities and that there were only three universities that offered specialized curricula for teaching incarcerated students. Van, Asscher, Stams, and Moonen's (2014) study indicated the need for special education teachers for students within the juvenile justice system by analyzing the recidivism rate of juveniles with disabilities. The researchers computed Pearson correlation coefficients to determine the relationship between risk factors and recidivism and conducted a multivariate regression analysis to identify the predictors of recidivism among juveniles with intellectual disabilities and juveniles without disabilities. The study predicted a 53% recidivism rate for juveniles with intellectual disabilities and a 45% recidivism rate for juveniles without disabilities. The researchers noted the limited number of teachers qualified to provide special education services was the most significant risk factor to the high recidivism rate of juveniles with intellectual disabilities.

Limitations of quantitative methodology. The limitations of the quantitative design included the use of subjective surveys such as the Teachers' Sense of Efficacy Scale and the Maslach Burnout Inventory. The Teachers' Sense of Efficacy Scale uses subjective questions such as: How much can you help your students value learning? The Maslach Burnout Inventory

asks participants to respond to statements such as "I can easily create a relaxed atmosphere with my students." The questions were based on the opinion of the participants and did not consider the students' perspectives. Fowler (2014) stated that it is feasible to assess objective facts, such as the participants' class sizes, as the researchers could physically count the number of students in each participant's class. However, it is difficult to measure a participant's subjective state, such as feelings of burnout or self-efficacy. As Aldridge and Fraser (2016) noted regarding this challenge, "although elements of the school climate are reported as influencing teacher self-efficacy and job satisfaction, one might also argue that teachers who are dissatisfied or have low efficacy beliefs might also influence the school climate" (p. 305).

Furthermore, their environment may affect participants' responses (Baxter, 2008). Houchins, Shippen, and Cattret (2004) examined the factors correlated with the attrition and retention rates of teachers within a juvenile justice program through a study conducted during a mandatory juvenile justice state conference. Houchins, Shippen, and Cattret (2004) suggested that the setting may have influenced the results. Members of the school's administration were not required to attend the conference which may have influenced the willingness of the respondents to participate in the survey.

Fowler (2014) indicated the timing of a study might affect participants' responses. For example, Viel-Ruma, Houchins, Jolivette, and Benson's (2010) survey instrument was distributed a month before the end of the school year, when the participants were heavily involved in developing IEPs for the following school year. Fowler (2014) noted that "respondents' estimates of how tired they have been over the past week may be affected by how tired they feel at the time they are answering the questions" (p. 12).

Qualitative Studies

Qualitative research seeks to solve a social problem by exploring the opinions and perceptions of the groups or individuals associated with the problem. Qualitative research includes phenomenological research, which involves examining the attitudes of individuals about a specific phenomenon. Phenomenological research also comprises ethnographic observations, which involve studying a culture subset within its natural setting (Creswell, 2014). Atkins and Bartuska (2010) used phenomenological interviewing and ethnographic observations to understand better why some special education programs within the juvenile justice system are ineffective. The study examined seven students; all enrolled in different schools. Atkins and Bartuska (2010) found that the schools offered special education services, but only two institutions employed special education teachers. In one program, the students did not receive direct instruction in the form of, for example, teacher-led lectures or guided practice activities; rather, they were given workbooks and placed in a large room to complete their assignments. Students with IEPs did not receive assistance from a special education teacher, nor did they receive their mandated accommodations.

Qualitative research is also used to create hypotheses, for experimental studies. Nance and Calabrese (2009) developed case studies to examine the low retention rate of special education teachers; which indicated the existence of a relationship between teacher retention and the stressors associated with managing the workload of a special education teacher. The participants reported that completing the mandated paperwork took time away from providing services to students. They also indicated that the overwhelming workload stressors increased stress because they were unable to teach their students effectively.

Qualitative research also examines the patterns of behavior of a group of individuals as they relate to a social problem (Creswell, 2014). Akkuzu (2014) interviewed and observed six

fifth-grade chemistry student teachers to develop case studies intended to examine teacher efficacy. The study indicated that the participants believed feedback had had a positive effect on their teacher efficacy. The teachers stated that feedback or verbal persuasion provided them with tools for encouraging mastery experiences.

Limitations of qualitative methodology. A qualitative approach to research involves the use of intensive data collection methods in exploring the meaning behind a particular phenomenon (Creswell, 2014). Despite the richness of the data that they may offer, a limited number of sources results in a low degree of reliability, as such research is based solely on the interpretation of the observer (Creswell, 2014). Yost's (2016) study of the barriers to improving teacher efficacy for first-year teachers included only 17 participants. Also, there was little diversity within the participants: 16 out of 17 of the respondents were Caucasian, and all of them taught in elementary schools. Another example is that of Atkins and Bartuska's (2010) case study, which described the characteristics of alternative education programs for the juvenile justice system. The study was conducted in three locations, and only seven students participated in the study.

Mixed Methods

Creswell (2014) stated that mixed methods design involves the integration of both qualitative and quantitative research methods. Mixed methods studies that examine the retention rate of special education teachers in the juvenile justice system often use qualitative data collection instruments to gather a combination of participants' attitudes, or behaviors and collect quantitative data by reviewing existing records.

A study by Macomber et al. (2010) used student files, interviews, and observations to investigate the characteristics of youth and teachers within juvenile justice facilities, to describe

the educational programs in juvenile justice facilities, and to identify the challenges associated with educating incarcerated students. The data was coded into categories upon which Macomber et al. (2010) sought to "formulate a theory-based explanation of the obtained observations" (p. 230). The results of the study indicated that students with disabilities were often not accurately identified as such or identified at all. Furthermore, the curricula taught in the educational programs at many juvenile justice facilities were not aligned with the curriculum of public schools. Therefore, many juveniles fall behind their grade-level peers.

Limitations of mixed methods studies. The mixed methods design includes quantitative and qualitative research designs (Creswell, 2014). Therefore, to maintain validity, of any finding the mixed method design requires intensive planning and meticulous implementation. For example, research that adopts a quantitative approach requires a larger sample size than the qualitative design. However, the goal of the qualitative design is to gather data on attitudes and behaviors, not to discover new information (Wisdom & Creswell, 2013).

Furthermore, the development and execution of mixed methods studies are often time and labor intensive. For example, a mixed method study of the relationships among students with disabilities, school attendance, and academic achievement, may include reviewing several IEPs, attendance records, and achievement score reports, along with gathering observational data from several different classrooms. Furthermore, to accurately answer their research question(s), the researcher would have to use qualitative methods and quantitative methods to analyze the data and accurately synthesize the results (Wisdom & Creswell, 2013).

Method of Study

This quantitative research study answers the following research questions using six multinomial logistic regression models:

R1. To what extent do the following variables predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, stress, burnout, and teacher efficacy?

R2. To what extent do the following variables predict stress for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, burnout, and support?

R3. To what extent do the following variables predict the workload stressors for special education teachers who provide services to juveniles within the juvenile justice system: stress, teacher efficacy, burnout, and support?

R4. To what extent do the following variables predict the level burnout for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, stress, and support?

R5. To what extent do the following variables predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system: support, workload stressors, stress, and burnout?

R6. To what extent do the following variables predict retention of special education teachers who provide services to juveniles within the juvenile justice system: teacher efficacy, support, workload stressors, stress, and burnout?

Synthesis

The literature suggests the existence of relationships between teacher efficacy and support, burnout, stress, and workload stressors. It also indicates a correlation between teacher efficacy and the retention of special education teachers, as well as a connection between the increasing number of juveniles with disabilities in the juvenile justice system and the low

retention rates among special education teachers (Macomber, Skiba, Blackmon, Esposito, Hart, Mambrino, & Grigorenko, 2010; Morris & Morris, 2006; Van, Asscher, Stams, & Moonen, 2014).

Teacher efficacy is a teacher's belief in their ability to positively impact students' academic achievements (Tschannen-Moran and Hoy, 2001). The elements of teacher efficacy correspond with self-efficacy, meaning that teacher efficacy is directly related to mastery experiences, vicarious experiences, verbal persuasions, and physiological states (Bandura, 1986). A teacher fails to demonstrate mastery when their efforts result in low student achievement rates. Hence, continued failures of mastery may lower teacher efficacy. The special education teachers investigated in the study conducted by Nuri, Demirok, and Direktör (2017) indicated that their teaching efficacy increased with the number of student achievements. However, the administrative responsibilities of a special education teacher may prove an obstacle to providing quality instruction. For example, Stempien and Loeb's (2002) study indicated that special education teachers spend less time preparing for instruction because the majority of their planning time is spent completing administrative tasks. The literature indicates that, once administrative tasks become an obstacle to instruction, special education teachers experience high levels of stress and frustration due to the fear of becoming low-performing teachers. For example, the special education teachers surveyed in Houchins' et al. (2009) study experienced a negative mental state when special education requirements (progress monitoring, creating, implanting and monitoring IEPs, etc.) and the mandates of the juvenile justice system (providing behavioral reports for counseling services, documentation for probation officers, etc.) served as obstacles to providing quality instruction. Sass, Seal, and Martin's (2010) study indicated that those teachers who had successfully balanced instruction and other administrative requirements

exhibited a profound sense of commitment. Furthermore, those teachers took fewer sick days, displayed a positive attitude toward working with students and parents, and were more confident in their teaching abilities. However, Sass, Seal, and Martin (2010) found that non-instructional responsibilities were obstacles to effective teaching and caused "elevated psychological distress and lower commitment to the profession" (p. 202).

Bandura (1986) stated that vicarious experiences enhance self-efficacy. In the context of teaching, vicarious experiences include observing the successes of other educators and collaborating with colleagues. Guo, Justice, Sawyer, and Tompkins's (2011) study examined the relationships among collaboration, student engagement, and teacher efficacy. The participants reported that teacher collaboration led to the development of more engaging lessons for students. They also noted that collaboratively created lessons yielded higher levels of student achievement. Bandura (1986) identified student academic achievement as a mastery experience needed to increase teacher efficacy.

Furthermore, the participants in Akkuzu's (2014) study reported they would often use the feedback provided by more experienced teachers to improve their teaching performances, which in turn increased their teacher efficacy. The teachers also discussed the value of the observation process in improving their number of mastery experience. The observation process included a classroom observation and a post-conference with a teacher with high student achievement scores within the subject. The post-conferences provided feedback intended to highlight impactful areas of instruction while also identifying areas in need of improvement. Novice teachers were expected to use the feedback to develop a new lesson for the next observation cycle. This process allowed the teachers to view their strengths and weaknesses through the lens of expert teachers. The novice teachers reported that the observation experiences were vital in

improving their self-efficacy because they included "verbal encouragement" toward improving their practice (p. 31).

Bandura (1986) noted the positive effects of receiving support from a person who has achieved success within an individual's sector. Andrews and Brown's study (2015) illustrated the importance of receiving support from a qualified individual. The participants in this study, novice special education teachers, were required to attend professional development sessions held by general education teachers. The teachers reported feelings of frustration and anger because they were expected to implement practices suggested by a teacher who had only worked with special education students for a limited amount of time. Consequently, the special education teachers developed feelings of isolation. The researchers stated that the feelings of isolation led to a negative mindset, and the study participants became less prone to accept feedback as a means of improvement. As a result, the school witnessed little to no improvement in achievement among special education students (Andrews & Brown, 2015). However, the juvenile justice teachers in the study conducted by Houchins' et al. (2009) indicated that the poor staff morale and low retention rate were the results of a lack of staff development courses, opportunities for professional growth, and professional feedback and encouragement from their colleagues.

Critique

Based on the literature, there is considerable evidence for the existence of relationships among teacher efficacy and support, workload stressors, burnout, stress, and the retention of special education teachers who provide services for students within the juvenile justice system (Guo, Justice, Sawyer, & Tompkins, 2011; Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009; Nance & Calabrese, 2009; Nuri, Demirok, & Direktör, 2017; Viel-Ruma,

Houchins, Jolivette, & Benson, 2010; Weißenrieder, Roesken-Winter, Schueler, Binner, & Blömeke, 2015; Da Fonte & Barton-Arwood, 2017). However, the existing studies are not without limitations.

Andrews and Brown's (2015) comparison study of special education teachers' expectations of their careers found that the teachers surveyed lacked collegial support. However, the study did not indicate whether workload stressors made it difficult for them to collaborate with other teachers. Furthermore, an exploration of the factors associated with the attrition and retention rates of juvenile justice teachers conducted by Houchins et al. (2004) found that 75% of the teachers surveyed felt supported by their superiors, while 84% felt that their administrations had failed to provide feedback concerning how they might improve their teaching practices.

Nance and Calbrese's (2009) investigation to determine the relationship between the shortage of special education teachers and increased legal requirements did not provide sufficient data to determine the existence of a strong positive relationship between workload stressors and the retention of special education teachers. However, the researchers did not find a relationship between teacher efficacy and workload stressors. Analysis of the data indicated increased stressors associated with managing the workload of a special education teacher due to the new legal requirements increased only the frustration levels of special education teachers. The literature suggests a correlation between frustration and teacher efficacy due to the negative mental states related to the feelings of frustration (Bandura, 1997; Billingsley, 2004; Freudenberger, 1974).

Bullock and McAuthur's (1994) study reviewed the archived records of three juvenile detention centers to determine whether a need for specialized preparation programs for teaching within the juvenile justice system existed. The researchers discussed the growing population of

incarcerated juveniles with disabilities, but they did not identify a need for specialized teacher preparation programs. Also, Bullock and McAuthur's (1994) failed to compare the success rate of incarcerated juveniles with disabilities who received services from graduates of a specialized program to those who received services from teachers who did not graduate from such a program.

Summary

The extant literature supports the need for qualified special education teachers within the juvenile justice system (Billingsley, 2004; Holmquist, 2013; Moody, 2003; Morris & Morris, 2006, Robinson & Rapport, 1999). However, the structure of the juvenile justice system poses many obstacles for special education teachers, including a lack of resources, challenging student behaviors, transient populations, significant workload stressors, and a lack of support. The literature suggests the existence of a relationship between those obstacles and the retention rate of special education teachers who serve students within the juvenile justice system (Gersten, Keating, Yovanoff, & Harniss, 2001; Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009; Grant, 2017; Hagaman & Casey, 2018).

The preceding literature review led to the theoretical and conceptual framework of a relationship between teacher efficacy and support, workload stressors, stress, and burnout (Dicke, Parker, Holzberger, Kunina-Habenicht, Kunter, & Leutner, 2014; Nuri, Demirok, & Direktör, 2017; Paneque, & Barbetta, 2006). However, the literature does not closely examine the relationships among the retention of special education teachers who serve students within the juvenile justice system and teacher efficacy support, burnout, stress, and workload stressors.

<center>**Chapter 3: Methodology**</center>

Introduction to Methodology

      Bandura (1986) defined self-efficacy as an individual's personal belief that he or she can achieve a goal or complete a specific task. Therefore, teacher efficacy refers to a teacher's belief in their ability to effectively teach their students (Bandura, 1986). Paneque and Barbetta (2006) suggested that the absence of support and excessive stressors associated with managing the workload of a special education teacher affect teacher efficacy. The teachers surveyed in McCarthy, Lambert, O'Donnell, and Melendres' (2009) study expressed feelings of anxiety, ineptitude, and burnout due to their overwhelming job responsibilities and lack of support. This study employs quantitative research methods to examine the relationships among teacher efficacy and stress, burnout, the stressors related to managing the workload of a special education teacher, and support. Also, it adopts quantitative research methods to investigate the relationships among between teacher efficacy, stress, burnout, the stressors connected with managing the workload of a special education teacher, support, and the retention of special education teachers who serve students within the juvenile justice system.

Research Questions

      R1. To what extent do the following variables predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, stress, burnout, and teacher efficacy?

      R2. To what extent do the following variables predict stress for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, burnout, and support?

<center>50</center>

R3. To what extent do the following variables predict the workload stressors for special education teachers who provide services to juveniles within the juvenile justice system: stress, teacher efficacy, burnout, and support?

R4. To what extent do the following variables predict the level burnout for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, stress, and support?

R5. To what extent do the following variables predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system: support, workload stressors, stress, and burnout?

R6. To what extent do the following variables predict retention of special education teachers who provide services to juveniles within the juvenile justice system: teacher efficacy, support, workload stressors, stress, and burnout?

Research Hypotheses

$H1_0$: Teacher efficacy, workload stressors, stress, and burnout do not predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

$H1_A$: Teacher efficacy, workload stressors, stress, and burnout predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

$H2_0$: Teacher efficacy, workload stressors, support, and burnout do not predict stress for special education teachers who provide services to juveniles within the juvenile justice system.

H2$_A$: Teacher efficacy, workload stressors, support, and burnout predict the level of stress for special education teachers who provide services to juveniles within the juvenile justice system.

H3$_0$: Teacher efficacy, support, stress, and burnout do not predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

H3$_A$: Teacher efficacy, support, stress, and burnout predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

H4$_0$: Teacher efficacy, workload stressors, stress, and support do not predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

H4$_A$: Teacher efficacy, workload stressors, stress, and support predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

H5$_0$: Support, workload stressors, stress, and burnout do not predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

H5$_A$: Support, workload stressors, stress, and burnout predict the teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

H6$_0$: Teacher efficacy, workload stressors, stress, support, and burnout do not predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

H6$_A$: Teacher efficacy, workload stressors, stress, support, and burnout predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

Research Design

Adams and Lawrence (2014) stated when the researcher seeks to examine the relationship between variables; the researcher should employ a correlational research design. Furthermore, Adams and Lawrence (2014) stated the survey method produces numerical data that measures the relationship among the variables investigated. The purpose of this study is to examine the relationships among teacher efficacy, stress, burnout, workload stressors, support, and the retention of special education teachers who serve students within the juvenile justice system. Therefore, a correlational research design was the research design for this study and survey research was the preferred data collection procedure. The motive behind the use of the survey design was gathering the participants' perceptions of their teacher efficacy, support, workload stressors, stress, burnout, and examine the reasons behind the participants' decision to no longer provide special education services to students within the juvenile justice system. Fowler (2014) stated that the survey approach is a low-cost quantitative method of gathering information from a sample and that surveys processed through the Internet are cost-efficient, protect anonymity, and provide instant results. Hence, this study's survey was implemented via the Internet. The principal investigator used six multinomial logistic regression models analyzed the survey results to explore the relationships among teacher efficacy, stress, workload stressors, burnout, support and the retention of special education teachers who serve students within the juvenile justice system.

Target Population

The target population for this study was special education teachers who provide special education services to students within the juvenile justice system and who are also members of one of two organizations: The Council of Exceptional Children (CEC) and Black Special

Educators Rock. The target population included special education teachers within the juvenile justice system, from public schools with a large population of students within the juvenile justice system and from programs (e.g., boot camps, residential facilities, wilderness programs) that provide educational services for youth within the juvenile justice system.

The CEC is a global "professional association of educators dedicated to advancing the success of children with exceptionalities… through advocacy, standards, and professional development" (Council of Exceptional Children, 2017, para.1). Currently, the CEC has over 18,000 members. Potential members are required to complete a membership application and pay a membership fee to enjoy the benefits the organization offer such as participation in regional, state, and international chapters, as well as state and national conferences.

Furthermore, the CEC releases a monthly newsletter discussing best instructional practices, current legal issues, and other specialized topics relevant to special education. The CEC also offers online professional development opportunities, access to its career center, and the opportunity to participate in special interest (e.g., special education administration, teaching students with emotional disabilities, autism) subgroups within the organization. Membership also includes access to the online CEC community forum, which allows paid members to collaborate with other CEC members professionally. The CEC's community forum provides a platform upon which members can share their expertise, discuss issues within the field of special education, and seek advice from other special education teachers and leaders. The CEC requires all participants to adhere to a code of conduct when participating in the community forum. This code of conduct mandates that members will not challenge or attack other members post commercial messages or employment opportunities or use offensive or profane language. The CEC reviews all posts and will reject messages that do not follow the code of conduct. The CEC membership application

requires potential members to provide demographic information such their name, address, organization (e.g., school district, college), and phone number. Potential members are also asked to create a password to protect their privacy. The second section of the application requires potential members to select a membership, with the options being student membership, basic membership, full membership, or premier membership. Student membership provides students with the freedom to subsequently upgrade to a.a basic, full, or premier membership.

The purpose of Black Special Educators Rock is to provide an online community for African-American special education teachers to collaborate with other African-American special education teachers. Currently, Black Special Educators Rock has over 4,000 members. Black Educators Rock is primarily an online community forum. Therefore, potential members are not required to submit detailed demographic information or to pay a membership fee. The organization caters to African-American special education teachers, but membership is open to all special education teachers. Potential members are required to submit a short membership application that requires the potential participant's name, certification, email address, and current position within the field of special education. Approved members receive an email granting access to the Black Special Educator Rock community forum. Black Special Educators Rock also has a code of conduct for posting messages to the online community forum. The organization's online community forum requires members to refrain from making commercial posts; members are required only to post messages concerning special education, to maintain the confidentiality of their students, and to refrain from using inappropriate or profane language. Failure to adhere to the Black Special Educators Rock code of conduct for the community forum will result in automatic revocation of a user's membership.

Selection Process and Sampling Design

The selection process and sampling design was convenience sampling. Creswell (2014) defined convenience sampling as "a nonprobability sample in which respondents are chosen based on their convenience and availability" to the researcher (p. 158). The CEC has a directory that lists members' certifications or work experience; however, this directory relies upon members voluntarily completing a community profile. The CEC members are not required to complete a community profile to maintain membership in the organization. Black Special Educators Rock does not have a directory that lists members' certifications or work experience. To ensure that the participants are part of the target population, the participant selection began with a post to the CEC and Black Special Educators Rock community forum to inquire if members are willing to participate in my study. Potential participants received an email containing the link to the complete the survey in Qualtrics. Participants were allowed to complete the survey at their convenience.

Sample Size

G*Power, a statistical calculator was used to determine the sample size required for this study. The G*Power tool uses power, effect size, and significance level (α) to calculate the sample size. In a correlational study, power is the ability to detect a relationship among the variables under consideration. Power is the probability of rejecting a false null hypothesis. Cohen (1988) recommends a minimum significance level of 0.05, which corresponds to a power of .95.

Cohen (1988) explained that, when determining the effect size for multiple logistical regression, 0.02 represents a weak effect, 0.15 represents a moderate effect, and a coefficient of

0.35 or larger represents a strong effect. The author recommends using an effect size of 0.15 for statistical studies that use multinomial logistic regression (Cohen, 1988). Per Cohen's (1988) recommendations, the effect size for this study is 0.15, and the significance level is 0.05. Based on the parameters, a sample of at least 138 participants was needed.

Instrumentation

The survey instrument for this study consists of items intended to gather information concerning participants' personal attributes and educational backgrounds, original survey items from Tschannen-Moran and Hoy's (2001) Teachers' Sense of Efficacy Scale short-form (TSES), original survey items from Maslach, Jackson, and Leiter's (1996) Maslach Burnout Inventory-Educators Survey (MBI-ES)*,* Fimian's (1988) Teacher Stress Inventory (TSI) and modified questions from the National Center for Education Statistics (2009) Schools and Staffing Survey-Teacher Follow-Up Survey (SASS-TFS*).* Tschannen-Moran and Hoy, the authors of the TSES, granted permission to use the TSES for this study (see Appendix B). The principal investigator used previously purchased copies of the MBI-ES for this study. Fimian, the author of the TSI, permitted the use of TSI for this study. The SASS-TFS is located on the National Center for Education Statistics' website and available for public use (U.S. Department of Education, 2016).

Demographics

The first section of this study's survey instrument focuses on demographical information survey items 1–5 asked participants to state their gender, ethnicity, years of teaching experience, whether or not they were highly qualified, any special education certification, and the number of years worked as a special education teacher within the juvenile justice system or at a school with a large population of students involved in the juvenile justice system. Survey item

6 focuses on teacher retention. The survey item asks current teachers if they plan to return in the following year as a special education teacher. Survey item 6 states "I plan to return to my school next year in the role of a special education teacher"; participants will indicate yes (1) if they plan to return as a special education teacher who provides services to students within the juvenile justice system or no (2) if they do not intend to do so. Survey items 7–19 ask participants to indicate the degree to which certain factors (e.g., personal life factors, salary, classroom, and school factors) contributed to the decision to leave their positions as special education teachers who provide services to students within the juvenile justice system. Participants rated each factor's level of importance as not at all important, (1), slightly important (2), somewhat important (3), very important (4) or extremely important (5).

Teacher's Sense of Self-Efficacy Scale

The purpose of the TSES is to assess teacher efficacy levels in terms of instructional practices, student engagement, and classroom management. The TSES consists of a long form (24 items) and a short form (12 items), both of which use a perception-based, nine-point Likert-type scale (e.g., 1 = not at all, 3 = very little, 5 = some degree, 7 = quite a bit, and 9 = a great deal). The items measure the participants personal belief in their ability to create and implement effective instructional practices, (e.g., "To what extent can you craft good questions for your students?"), maintain high levels of student engagement, (e.g., "How much can you motivate students who show low interest in school work?"), and the ability to manage their students, (e.g., "How much can control disruptive behavior in the classroom?"). The short form consists of four questions for each section. The mean value of each subscale (student engagement, instructional practices, and classroom management) determines a participant's efficacy level for that subscale. Tschannen-Moran and Hoy (2001) stated that a high mean score (e.g., a mean score of 6 or

higher) indicates a high level of efficacy for a subscale, whereas a low mean score (e.g., 5 or lower) indicates a low level of teacher efficacy for that subscale.

The questions in the long and short forms have virtually identical psychometric properties (Heneman, Kimball, & Milanowski, 2006). Tschannen-Moran and Hoy (2001) stated that construct validity analyses verified the TSES as being "reasonably valid and reliable" (p. 801), while Heneman, Kimball, and Milanowski (2006) claimed that the TSES is "superior in content to the previously developed measures of [TSES]" (p. 4). With regard to content validity, Tschannen-Moran and Hoy (2001) noted that "the three dimensions of efficacy for instructional strategies, student engagement, and classroom management represent the richness of teachers' work lives and the requirements of good teaching" (p. 801). Tschannen-Moran and Hoy (2001) used the Cronbach's alpha (α) coefficient to measure correlation. Cronbach's alpha (α) measures the extent to which a group of items will consistently measure a concept. Creswell (2014) stated that an alpha (α) score of 1.0 represented a perfect correlation which means that a survey item with an alpha (α) score of 1.0 will perfectly measure a concept. The overall alpha score (α) for the TSES short form is .90, while the alpha score (α) for the student engagement subscale is .81. The alpha score (α) for the instruction subscale is .86, while that of the classroom management subscale is .86 (Tschannen-Moran and Hoy, 2001).

Maslach Burnout Inventory-Educator Survey

The Maslach Burnout Inventory-Educator Survey (MBI-ES) is the MBI for educators. The MBI-ES uses the same subscales as the MBI, namely emotional exhaustion, personal accomplishment, and depersonalization. Emotional exhaustion assesses "feelings of being emotionally overextended and exhausted by one's work," such as "I feel frustrated by my job" (Maslach, Jackson, & Leiter, 1996, p. 194). The emotional exhaustion subscale also measures

participants' stress levels. Maslach, Jackson, and Leiter (1996) described emotional exhaustion as involving loss of energy, debilitation, and fatigue, all of which are indicative of high levels of stress (Prilleltensky, Neff, & Bessell, 2016). Furthermore, the researchers stated that "the factors hypothesized to relate to emotional exhaustion are similar to those in the general literature on stress, and so the similar findings are not unexpected" (Maslach, Jackson, & Leiter, 1996, p. 204). Therefore, in this study, the emotional exhaustion subscale was used to measure the participants' stress. The depersonalization subscale and personal accomplishment subscale were used to measure burnout. Participants respond to survey items using a six-point Likert-type scale (e.g., 0=never, 1=A few times a year or less, 2=Once a month or less, 3=A few times a month, 4=Once a week, 5=A few times a week, 6=Everyday) Maslach, Jackson, & Leiter, 1996). Each subscale's score is categorized as low, average, or high using a scoring key (Maslach, Jackson, and Leiter, 1996). Figure 3 presents the scoring key for each subscale of the MBI-ES.

Emotional Exhaustion	• High: 27 or over • Moderate: 17–26 • Low: 0–16
Depersonalization	• High: 13 or over • Moderate: 12–7 • Low: 6 or less
Personal Accomplishment	• High: 0–31 • Moderate: 32–38 • Low: 39 or over

Figure 3. The Scoring Key for the MBI-ES (Maslach, Jackson, & Leiter, 1996).

Maslach, Jackson, and Leiter (1996) stated that the only difference between the MBI and the MBI-ES is the MBI-ES is for educators. Therefore, the validity of the MBI is comparable to that of the MBI-ES. Convergent validity was determined by correlating a participant's MBI scores with the behavioral ratings provided by a spouse or coworker, certain job characteristics,

and potential measures of burnout. Each correlation were significant correlations, which proved the validity of the MBI (Maslach, Jackson, & Leiter, 1996). Internal consistency was estimated using Cronbach's alpha (α). The reliability coefficient for the emotional exhaustion subscale is an alpha (α) of .90, that of the depersonalization subscale is an alpha (α) of .76, and that of the personal accomplishment subscale is an alpha (α) of .76 (Maslach, Jackson, & Leiter, 1996). Discriminant validity was verified by differentiating the constructs of the MBI from other psychological constructs associated with burnout. Graduate students studying social services completed the MBI and Crowne-Marlow (1964) social desirability (SD) scale. The results indicated there was no correlation between social desirability and burnout.

Teacher Stress Inventory

The Teacher Stress Inventory (TSI) consists of ten subscales of 49 items that measure teacher stress. The ten subscales are time management, work-related stressors, professional distress, discipline and motivation, professional investment, emotional manifestations, fatigue manifestations, cardiovascular manifestations, gastronomic manifestations, and behavioral manifestations. The ten subscales are divided into two categories, namely sources of stress and manifestations of stress. The 49 items are scored using a five-point Likert-type scale (e.g. 5 = extremely noticeable, 4 = very noticeable, 3=moderately noticeable, 2 = barely noticeable, and 1 = not noticeable). The final score is the mean of the 49 items, meaning that the sum of the 49 items is divided by 10. The work-related stressors focus on workload stressors (e.g., "There is little time to prepare for my lessons/responsibilities"). Therefore, only the questions from the work-related stressors subscale are used to assess workload stressors; the mean of the work-related stressors subscale determines a participant's stressors associated with managing the

workload of a special education teacher (Fimian, 1988). Table 1 presents the categories and subcategories of the TSI.

Table 1

Teacher Stress Inventory Categories and Subcategories

Sources of Stress	Manifestations of Stress
Time management	Emotional manifestations
Work-related stressors	Fatigue manifestations
Profession distress	Cardiovascular manifestations
Discipline and motivation	Gastronomic manifestations
Professional investment	Behavioral manifestations

Establishing the face validity of the TSI began with 79 factors related to teacher stress. A list of the 79 factors was distributed to two faculty members and 14 graduate students from the University of Connecticut's College of Education and 16 local public-school teachers. The teachers were asked to sort the 79 items into two categories, namely items closely related to teacher stress and items least related to teacher stress. The items that the respondents identified as being closely related were used to develop a master list of items related to teacher stress. When a participant listed one of the master list items as closely related to teacher stress, a check mark was placed beside that item. The results indicated that 80% of the items were closely related to teacher stress, and this data was used to develop the final inventory (Fimian, 1988).

A factor analysis, which involved identifying clusters of items that share significant disparities determined the TSI's construct validity (Gable, 1986). The participants whose data was used to conduct the factorial validity of the TSI included 960 general education teachers, 2,353 special education teachers, and 88 unclassified educators. A preliminary

principal component factor analysis and oblique and varimax rotations were used to classify the stress factors for questions 1 through 49. Cronbach's coefficient alpha (α) was used to measure internal consistency. The alpha scores for the special education and regular education groups were.93, .92, and .93. A Pearson product-moment correlational analysis was used to identify the relationships among the scale and subscales. Fimian (1988) stated that "behavioral manifestations were least related to the TSI total score ($r = .53$), whereas Time Management was the most ($r = .73$); all correlations exceeded the .50 level, 7 of the 10 coefficients exceeded the .60 level, and 4 of the 10 exceeded .70" (p. 60). For work-related stressors, the overall alpha score (α) for general education teachers was .74, while that of special education teachers was .77. The final version of the TSI included the factors Factors whose alpha reliability estimates exceeded .60 (Fimian, 1988).

Schools and Staffing Survey: Teacher Follow-Up Survey

The National Center for Education Statistics (NCES), in partnership with the U.S. Department of Education, developed the Schools and Staffing Survey (SASS). The purpose of the SASS is to gather demographic data on teachers and principals and to examine the hiring practices for teachers and principals, class sizes, professional development opportunities, and overall productivity of U.S. schools. The Teacher Follow-Up Survey (SASS-TFS) is a follow-up survey for K-12 teachers who have completed the SASS. The SASS-TFS uses nominal questions (e.g., "What is your current marital status?") and Likert-type scale questions (e.g. "To what extent do you agree or disagree with each of the following statements about the state or district assessment program at last year's school?") to assess the retention rate of teachers, to analyze the characteristics of current and former teachers, and to obtain data on levels of job satisfaction. The SASS-TFS consists of two surveys, one for current teachers and one for former teachers.

The SASS-TFS for current teachers is designed for current K-12 teachers, while the SASS-TFS

is for teachers who have left the teaching profession within the last school year. Creswell (2014)

stated that the validity of quantitative research could be determined if "one can draw meaningful

and useful inferences from scores on the instruments" (p. 160). Research studies such as the

"Teacher Attrition and Mobility: Results from the 2012–13 Teacher Follow-Up Survey" (2014)

and the "Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Follow-up

Survey" (1997) used the SASS-TFS data to explore teacher attrition and retention rates and to

examine the characteristics associated with teacher retention.

Creswell (2014) explained that reliability refers to the consistency of an instrument,

meaning that the results it yields are stable and consistent with each administration of the

instrument. Cox, Parmer, Tourkin, Warner, and Lyter (2007) reported that the U.S. Census

Bureau performed a variety of data checks to assess the reliability of the SASS-TFS. Cox,

Parmer, Tourkin, Warner, and Lyter (2007) stated that "these checks involved an examination of

the individual responses, patterns of response, and summary statistics for variables and files to

ensure consistency within items, respondents, and files" (p. 73). Furthermore, univariate,

bivariate, and multivariate tabulations were used to compare current SASS-TFS survey data to

that of previous SASS-TFS surveys to determine whether certain elements, such as a change in

population, can cause variance in the results. The results of the tabulations indicated that random

fluctuations would not affect the consistency of the SASS-TFS, meaning that, despite various

changes, the results yielded by the SASS-TFS will remain consistent with each use of the

instrument (Cox, Parmer, Tourkin, Warner, & Lyter, 2007).

For this study's instrument, questions from the SASS-TFS were modified to specifically

address the reasons why participants chose not to return to their position as special education

teachers who provide services to students within the juvenile justice system. The modified

questions are survey items 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20. A mean score of

three or higher designates a significant reason for not returning as a special education teacher,

while a mean score of two or lower indicates an insignificant reason for not returning (National

Center for Education Statistics, 2009).

Four modified questions from the SASS-TFS were used to assess the participants' level

of support. The modified questions are questions 61, 62, 63, and 64. A mean score of three or

higher designates a high level of support, while a mean score of two or lower indicates a low

level of support (National Center for Education Statistics, 2009). Table 2 lists the original

questions from the SASS-TFS, and the modified questions used in this study.

Table 2

Original Questions from the SASS-TFS and the Modified Questions

Original Question	Modified Question
Because I wanted to take a job more conveniently located OR because I moved.	I wanted to take a job more conveniently located OR because I moved.
Because of other personal life reasons (e.g., health, pregnancy/childcare, caring for family).	Other personal life reasons (e.g., health, pregnancy/childcare, caring for family).
Because I wanted to receive retirement benefits from last year's school system.	I wanted to receive retirement benefits from last year's school system.
Because I wanted or needed a higher salary.	I wanted or needed a higher salary.
Because I needed better benefits than I received at last year's school.	I needed better benefits than I received at last year's school.
Because I was concerned about my job security at last year's school.	I was concerned about my job security at last year's school.

Table 2 (continued)

Original Question	Modified Question
Because I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).	I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).
Because I was dissatisfied with the large number of students, I taught at last year's school.	I was dissatisfied with the large number of students I taught at last year's school.
Because I felt that there were too many intrusions on my teaching time at last year's school.	I felt that there were too many intrusions on my teaching time at last year's school.
Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.	I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.
Because student discipline problems were an issue at last year's school.	Student discipline problems were an issue at last year's school.
Because I was dissatisfied with the administration at last year's school.	I was dissatisfied with the administration at last year's school.
Because I was dissatisfied with the lack of influence, I had over school policies and practices at last year's school.	I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.
The school administration's behavior toward the staff is supportive and encouraging.	My school administration's behavior toward special education teachers is supportive and encouraging.
Necessary materials such as textbooks, supplies, and copy machines are available as needed by the staff.	Necessary materials such as textbooks, supplies, and copy machines are available to special education teachers.
Facilitated and encouraged professional development activities of teachers.	My school facilitated and encouraged professional development activities for special education teachers.

Table 2 (continued)

Original Question	Modified Question
Encouraged professional collaboration among teachers.	My school encourages professional collaboration between general and special education teachers.

Operationalization of Variables

Leggett (2011) stated that the operationalization of variables begins with defining the meaning of a study's constructs (conceptual definition) and identifying the procedures needed to measure those constructs (operational definition). Table 3 presents this study's constructs, conceptual definitions, and operational definitions. Furthermore, the actual survey items and constructs are located in Appendix A.

Table 3

Constructs, Conceptual Definitions, and Operational Definitions

Constructs	Conceptual Definition	Operational Definition
Teacher efficacy	Teacher efficacy refers to a teacher's belief in his or her ability to promote students' learning (Hoy, 2000).	The subscales of the TSES were used to measure the participants' perceived levels of teacher efficacy.
Teacher support	Teacher support refers to the provision of the services and resources needed to need for a teacher to improve his or her performance (Aldridge and Fraser, 2016).	The SASS-TFS was used to measure support (National Center for Education Statistics, 2009).
Workload Stressors	The external or internal stimuli associated with managing the quantity of work that one has to do within the workplace (Nuri, Demirok, & Direktör 2017).	The TSI-Work Related Stressors measured measure workload stressors.

Table 3 (continued).

Constructs	Conceptual Definition	Operational Definition
Burnout	Burnout is defined as the inability "to cope with work-related stress [which causes] long-term exhaustion and diminished interest in the profession" (Sariçam & Sakiz, 2014, p. 423).	The subscales of MBI-ES measured burnout.
Teacher retention	Teacher retention refers to whether teachers stay at their schools, move to different schools, or leave the profession (Thornton, Peltier, and Medina, 2007).	Survey item 6 asked participants who are current teachers whether they plan to stay at their current school as a special education teacher who provides services to students within the juvenile justice system. .

Creswell (2014) stated that it is best to connect the constructs used to the survey instrument to ensure that readers can understand how the data collection process connects to the variables and questions. Table 4 presents the connections among each variable and the survey items.

Table 4

The Connections between Constructs and Survey Item

Constructs	Survey Items
Retention	6–20
Teacher efficacy	21–32
Stress	33-41
Burnout	42–54
Workload Stressors	55–60

Table 4 (continued).

Constructs	Survey Items
Support	61–64

Data Collection

The survey instrument consists of demographic questions related to the participants' personal attributes, educational backgrounds, intent to continue as special education teachers who provide services to students within the juvenile justice system, and the reasons associated with their decision to resign as a special education teacher who provide services to students within the juvenile justice system. The survey instrument also incorporates Tschannen-Moran and Hoy's (2001) TSES short-form Maslach, Jackson, and Leiter's (1996) MBI-ES, and modified questions from the National Center for Education Statistics' (2009) SASS-TFS. The various sections of the survey instrument were combined into one instrument using Qualtrics, a web-based survey platform.

The participant selection began with a post to the CEC and Black Special Educators Rock community forums to inquire about the number of special education teachers who are currently teaching or have previously taught students who receive special education services within the following facilities: the juvenile justice system, residential facilities for students within the juvenile justice system, educational programs that provide educational services to students within the juvenile justice system, or public or alternative schools with a high population of students within the juvenile justice system. The CEC and Black Special Educator Rock members who responded to the community forum post received an email from Qualtrics. The email contained a link that will provide access to Qualtrics, where participants completed the survey instrument. The selected participants were given 15 days to complete the survey. Participants who did not

complete the survey received three reminders to complete the survey. The principal investigator sent reminders on the fifth, 10th, and 15th days after being sent the initial invitation to complete the survey.

As the participants completed the survey, Qualtrics stored their responses and the results of the completed surveys. Participants did not have access to the data that contained the individual responses or the completed surveys. The investigator had principal rights to the data obtained from the completed surveys. After 15 days, the survey was closed, and participants were not allowed to complete the survey instrument. The principal investigator imported the survey results into a Microsoft Excel worksheet for data analysis. The participants did not have access to the Microsoft Excel worksheet, and the primary investigator had primary rights to this worksheet.

Data Methods

The principal investigator used the survey data in six different multinomial logistic regression models. The support model examined the relationships among support and workload stressors, stress, teacher efficacy, and burnout. The stress model investigated the relationships among support, burnout, workload stressors, and teacher efficacy. The workload model analyzed the relationships among burnout stress, support, teacher efficacy, and workload stressors. The burnout model examined the relationships among workload stressors, teacher efficacy, support, stress, and burnout. The teacher efficacy model assessed the predictability of the workload stressors, support, burnout, and stress to teacher efficacy. Lastly, the retention model analyzed the predictability of support, teacher efficacy, workload stressors, stress, and burnout to the retention of special education teachers who serve students within the juvenile justice system. Table 5 lists the dependent and independent variables for each model.

Table 5

Multinomial Logistic Regression Models

Model	Dependent Variable	Independent Variables
Support model	Support	Stress, Workload Stressors, Burnout, Teacher efficacy
Stress model	Stress	Support, Workload Stressors, Burnout, Teacher efficacy
Workload model	Workload Stressors	Stress, Support, Burnout, Teacher efficacy
Burnout model	Burnout	Support, Stress, Workload Stressors, Teacher efficacy
Teacher efficacy model	Teacher efficacy	Support, Stress, Workload Stressors, Burnout
Retention model	Retention	Support, Stress, Burnout, Workload Stressors, Teacher efficacy

Data Analysis Procedures

The steps for preparing the data for analysis are as follows:

1. The principal investigator exported the survey data into a Microsoft Excel spreadsheet.

2. The principal investigator deleted responses with missing fields (e.g., a participant skipped a question).

The responses were changed into numerical values to calculate central tendencies. Table 6 illustrates the survey items, the participants' responses, and the numeric value assigned to each response.

Table 6

Survey Items, the Participants' Responses, and Numeric Values

Survey Items	Participants' Response	Numerical Value
6	Yes	1
	No	2
	Unsure	0
7 –20	Not at all important	1
	Slightly important	2
	Somewhat important	3
	Very important	4
	Extremely important	5
21–32	Never	0
	A few times a year or less	1
	Once a month or less	2
	A few times a month	3
	Once a week	4
	A few times a week	5
	Everyday	6
33–54	Never	0
	A few times a year or less	1
	Once a month or less	2
	A few times a month	3

Table 6 (continued).

Survey Items	Participants' Response	Numerical Value
	Once a week	4
55–60	Not noticeable	1
	Barely noticeable	2
	Moderately noticeable	3
	Very noticeable	4
	Extremely noticeable	5
61–64	Strongly disagree	1
	Somewhat disagree	2
	Somewhat agree	3
	Strongly agree	4

4. Microsoft Excel formulas were used to calculate the central tendencies (mean, mode, median, and standard deviation) for each participant's responses

5. The Statistical Package for the Social Sciences (SPSS) was used to calculate the skewness of the data and create a graph that illustrated the symmetry of a data set or the extent to which data varies from the normal distribution (Adams and Lawrence, 2014). A normally distributed dataset will produce a symmetrical bell-shaped curve, meaning that the mean and the mode are equal. A negative skewness indicates the mean is less than the mode and skewed to the left. Positive skewness indicates that the mean is greater than the mode and that the distribution and skewed to the right. Fairly symmetrical data achieves a skewness of between -0.5 and 0.5, moderately

skewed data is between -1 and -0.5 or between 0.5 and 1, and highly skewed data is less than -1 or greater than 1(Adams and Lawrence, 2014).

6. The SPSS was used to calculate the kurtosis. Kurtosis measures the tails of the distribution. Data with a normal distribution has a kurtosis of zero, a bell-shaped frequency curve, and clustered around the mean. Therefore, a positive kurtosis indicates heavy tails or outliners, while a negative kurtosis indicates light tails or a lack of outliers (Adams & Lawrence, 2014).

Pilot Testing

Creswell (2014) stated that pilot testing is "important to establish the content validity of scores on an instrument and to improve questions, format, and scales" (p. 161) and suggested content validity, construct ability, and concurrent validity as appropriate validity measures for such testing. The purpose of this study's survey instrument was to measure the relationships among teacher efficacy, support, stress, burnout, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system. The pilot testing survey instrument was the exact instrument used this study, meaning that the pilot instrument consisted of items intended to gather data on the participants' attributes and educational backgrounds.

The participants for the pilot testing of the survey instrument are teachers at an alternative school for students with profound behaviors, including students who are part of the juvenile justice system. The participants received an invitation to participate in this pilot study via email. The data collection and data analysis procedures were used to process and analyze the data. Also, an interview was held with each participant to discuss any necessary improvements. The interviews consisted of the following questions:

1. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey accurately addresses the reasons behind the low retention rate of special education students who serve students within the juvenile justice system?

2. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey accurately measures teacher efficacy? If not, what are your suggestions for improving this section of the survey?

3. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey measures burnout experienced by special education teachers? If not, what are your suggestions for improving this section of the survey?

4. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey accurately measure stress for special education teachers? If not, what are your suggestions for improving this section of the survey?

5. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey accurately measures workload stressors? If not, what are your suggestions for improving this section of the survey?

6. As a special education teacher who serves students within the juvenile justice system, do you feel that the survey accurately measures support for special education teachers? If not, what are your suggestions for improving this section of the survey?

7. What are some (if any) additional suggestions for improving this survey instrument?

The pilot study occurred after approval by the Concordia University Institutional Review Board (CU-IRB).

Limitations and Delimitations of the Research Design

The possible limitations and delimitations of this study are as follows:

1. The survey instrument uses modified items from the SASS. Creswell (2014) noted that the original validity and reliability might not hold for modified instruments.

2. The results obtained may be inaccurate or incomplete because the survey does not provide participants with an opportunity for participants to provide additional examples of inadequate support, workload stressors, burnout, and stress, and other factors that may lower teacher efficacy.

3. The study does not consider contextual factors when interpreting the results or examining variation in the data. For example, teachers at public schools with a high population of students within the juvenile justice system may experience a higher amount of support due to the school affiliation with the local school district.

4. This study 's sample included participants who voluntarily participate in an organization. Therefore, this sample may include a large number of special education teachers who do not experience high levels of stress, low levels of support, stressors allied with managing the workload of a special education teacher or feelings of burnout. The characteristics of the participants may limit the generalizability of findings for this study.

Internal Validity

Creswell (2014) stated internal validity threats are the experimental methods or participant experiences that jeopardize the ability to interpret the data concerning a specific population accurately. Creswell (2014) listed specific threats to internal validity: history, maturation, regression, selection, morality, diffusion of treatment, compensatory or resentful demoralization, compensatory rivalry, testing, and instrumentation. Mortality, the threat of "participants dropping out during an experiment due to many possible reasons" was a potential

internal threat to this study (Creswell, 2014, p. 174). Mortality posed as an internal threat to because even though participants may have indicated their involvement in the study, unforeseen circumstances may have caused the participants to withdraw within the 15 days allotted to complete the survey instrument. Creswell (2014) suggested recruiting a sample larger than that required to compensate for participants who may withdraw from the study. The results of the G*Power calculations recommended a sample of 138 participants. Therefore, a total of 200 participants was recruited to participate in this study to address the threat of participants dropping out due to unforeseen circumstances. The additional 62 participants served as alternatives to the participants who withdrew from the study.

External Validity

External validity threats arise when inaccurate interpretations of sample data are used to make inferences about populations, situations, and settings (Creswell, 2014). Creswell (2014) identified three types of threats to external validity: interaction of selection and treatment, interaction of setting and treatment, and interaction of history and treatment. Interaction of selection and treatment poses as an external validity threat to this study. Creswell (2014) stated that interaction of selection and treatment is a threat to external validity because the characteristics of participants may prevent researchers from using a study's results to make inferences about populations who do not share the characteristics of the study's participants. The characteristics of the participants of this study are that they are special education teachers who are currently working or have previously worked at a juvenile justice center, school (e.g., public, private, or alternative schools) with a large population of students within the juvenile justice system, or residential program for youth within the juvenile justice system. The results of this study cannot be used to make inferences concerning for teachers who do not teach special

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education, and the results also cannot be used to make accurate inferences concerning current or former special education teachers who do not teach or have not taught special education to students within the juvenile justice system. As a preventative measure, the results will only be used to develop claims concerning current or former special education teachers who serve(d) students within the juvenile justice system.

Ethical Issues

Fowler (2014) stated that the defining characteristic of ethical survey research is informing participants of the purpose of a survey as it relates to a particular study. Even though the CU-IRB determined this study was a minimal risk project, the CU-IRB recommended that all participants review an informed consent that includes a description of the study and ensures that participants have a full understanding of the study. Therefore, at the beginning of the survey, participants are required to read a paragraph explaining the role of the principal investigator in the research process, the purpose of the research, the individuals who will have access to the data, a confidentiality agreement and a consent statement. The survey was administered through Qualtrics, a web-based survey platform. The participants were not required to submit their names to maintain confidentiality.

Reducing Bias

Fowler (2014) stated that there is a risk that participants may be unwilling or unable to respond. To reduce the likelihood of nonresponse bias, participants received a personalized invitation to complete the survey, while the participants who have not completed the survey received reminders. There is also the risk that participants will complete the survey simply to be agreeable to the researcher. As the researcher is a special education teacher who provides special education services at a school with a high population of students within the juvenile justice system and as a member of the CEC and Black Special Educators Rock, many of the participants

are professional colleagues. Therefore, the participants were not required to submit their name when completing the survey. The survey used neutrally worded questions, and the survey responses were not shared with the participants to reduce response bias. The survey questions were presented in a certain order to prevent order bias or the assimilation effect, which is when participants use previous responses to answer the latter questions (Fowler, 2014).

Expected Findings

Prilleltensky, Neff, and Bessell (2016) defined stress on the part of teachers as arising from an imbalance between risk and protective factors, while teacher support refers to the services and resources provided to improve teacher effectiveness. Melendres' (2009) study indicated that an imbalance between the demands of a job and the availability of the resources results in prolonged stress. Prilleltensky, Neff, and Bessell (2016) stated that prolonged periods of stress lead to emotional exhaustion (i.e., burnout). Furthermore, Huberman's (1993) study indicated the existence of strong relationships among workload stressors, stress, burnout, and teacher efficacy. The participants in Huberman's (1993) study stated that the difficulty involved in managing their workloads led to increased stress levels and periods of low teacher efficacy. When asked about the future of their teaching careers, the participants indicated low teacher efficacy as a reason for not continuing in their positions. Therefore, I expect to find strong positive relationships among stress, teacher efficacy, workload stressors, support, burnout and the retention of special education teachers who serve students within the juvenile justice system.

Summary

The principal investigator for this study used a correlational research design, a survey instrument, and six multinomial logistic regression models to investigate the relationships among teacher efficacy, support, workload stressors, stress, burnout and the retention of special

education teachers who serve students within the juvenile justice system. The target population consists of special education teachers who provide services to students within the juvenile justice system. The target population will include participants who teach or have taught in juvenile justice programs, residential programs, alternative schools for youth within the juvenile justice system, and public schools with large populations of students within the juvenile justice system. There are limitations to this research design, such as possibly reduced validity as a result of using a modified instrument and overlooking additional causes of stress, emotional exhaustion, and low teacher efficacy. Furthermore, there are also internal (e.g., mortality) and external (e.g., the interaction of selection treatment) threats to the validity of this study. Recruiting additional participants to serve as alternates to participants who unable to participate in the study and using the study's results only to develop claims concerning current or former special education teachers who provide services to students within the juvenile justice system will reduce external and internal threats to validity.

To reduce the risk of engaging in unethical practices, a paragraph at the beginning of the survey listed the individuals who will have access to the data, included a confidentiality agreement and a consent statement. The participants received a personalized invitation to complete the survey, and the participants who did not completed it within a certain time frame received reminders. The participants remained anonymous to each other to prevent response bias, and the survey questions were presented in a certain order to prevent order bias (Fowler, 2014).

Chapter 4: Data Analysis and Results

Introduction

The purpose of this study was to examine the relationships among teacher efficacy, stress, burnout, support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system. Using the theoretical lens of teacher efficacy (Bandura, 1986), the conceptual framework of this study addressed the lack of research that discusses the relationship among teacher efficacy, stress, burnout, lack of support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system (Skaalvik & Skaalvik, 2007). The data collection method employed was survey research, and the data was analyzed using six multinomial logistic regression models. The following sections review the research questions, discuss the hypotheses, describe the instrumentation, population, sampling method, the sample; the pilot instrument; data processes methods, data analysis methods; and the results.

Research Questions and Hypotheses

The research questions and hypotheses that guided this study are as follows:

R1. To what extent do the following variables predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, stress, burnout, and teacher efficacy?

$H1_0$: Teacher efficacy, workload stressors, stress, and burnout do not predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

$H1_A$: Teacher efficacy, workload stressors, stress, and burnout predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system.

R2. To what extent do the following variables predict stress for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, burnout, and support?

H2$_0$: Teacher efficacy, workload stressors, support, and burnout do not predict stress for special education teachers who provide services to juveniles within the juvenile justice system.

H2$_A$: Teacher efficacy, workload stressors, support, and burnout predict the level of stress for special education teachers who provide services to juveniles within the juvenile justice system.

R3. To what extent do the following variables predict the workload stressors for special education teachers who provide services to juveniles within the juvenile justice system: stress, teacher efficacy, burnout, and support?

H3$_0$: Teacher efficacy, support, stress, and burnout do not predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

H3$_A$: Teacher efficacy, support, stress, and burnout predict workload stressors for special education teachers who provide services to juveniles within the juvenile justice system.

R4. To what extent do the following variables predict the level burnout for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, stress, and support?

H4$_0$: Teacher efficacy, workload stressors, stress, and support do not predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

H4_{A:} Teacher efficacy, workload stressors, stress, and support predict the level of burnout for special education teachers who provide services to juveniles within the juvenile justice system.

R5. To what extent do the following variables predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system: support, workload stressors, stress, and burnout?

$H5_0$: Support, workload stressors, stress, and burnout do not predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

$H5_A$: Support, workload stressors, stress, and burnout predict the teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system.

R6. To what extent do the following variables predict retention of special education teachers who provide services to juveniles within the juvenile justice system: teacher efficacy, support, workload stressors, stress, and burnout?

$H6_0$. Teacher efficacy, workload stressors, stress, support, and burnout do not predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

$H6_A$. Teacher efficacy, workload stressors, stress, support, and burnout predict retention for special education teachers who provide services to juveniles within the juvenile justice system.

Instrumentation

Description of Survey Instrument. The survey instrument consisted of non-identifying demographic questions; original survey items from Tschannen-Moran and Hoy's (2001) short form TSES; original survey items from Maslach, Jackson, and Leiter's (1996) MBI-ES; and modified questions from the National Center for Education Statistics' (2009) SASS-TFS.

Tschannen-Moran and Hoy, the authors of the TSES, granted permission to use the TSES for this study (see Appendix B).

The purpose of the TSES is to assess teacher efficacy levels on three subscales: instructional practices, student engagement, and classroom management (e.g., "To what extent can you craft good questions for your students?", "How much can you do to motivate students who show low interest in school work?", and "How much can you do to control disruptive behavior in the classroom?"). Participants answered each question using a nine-point Likert-type scale (where 1 = not at all, 3 = very little, 5 = some degree, 7 = quite a bit, and 9 = a great deal; Tschannen-Moran & Hoy, 2001). The purpose of the MBI-ES is to assess an educator's emotional exhaustion, personal accomplishment, and depersonalization (e.g., "I feel frustrated by my job"). Participants responded to survey items using a six-point Likert-type scale (0 = never, 1 = a few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, and 6 = every day; Maslach, Jackson, & Leiter, 1996). The purpose of the TSI is to assess teacher stress. The items are scored using a five-point Likert-type scale (e.g. 5 = extremely noticeable, 4 = very noticeable, 3 = moderately noticeable, 2 = barely noticeable, and 1 = not noticeable). The questions from the work-related stressors subscale were used to assess workload stressors. The purpose of the SASS-TFS is used to investigate the efficiency of public and private schools. The SASS-TFS uses both nominal questions (e.g., "What is your current marital status?") and Likert-type scale questions (e.g., "To what extent do you agree or disagree with each of the following statements about the state or district assessment program at last year's school?"). Participants respond to Likert-type questions using a 4-point scale (e.g.,1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, and 4 = strongly agree).

The questions were combined into one survey instrument using Qualtrics. Therefore, the mean of the TSES subscales was calculated into one mean value to determine the overall score for teacher efficacy (Tschannen-Moran & Hoy, 2001). The MBI-ES also uses subscales to measure specific areas of burnout, namely depersonalization, personal accomplishment, and emotional exhaustion. However, this study focuses on stress and burnout. Therefore, the emotional exhaustion subscale was used to measure stress, and the mean of the depersonalization and personal accomplishment subscales measured burnout. The mean of the MBI-ES emotional exhaustion subscale determined the overall score for stress, while the means of the MBI-ES depersonalization and personal accomplishment subscales determined the overall score for burnout. The mean of the TSI work-related stressors subscale was used to determine each participant's workload stressors. Survey items 7 through 19 were intended only for participants who responded "no" or "unsure" to survey item 6. Survey items 7 through 19 focused on the reasons for the high retention rates among special education teachers who provide services for students within the juvenile justice system. Therefore, central tendency scores for survey items 7 through 19 were used to examine the reasons associated with the retention of special education teachers who serve students within the juvenile justice system.

Reliability. The SPSS was used to determine the reliability of the survey instrument. The SSPS calculated the Cronbach's alpha (α) coefficient to determine the extent to which a group of items will consistently measure a concept. Creswell (2014) stated the score of 1.0 represents a perfect correlation, meaning that survey items with an alpha (α) score of 1.0 will produce perfectly consistent results. When examining the survey items 7–19, it is important to note that the questions were not designed to measure retention but were instead intended to allow participants to rate the importance each survey item had in terms of influencing their decision to

not return to their careers as special education teachers who serve students within the juvenile justice system. As can be seen in Table 7, the subscale used to measure retention showed the lowest reliability. As can be seen in Table 7, the survey items used to measure each construct were above .50, indicating that they consistently measured each construct (Adams & Lawrence, 2014).

Table 7

The Reliability of Each Construct

Construct	A
Retention	.69
Teacher efficacy	.81
Stress	.94
Support	.81
Burnout	.60
Workload stressors	.87

Note. Survey items 7–19 were used to analyze the responses of survey item 6

Population and Sampling Method

The selection process and sampling design involved "a nonprobability sample in which respondents are chosen based on their convenience and availability" (Creswell, 2014, p. 158). The participant selection began with a post to the CEC and Black Special Educators Rock community forums inquiring about the number of special education teachers who were currently teaching or had previously taught special education within the following facilities: detention centers, diagnostic centers, group homes, boot camps, alternative schools, public or private schools with a large number of students within the juvenile justice system, or long-term secure

facilities. The potential participants received an email with an invitation to complete the survey. Participants were given 15 business days in which to respond to the survey.

The target population was current or former special education teachers who provided special education services to students within the juvenile justice system. The actual sample included both current and former special education teachers who provided services at detention centers, diagnostic centers, group homes, boot camps, alternative schools, public or private schools with a large number of students within the juvenile justice system, or long-term secure facilities. The G*Power tool was used to identify the desired sample size (Faul, Erdfelder, Buchner, & Lang, 2009). Cohen (1988) suggested 0.15 as the effect size, for a moderate effect and a power of .95 for a 95% chance of detecting a correlation between the variables investigated. Moreover, Cohen (1988) recommended a minimum significance level of 0.05, which represents a 5% chance of not accepting a true null hypothesis. The calculations of a one-tailed test include using the alpha value to test the statistical significance in the one direction of interest. Each construct was used as a dependent variable in a multinomial logistic regression model to examine the relationships among the dependent and independent variables in a single direction (Adams & Lawrence, 2014). With an effect of 0.15, a significance level of 0.05, and power at 95 %, G*Power calculated a necessary sample size of at least 138 participants.

Description of the Sample

As can be seen in Table 8, there were a total of 155 participants. Most of the participants were white (82.91%), female (92.90%), and considered highly qualified (94%) in special education. The largest number of participants held certifications in learning disabilities (30.15%) and emotional disabilities (19.47%). There was a small variance between the participants who reported 20 or more years of experience (21.94%) and participants who reported three or fewer

years of experiences (20.65%). With regard to retention, 74.84% of the participants reported

planning to return as special education teachers who provide services to students within the

juvenile justice system. Therefore, the majority of the participants were white, female, and

highly qualified special education teachers with 20 or more years of experience who planned to

return as special education teachers who serve students within the juvenile justice system.

Table 8

Demographics

Characteristic	%	Count
Gender		
Male	6.45%	10
Female	92.90%	144
Other	0.65%	1
Ethnicity/race		
White	82.91%	131
Other	1.27%	2
Native Hawaiian or Pacific Islander	0.00%	0
Hispanic or Latino	2.53%	4
Black or African American	12.66%	20
Asian	0.63%	1
American Indian or Alaska Native	0.00%	0
Highly qualified teacher		
Yes	93.55%	145
No	6.45%	10
Special education certifications		

Table 8 (continued).

Characteristic	%	Count
Intellectual disabilities	21.37%	56
Learning disabilities	30.15%	79
Autism	14.50%	38
Blind/visually impaired	1.53%	4
Emotional disabilities	19.47%	51
Deaf/hearing impaired	1.15%	3
8–11 years	15.48%	24
12–15 years	12.26%	19
16-19 years	10.32%	16
20+ years	21.94%	34
Retention rate		
Yes	74.84%	116
No	23.87%	37
Unsure	1.29%	2

Note: Three participants identified two ethnicities. Participants could select multiple certifications.

Pilot Test

The principal investigator conducted the pilot test after approval from the Concordia University Institutional Review Board. The pilot testing survey instrument was the exact instrument used for the actual study. The participants for the pilot test consisted of 10 special education teachers from an alternative school in South Carolina where 80% of the student population were within the juvenile justice system. The participants received an invitation with a

link to Qualtrics to complete the survey via email. The purpose of the pilot study was to measure the constructs of teacher efficacy, support, stress, burnout, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system. The participants were able to review their scores to determine if the scores reflected their perceptions of the survey constructs. All of the participants indicated that the questions accurately measured constructs. However, the recommendations of the pilot study participants led to three changes to the survey format: The directions were removed from the individual questions and instead placed at the beginning of each section, a response of "unsure" was added to survey item 6 ("I plan to return to my school next year in the role of a special education teacher"). Finally, the participants stated that, when completing the instrument on a mobile device, the questions where participants responded using a that used the sliding scale were easier to complete than multiple choice questions. The participants indicated it was not necessary to use sliding scale responses for the demographic questions. Therefore, the principal investigator used a sliding scale response for the survey constructs that measured stress, support, workload stressors, teacher efficacy, and burnout.

Preparing the Dataset

Survey items 19 and 20 were duplicate questions, which resulted in duplicate responses. Therefore, the principal investigator removed survey item 20 from the Microsoft Excel spreadsheet. However, to prevent data discrepancy, the numbering of the survey items was not changed. To ensure an appropriate sample size, 249 potential participants were identified and provided with an electronic link to the survey.

Missing Data

Participants were not allowed to skip questions but could stop the survey at any time. As a result, 155 participants completed the survey, while 94 did not. In the 94 incomplete surveys, the only item that the respondents completed was the consent form. Therefore, the 94 incomplete surveys were discarded and not used in this study.

Preliminary Statistics

The purpose of this study is to examine the relationships among teacher efficacy, stress, burnout, support, workload stressors, and the retention of special education teachers who provide services to students within the juvenile justice system. For this study, the participants who planned to return as special education teachers who provide services for students within the juvenile justice system are referred to as "returning teachers." The "non-returning teachers" consisted of participants who responded "no" or "unsure" to survey item 6. To determine the descriptive statistics, the survey data was examined using four different approaches. For survey items 21 through 64, descriptive statistics were computed for the full sample, and the results were then also disaggregated for returning and non-returning teachers. Survey items 7 through 19 examined the reasons why respondents chose not to return as special education teachers who provide services to students within the juvenile justice system, and only the non-returning participants were asked to complete survey items 7 through 19. Therefore, survey items 7 through 19 were examined separately from the other survey items.

Central Tendencies and Standard Deviation. As can be seen in Table 9, according to the TSES scale, a mean of 7.15 (nothing = 1–2, very little = 3–4, some influence = 4–5, quite a bit = 6–7, and a great deal = 8–9) signified that the participants reported high levels of teacher efficacy (quite a bit). The mean for the stress construct was 2.87 (never = 0, a few times a year or less = 1,

once a month or less = 2, a few times a month = 3, once a week = 4, a few times a week = 5, and

every day = 6). According to the MBI-ES emotional exhaustion subscale, the participants

experienced stress a few times a month (never = 0, a few times a year or less = 1, once a month

or less = 2, a few times a month = 3, once a week = 4, a few times a week = 5, and every day =

6). However, the standard deviation for stress (1.42) was greater than the standard deviations for

the other variables. According to MBI-ES, the mean for the burnout construct suggested that

most of the participants experienced feelings of burnout three times a month (never = 0, a few

times a year or less = 1, once a month or less = 2, a few times a month=3, once a week=4, a few

times a week = 5, and every day = 6). The small standard deviations for each construct indicated

that most of the scores were close to the mean. According to the TSI scale, a value of 1 suggests

that workload stressors were not noticeable, while a value of 5 implies that workload stressors

were extremely noticeable, indicating a high level of workload stressors. The mean for workload

was 3.64, or moderately noticeable, which indicated a moderate level of workload stressors (not

noticeable = 1, barely noticeable = 2, moderately noticeable = 3, very noticeable = 4, and

extremely noticeable = 5). The low standard deviation indicated that many of the responses were

close to the mean.

Table 9

Measures of Central Tendency and Standard Deviation

Variable	M	Mode	Mdn	SD
Teacher efficacy	7.15	7.33	7.25	0.95
Stress	2.87	2.33	2.89	1.42
Burnout	3.08	3.09	3.09	0.06
Workload	3.64	3.83	3.83	0.95

Table 9 (continued).

Variable	M	Mode	Mdn	SD
Support	2.75	2.75	2.75	0.82

Table 10 provides the descriptive statistics for non-returning teachers. As can be seen, the mean for teacher efficacy was 7.3, meaning that most of the non-returning teachers felt strongly (quite a bit) about their ability to implement effective instructional strategies, to implement classroom management techniques, and to maintain a high level of student engagement (nothing = 1–2, very little = 3–4, some influence = 4–5, quite a bit = 6–7, and a great deal = 8–9). The mean for the stress subscale was 3, indicating that the non-returning teachers experienced stress a few times a month. However, the mode was 5, meaning the non-returning teachers' most frequently reported score for stress signified that they experienced stress a few times a week (never = 0, a few times a year or less = 1, once a month or less = 2, a few times a month = 3, once a week = 4, a few times a week = 5; and every day = 6). The mean for the burnout subscale for non-returning teachers was 3, meaning that non-returning teachers experienced burnout a few times a month. However, the mode was 6, indicating that non-returning teachers experienced daily feelings of burnout (never = 0, a few times a year or less =1, once a month or less = 2, a few times a month = 3, once a week = 4, and every day =6). The mean for workload stressors was 4, suggesting that workload stressors had a moderate impact. However, the mode was 5, meaning that the non-returning participants' most frequently reported score for workload stressors indicated workload stressors were extremely noticeable (not noticeable = 1, barely noticeable = 2, moderately noticeable = 3, very noticeable = 4, and extremely noticeable = 5).

Table 10

Measures of Central Tendency and Standard Deviation: Non-returning Special Education

Teachers

Variable	M	Mode	Mdn	SD
Teacher efficacy	7.30	9	8	1.65
Stress	3.40	5	4	2.00
Burnout	3.27	6	4	2.25
Workload stressors	3.76	5	4	1.27
Support	2.53	3	3	1.12

As can be seen in Table 11, a mean of 7 implies high levels of teacher efficacy (nothing = 1–2, very little = 3–4, some influence = 4–5, quite a bit = 6–7, and a great deal = 8–9). The mean for burnout indicated that the returning teachers experienced feelings of burnout a few times a month. However, the most frequently reported score for burnout was 5, meaning that the returning teachers experienced feelings of burnout a few times a week (never = 0, a few times a year or less = 1, once a month or less = 2, a few times a month = 3, once a week = 4, a few times a week = 5, and every day = 6).

Table 11

Measures of Central Tendency and Standard Deviation: Returning Special Education Teachers

Variable	M	Mode	Mdn	SD
Teacher efficacy	7.10	7	7	1.5
Stress	2.70	1	3	1.76
Burnout	3.27	5	4	2.24
Workload Stressors	3.76	3	3	1.27

Table 11 (continued).

Variable	M	Mode	Mdn	SD
Support	2.53	3	3	0.99

To further investigate the factors that influence retention, the non-returning teachers were asked to complete survey items 7 through 19. Table 12 presents the measures of central tendency for each survey item. The results of the survey item dissatisfaction with administration suggested that non-returning teachers' dissatisfaction with administration was somewhat important in their decision-making process (mean = 3). However, the most frequently reported score was 5, meaning most of the non-returning teachers reported dissatisfaction with administration as being extremely important in their decision-making process (not at all important = 1, slightly important = 2, somewhat important = 3, very important = 4, and extremely important = 5).

Table 12

Measures of Central Tendency and Standard Deviation for Survey Items 7–19.

Survey Item	M	Mode	SD	Mdn
7. I wanted to take a job more conveniently located OR because I moved.	2.05	1	1.41	1
8. Other personal life reasons (e.g., health, pregnancy/childcare, caring for family).	2.64	1	1.61	2
9. I wanted or needed a higher salary.	2.61	1	1.54	3
10. I needed better benefits than I received at last year's school.	2	1	1.58	1
11. I was concerned about my job security at last year's school.	1.72	1	1.28	1

95

Table 12 (continued).

Survey Item	M	Mode	SD	Mdn
12. I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).	2.90	1	1.59	3
13. I was dissatisfied with a large number of students I taught at last year's school.	2.61	1	1.60	2
14. I felt that there were too many intrusions on my teaching time at last year's school.	2.64	1	1.66	2
15. I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.	2.56	1	1.48	2
16. Student discipline problems were an issue at last year's school	2.95	1	1.47	3
17. I was dissatisfied with the administration at last year's school	3.19	5	1.69	3
18. I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.	2.85	3	1.37	3

Assumptions of normality. Ghasemi and Zahediasl (2012) stated that assumptions of normality are vital in a regression analysis because it is difficult to draw accurate conclusions about a population. Therefore, the skewness of each construct was used to measure the distribution of the data.

Skewness. A skewness of 0 indicates a normal distribution. A negative skewness has a long tail towards the left, indicating, and the mean is less than the median. A positive skewness results in a long tail to the right, meaning the mean is higher than the median (Adams and Lawrence, 2014). The SPSS was used to calculate the skewness and standard error of skewness for all data values. Stress was the only variable with a positive skew (.20). The skewness of the teacher efficacy construct was -.79, the burnout construct was -2.47, the workload stressors

construct was -.620, and that of the support construct was -.33. The standard error of skewness for each variable was .20. Adams and Lawrence (2014) stated that if the skewness value is twice the standard error of skewness, there is a significant departure from a normal distribution. Therefore, the only construct that was not normally distributed from the mean was the stress construct.

Skewness: Survey Items 7 through 19. Table 13 provides the skewness for survey items 7 through 19. In Table 13, survey items 7 through 19 are referred to as Q7 through Q19. As can be seen in Table 13, survey items 8, 17, 18, and 19 were negatively skewed, while the remaining survey items were positively skewed. The survey items with values closest to a normal distribution were 13, 17, and 19.

Table 13

Skewness for Survey Items 7–19

	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19
Skewness	.85	.35	1.56	.34	1.32	1.54	.10	.311	.286	.512	-.07	-.11	-.03

Assumptions of normality: Implications. Ghasemi and Zahediasl (2012) stated that, according to the central limit theorem, in sample sizes larger than 30, the sampling distribution is most likely to be normally distributed, despite the shape of the data. The assumptions of normality indicate the data is not normally distributed. However, the sample size for this study was 155 participants, which is larger than 30. Therefore, it is acceptable to use this data in a regression analysis.

Kurtosis. Data that is not normally distributed signifies the presence of outliers. Outliers are data points that fall outside of the range of normally distributed data. It is important to

measure outliers because they may bias a statistical analysis (Adams & Lawrence, 2014). Kurtosis measures the tails of the distribution. Data with a normal distribution has a kurtosis of zero and a bell-shaped frequency curve, and the data is clustered around the mean. Therefore, a positive kurtosis indicates heavy tails or outliners, while a negative kurtosis indicates light tails or a lack of outliers (Adams & Lawrence, 2014). The SSPS was used to calculate the kurtosis values for all the data. The kurtosis values for workload stressors (-.34), support (-.78), and stress (-.81) were negative and less than zero. As indicated by the skewness values, workload stressors and stress constructs were skewed to the left. However, the kurtosis values indicate a lack of outliers. The kurtosis for teacher efficacy was 1.51. As indicated by the skewness value, the teacher efficacy values were skewed to the right as specified by the skewness value. However, the kurtosis value indicates the presence of outliers. The kurtosis for burnout was 11.17, meaning there were significant outliers, and, and burnout is skewed to the right. The outliers were not removed from this study because the presence of outliers does not affect the regression line (Adams and Lawrence, 2014).

Kurtosis for survey items 7– 19. As can be seen in Table 14, survey item 9 was the only item with outliers. The remaining survey items were negative and thus did not indicate the presence outliers. The purpose of survey items 7 through 19 was to closely examine the reasons associated with participants' decision to not return as special education teachers for students within the juvenile justice system. Therefore, it was important to examine all of the data from survey items 7 through 19, and the outliers were thus not removed from the data set. The standard error of kurtosis for all values was .733, which is less than 2. Therefore, there is no need to reject normality (Adams & Lawrence, 2014).

Table 14

Kurtosis for Survey Items 7 through 19

	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19
Kurtosis	-.90	-1.49	.83	-1.35	-.46	-.98	-1.49	-1.51	-1.60	-1.04	-1.36	-1.67	-1.08

Multicollinearity. Using the SPSS, a multicollinearity test was performed to determine the correlations among the independent variables. One of the hypotheses of this study examines the correlations among teacher efficacy, support, stress, burnout, and workload stressors. The survey items 7-19 were not used in the multicollinearity test because the data from survey items 7-19 were used as descriptive data. The variance inflation factor (VIF) values determine the degree of correlation among the independent variables. A VIF value higher than 10 indicates that multicollinearity is a problem (Adams and Lawrence, 2014). All of the independent variables had a VIF value of less than 10, indicating that no correlations existed among them.

Procedures

A multinomial logistic regression analysis is used to predict a dependent variable given one or more independent variables (Adams & Lawrence, 2014). This study used the statistical information that was vital in examining each hypothesis: the multiple R-value, R-squared value, significance level associated with the F-statistic, p-values, t st. The multiple R-value is the absolute value (between -1 and +1) of the correlation. The multiple R-value does not indicate a positive or negative correlation, only the strength of the relationship. The multiple R-value was important in examining the correlations among the dependent and independent variables. A multiple R-value of 1.0 to 0.5 implies a strong correlation or a significant relationship, R-values of 0.4 to 0.3 indicate moderate correlation or a moderate relationship, and multiple R-values of 0.2 to 0.1 indicate a weak correlation or a weak relationship. An R-value of 0.0 indicates that

there is no correlation or no relationship among the variables. The R-squared value identifies the amount of variance in the dependent variables that are explained by the combination of independent variables. In a regression analysis, the F statistic determines whether the means between two populations are significantly different. The significance level associated with the F-statistic examines the significance of all of the variables, while the p-value measures the significance of each variable or coefficients. The t-statistic is the coefficient estimate divided by the standard error. A t-statistic greater than 2 (or less than -2) indicates the coefficient is significant with >95% confidence. The degrees of freedom indicate the number of variations within the model (Adams & Lawrence, 2014; Cohen, 1988).

Table 15 presents the dependent variable and independent variables for each model, the research question and hypotheses associated with each model.

Table 15

Multinomial Logistic Regression Models, Research Questions, and Hypotheses

Model	Dependent Variable	Independent Variables	Research Question	Hypotheses
Support model	Support	Stress, Workload stressors, Burnout, Teacher efficacy	R1	$H1_0$ and $H1_A$
Stress model	Stress	Support, Workload stressors, Burnout, Teacher efficacy	R2	$H2_0$ and $H2_A$
Workload model	Workload stressors	Stress, Support, Burnout, Teacher efficacy	R3	$H3_0$ and $H3_A$
Burnout model	Burnout	Support, Stress, Workload stressors, Teacher efficacy	R4	$H4_0$ and $H4_A$

Table 15 (continued)

Model	Dependent Variable	Independent Variables	Research Question	Hypotheses
Teacher efficacy model	Teacher efficacy	Support, Stress, Workload stressors, Burnout	R5	$H5_0$ and $H5_A$
Retention model	Retention	Support, Stress Burnout, Workload stressors, Teacher efficacy	R6	$H6_0$ and $H6_A$

Results

Support model. Support refers to the services and resources provided to improve teacher effectiveness (Althauser, 2015). However, the perceptions of the significance and effectiveness of support are subjective, as they are based on a teacher's experience; this means that while a teacher may have vast amounts of support, other factors, such as high levels of stress or low teacher efficacy, may cause that teacher to perceive him or herself as lacking support or as relying on ineffective means of support (Althauser, 2015; Andrews & Brown 201; Dicke, Parker, Holzberger, Kunina-Habenicht, Kunter, & Leutner, 2014). Therefore, the purpose of the support model was to determine whether the stressors associated with managing the workload of a special education teacher, teacher efficacy, stress, and burnout predict perception of support. The support model used support as the dependent variable, while burnout, the stressors associated with managing the workload of a special education teacher, teacher efficacy, and stress served as the independent variables. A multiple R-value of .4 confirmed a moderate relationship among support (dependent variable) and teacher efficacy, burnout, workload stressors, and stress

(independent variables). The R-squared value was .14, meaning that a 14% variation in support is explained by the combination of teacher efficacy, burnout, workload stressors, and stress and that 86% of the variation was caused by factors other than the combination of teacher efficacy, burnout, workload stressors, and stress. The degrees of freedom was four indicating four possible variations of results for the support model. The significance level associated with the F-statistic was .00, which is less than the p-value of .05 ($p < 0.05$). Therefore, $H1_0$ was rejected, as the F-statistic was less than the p-value of .05. The p-value for workload stressors was .00 ($p < 0.05$) and the t-statistic for workload was -3.37 ($t < -2$). Thus, workload stressors were found to be a significant predictor of support. The p-value for teacher efficacy was .00, ($p < 0.05$) and the t-statistic for teacher efficacy was 2.89 ($t > 2$). Therefore, teacher efficacy is a significant predictor of support. The p-value for burnout was .55, which is larger than the accepted alpha value of .05. Consequently, burnout was not found to be a significant predictor of support ($p > .05$). The p-value for stress was .77. Stress was found not to be a significant predictor of support ($p > .05$). The findings of the support model are detailed in table 16.

Table 16

Support Model

	T	p	df	Significance F	Multiple R	R^2
Overall Model			4	.00	.37	.14
Stress	.29	.77				
Burnout	.59	.55				
Teacher Efficacy	2.89	.00				
Workload	-3.37	.00				

Stress model. Teacher-related stress is a result of the imbalance of between risk and protective factors, with protective factors including high levels of teacher efficacy due to positive student experiences and risk factors including negative stressors associated with managing the workload (Prilleltensky, Neff, & Bessell, 2016). The purpose of the stress model was to determine whether the risk factors of burnout and workload stressors and the protective factors of support and teacher efficacy significantly predict stress levels. The stress model used stress as the dependent variable and support, teacher efficacy, burnout, and workload stressors as the independent variables. A multiple R-value of .2 indicated the existence of a weak relationship among stress and support, teacher efficacy, burnout, and workload stressors. The R-squared value was .04, meaning that a 4% variation in stress could be explained by the combination of teacher efficacy, burnout, workload stressors, and support. Ninety-six percent (96%) of the variation was caused by factors other than the combination of teacher efficacy, burnout, workload stressors, and support. The degrees of freedom was four which suggests the possibility of four different variations for the results of the stress model. The $H2_0$ was not rejected because the significance level associated with the F-statistic was .23, which is higher than .05 ($p > .05$). The p-values for teacher efficacy (.37), workload stressors (.28), and support (.77) were greater than .05 ($p > .05$). The p-value for burnout was .05. A p-value that is greater than or equal to .05 ($p \geq .05$) means that the coefficient is not a significant predictor. The t-statistic for all of the variables was less than 2 (t>2). Therefore, teacher efficacy, burnout, workload stressors, and support are not significant predictors of stress. (Adams & Lawrence, 2014, Cohen, 1988). The results of the stress model are listed in table 17.

Table 17

Stress Model

	T	p	df	Significance F	Multiple R	R^2
Overall Model			4	.23	.19	.04
Burnout	.28	.78				
Teacher Efficacy	1.94	.05				
Workload	0.90	.37				
Support	1.07	.28				

Workload model. The literature indicated that unmanageable workload stressors increases stress, reduces teacher efficacy, and increases feelings of burnout (Huberman, 1993). The literature also suggested that special education teachers who receive adequate support find it easier to manage the stressors associated with the workload of a special education teacher. (Althauser, 2015). Therefore, the workload model examined if stress, support, burnout and teacher efficacy (independent variables) predict the level of stressors related to managing the workload (dependent variable). The multiple R-value of .32 denoted a moderate relationship between the workload stressors and the stress, teacher efficacy, burnout, and support. The R-squared value was .10 which suggested a 10 % variance in workload stressors are explained by the combination of teacher efficacy, burnout, stress, and support. Ninety percent (90%) of the variation in workload stressors was caused by other factors than the combination of teacher efficacy, burnout, stress, and support. The degrees of freedom was four indicating the possibility of four different variations for the results of the workload model. The $H3_0$ was rejected because the significance level associated with the F-statistic was .00 ($p < .05$). The p-value for support

was .00, (p <.05) and the t-statistic for support was -3.37 (t < -2) which indicates that support is a significant predictor of workload stressors. The p-value for stress was .28, that of burnout was .60, and that of teacher efficacy was .29 (p > .05). The t-statistic for stress, burnout, and teacher efficacy indicated the variables are not significant predictors of workload stressors Adams & Lawrence, 2014, Cohen, 1988).

Table 18

Workload Model

	T	p	df	Significance F	Multiple R	R^2
Overall Model			4	.00	.32	.10
Stress	1.07	.28				
Burnout	-.53	.60				
Teacher Efficacy	-1.06	.29				
Support	-3.37	.00				

Burnout model. Burnout is fatigue or frustration resulting from negative professional experiences (Freudenberger, 1974, Maslach, 1982). Stress and burnout involve an imbalance between protective and risk factors. However, stress can occur from a singular experience involving an imbalance of risk and protective factors. Burnout, in contrast, is a result of continued exposure that involves an imbalance between protective and risk factors (Prilleltensky, Neff, & Bessell, 2016). Therefore, the burnout model examined the relationship among burnout and the protective factors of teacher efficacy and support and the risk factors of stress and workload, meaning that burnout was the dependent variable and teacher efficacy, support, stress,

and workload were the independent variables. The multiple R-value was 0.18, indicating a weak relationship among burnout and teacher efficacy, stress, support, and workload. The R-squared value was .03, which suggested a 3% variance in the degree to which feelings of burnout can be explained by the combination of teacher efficacy, stress, workload, and support. Ninety-seven percent (97%) of variance was caused by factors other than the combination of teacher efficacy, stress, workload stressors, and support. The degrees of freedom was four indicating the possibility of four variations for the results of the burnout model. The $H4_0$ was not rejected because the significance level associated with the F-statistic was .31 ($p > .05$). The p-values for workload stressors (.60), stress (.05), teacher efficacy (.91), and support (.55) were greater or equal to .05 ($p > .05$). The t-statistics for workload stressors, support, teacher efficacy, and stress were either greater than -2 or less than 2. Therefore, workload stressors, stress, teacher efficacy, and support are not significant predictors of burnout (Adams & Lawrence, 2014, Cohen, 1988). The results of the burnout model are listed in table 19.

Table 19

Burnout Model

	T	p	df	Significance F	Multiple R	R^2
Overall Model			4	.32	.18	.03
Workload	-.53	.60				
Stress	1.94	.05				
Teacher Efficacy	.11	.91				
Support	.59	.55				

Teacher efficacy model. The literature suggests that stress, support, burnout, and workload stressors predict levels of teacher efficacy (Billingsley, 2004; Gersten, Keating, Yovanoff, & Harniss, 2001; Guo, Justice, Sawyer, & Tompkins, 2011; Klassen & Chin, 2010). The teacher efficacy model used teacher efficacy as a dependent variable to determine whether stress, support, burnout, and workload stressors predicted teacher efficacy. Teacher efficacy was the dependent variable, and burnout, support, stress, and workload stressors were the independent variables.

The multiple R-value was .27 confirming a weak relationship between teacher efficacy and workload stressors, stress, support, and burnout. The significance level associated with the F-statistic was .01, which confirmed that this model was statistically significant which lead to the rejection of the $H5_0$. The R-squared value was .08, which suggested an 8% variance in the degree to which teacher efficacy is predicted by the combination of stress, burnout, workload stressors, and support. The degrees of freedom was four which indicated the possibility of four variations of results for the teacher efficacy model. The p-value for support was .00, ($p > .05$) and the t-statistic was 2.89 ($t > 2.00$) which indicated that support could significantly predict levels of teacher efficacy The p-values for stress (.37), burnout (.91), and workload stressors (.29) were higher than .05 ($p > .05$) and the t-statistics were less than 2 or greater than -2. Thus, stress, burnout, and workload stressors are not significant predictors of teacher efficacy (Adams & Lawrence, 2014, Cohen, 1988).

Table 20

Teacher Efficacy Model

	T	p	df	Significance F	Multiple R	R^2
Overall Model			4	.32	.01	.08
Support	2.89	.00				
Stress	.90	.37				
Burnout	.11	.91				
Workload	-1.06	.29				

Retention Model. The literature indicated that the low retention rate of special education teachers who serve students within the juvenile justice system is a result of low teacher efficacy, high stress, lack of support, excessive workload stressors, and feelings of burnout (Gersten, Keating, Yovanoff, & Harniss, 2001; Nance & Calbrese 2009; Nuri, Demirok, & Direktör, 2017; Plash & Piotrowsk, 2006). Teacher retention was the dependent variable, and teacher efficacy, burnout, support, stress, and workload stressors were the independent variables. Survey item 6 asked the participants to respond with a "yes," "no," or "unsure" to the question of whether they planned to return to their schools in the role of special education teachers. The non-returning teachers were instructed to click "no" if they were former special education teachers who had provided services to students within the juvenile justice system. To calculate the multinomial logistic regression, the responses were coded: no (2.00), yes (1.00), and unsure (0.00). The participants were expected to answer the survey questions based on their experiences as special education teachers who had served students within the juvenile justice system.

The multiple R-value was .28, conveying a weak relationship between teacher retention and stress, teacher efficacy, burnout, workload stressors, and support. The significance level associated with the F-statistic was .02. The model was statistically significant, which led to the rejection of $H6_0$ ($p < .05$). The R-squared value was .08, which suggested that 8% of the variance in retention was predicted by the combination of teacher efficacy, burnout, workload stressors, stress, and support. Ninety-two percent (92%) of the variance was caused by factors other than the combination of teacher efficacy, burnout, workload stressors, stress, and support. The degrees of freedom was five, indicating the possibility of five different variations of results for the retention model. The p-value for support was .01. The t-statistic was -2.47 ($t < -2$). Therefore, support was found to significantly predict the retention levels of special education teachers who serve students within the juvenile justice system ($p < .05$). The p-values for teacher efficacy (.09), stress (.16) burnout, (.19), and workload stressors (.31) were greater than .05 ($p > .05$) and the t-statistic for teacher efficacy, stress, burnout, and workload stressors were either less than 2 or greater than -2. Therefore, teacher efficacy, stress, burnout, and workload stressors variables do not significantly predict the retention levels of special education teachers who serve students within the juvenile justice system. Figures 27 through 28 illustrate the linear correlation between the predicted retention intention and the variables.

Table 21

Retention Model

	T	*p*	df	Significance F	Multiple R	R^2
Overall Model			5	.03	.28	.08
Teacher Efficacy	1.66	.10				
Stress	1.43	.16				
Burnout	-1.32	.19				
Workload	-1.01	.31				
Support	-2.47	.01				

Summary of Results

The results of the support model indicated workload stressors and teacher efficacy were significant predictors of support. The workload model indicated support was a significant predictor of workload stressors. The teacher efficacy model indicated support was a significant predictor of teacher efficacy. The retention model indicated support is a significant predictor of the retention of special education teachers who provide special education services to students within the juvenile justice system. The results of the stress model indicated support, work stressors, burnout, and teacher efficacy are not significant predictors of stress. The results of the burnout model indicated stress, workload stressors, support and teacher efficacy are not significant predictors of burnout.

Summary

The support model used support as the dependent variable and workload stressors, stress, teacher efficacy, and burnout as the independent variables. It indicated a moderate relationship among support and the independent variables. Workload stressors and teacher efficacy were

significant predictors of support. The stress model used stress as a dependent variable and workload stressors, teacher efficacy, burnout, and support as independent variables. The results yielded by the stress model implied a weak correlation among stress and the independent variables. The results of the burnout model indicated that correlation was not statistically significant and there were no significant predictors of stress. The results of the workload model indicated a weak relationship among workload stressors and the independent variables, and that support was the only significant predictor of workload stressors. The burnout model used burnout as the dependent variable and support, stress, teacher efficacy, and workload as the independent variables. The results indicated the existence of a weak relationship, with no significant predictors of burnout. The teacher efficacy model used teacher efficacy as the dependent variable and support, burnout, workload and stress as the independent variables. The results yielded by this model indicated that the relationship was statistically significant and that support was the only significant predictor of teacher efficacy.

The retention model used the responses of survey item 6 as the dependent variable and teacher efficacy, workload, support, stress, and burnout as the independent variables. The results indicated a weak relationship among the variables. Support was found to be a significant predictor of the retention of special education teachers who serve students within the juvenile justice system.

Chapter 5: Discussion and Conclusion

Introduction

For the last ten years, the U.S. Department of Education has reported a nationwide shortage of special education teachers (U.S. Department of Education, 2015; U.S. Department of Education & U.S. Department of Justice, 2014). Despite efforts to improve special education services within the juvenile justice system, the shortage of special education teachers for students within the juvenile justice system contributes to the 50% recidivism rate for juveniles with disabilities (Houchins, Puckett-Patterson, Crosby, Shippen, & Jolivette, 2009; Houchins, Shippen, Schwab, & Ansely, 2017; U.S. Department of Education, 2015; U.S. Department of Education and U.S. Department of Justice, 2014; Van, Asscher, Stams, & Moonen, 2014). Research indicates a correlation among the low retention rate of special education teachers, low teacher efficacy, excessive workload stressors, lack of support, high stress levels, and burnout (Gersten, Keating, Yovanoff, & Harniss, 2001; Nance & Calbrese, 2009; Plash & Piotrowsk, 2006; Weißenrieder, Roesken-Winter, Schueler, Binner, & Blömeke, 2015; Da Fonte & Barton-Arwood, 2017). However, there is a lack of research that explores the retention of special education teachers who provide services to students within the juvenile justice system and the relationships among teacher efficacy, stress, burnout, support, and workload stressors (Skaalvik & Skaalvik, 2007). Therefore, this study used teacher efficacy, a construct adopted from Bandura's (1986) social learning theory, as the theoretical framework in which to investigate the relationships among the retention of special education teachers who teach students within the juvenile justice system and teacher efficacy, workload stressors support, stress, and burnout. The following discussion of the results examines the connection between teacher efficacy and each of the other constructs. This study used six multinomial logistic regression models to examine the

responses of 155 surveyed current and former special education teachers who had previously provided services to students within the juvenile justice system.

Summary of the Results

The methods used to analyze the survey data consisted of six multinomial logistic regression analyses: the support, stress, workload stressors, burnout, teacher efficacy, and retention models. The results of the support model indicated that teacher efficacy and workload stressors were significant predictors of support and that increases in teacher efficacy were related to increased support. Furthermore, decreases in workload stressors were related to increases in support. The results of the workload model indicated that support was a significant predictor of workload stressors and that increases in support were related to decreases in workload stressors. The teacher efficacy model indicated that support was a significant predictor of teacher efficacy and that increases in support were related to increases in teacher efficacy. The results of the retention model indicated that support was a significant predictor of retention and that increases in support were related to decreases in the retention rate of special education teachers who teach students within the juvenile justice system. The results of the burnout and stress models indicated that burnout and stress were not significant predictors of any of the constructs. Figure 29 illustrates the correlations among the predictors of the support, workload stressors, burnout, stress model, teacher efficacy, and retention models.

Discussion of the Results

Support, teacher efficacy, and retention. Bandura (1986) stated that teacher efficacy refers to a teacher's belief in their ability to positively affect student outcomes. The studies of Aldridge and Fraser (2016), Houchins et al., (2009), and Ware and Kitsantas (2001) indicated that support refers to the services and resources provided to improve teacher effectiveness.

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Forms of support for special education teachers who teach students within the juvenile justice system include professional development related to improving instruction and managing the behaviors of special education students, collaboration with special education and general education teachers, and supportive school leadership, with school leaders who are knowledgeable of special education policies and practices. The results of this study indicated that teacher efficacy was a significant predictor of support. Hence, the results of this study suggest that special education teachers who teach students within the juvenile justice system and who exhibit high levels of teacher efficacy are more likely to report having significant support. The results of this study also indicated the existence of a bidirectional relationship, as support was found to be the only significant predictor of teacher efficacy. In other words, the findings of this study indicated that special education teachers who provide special education services to students within the juvenile justice system and receive a substantial amount of support are more likely to report high levels of teacher efficacy.

The results of this study did not indicate that teacher efficacy was a significant predictor of the retention of special education teachers who provide special education services to students within the juvenile justice system. Therefore, the findings indicated that special education teachers who provide special education services to students within the juvenile justice system and who exhibit high levels of teacher efficacy might not return to their special education teachers. The results of this study also indicated that support was a significant predictor of retention. Specifically, the findings revealed that dissatisfaction with school leadership was the most important reason for special education teachers who work with students within the juvenile justice system choosing not to return to their careers. Simply stated, there is a relationship between a low retention rate among special education teachers who provide special education

services to students within the juvenile justice system and school leaders who are knowledgeable of special education policies and provide relevant support.

Stress, teacher efficacy, and retention. Stress is the imbalance between risk and protective factors. Risk factors for special education teachers may include low teacher efficacy, lack of support, and high levels of workload stressors, whereas protective factors for special education teachers may include supportive school leadership, access to instructional resources, and mentoring programs that encourage teacher collaboration (Prilleltensky, Neff, & Bessell, 2016). The findings of this study indicated that stress was not a significant predictor of teacher efficacy or retention. In other words, the results of this study suggest that imbalances between risk and protective factors were not related to levels of teacher efficacy or to the retention of special education teachers who provide special education services to students within the juvenile justice system.

Burnout, teacher efficacy, and retention. Burnout is the prolonged fatigue or frustration resulting from negative experiences. Burnout consists of three elements: emotional exhaustion, depersonalization, and personal accomplishment. Burnout is related to stress, meaning that prolonged periods of stress will cause burnout (Freudenberger, 1974; Maslach, 1982; Prilleltensky, Neff, & Bessell, 2016). The results of this study indicated that burnout was not a significant predictor of teacher efficacy; in other words, the findings revealed that prolonged imbalances between risk and protective factors were not related to the levels of teacher efficacy of special education teachers who provide special education services to students within the juvenile justice system.

The results of this study indicated that burnout was not a significant predictor of the retention of special education teachers who provide special education services to students within

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the juvenile justice system. Therefore, the findings indicated that such teachers with high levels of burnout continued to work within the juvenile justice system.

Workload, teacher efficacy, and retention. The National Education Association (2016) stated that the workload of a special education teacher consists of providing specialized instruction and creating IEPs, BIPs, and other documents related to providing special education services. Special education teachers are also responsible for scheduling and participating in meetings related to the implementation of special education services, tracking student data related to IEP goals, and for managing any other responsibilities related to providing instruction and managing students (i.e., creating lesson plans, recording grades, and holding parent-teacher conferences). The findings of this study indicated that workload stressors are not related to the teachers' levels of teacher efficacy.

The results of this study also indicated that workload stressors were not a significant predictor of retention for special education teachers who provide special education services to students within the juvenile justice system. In other words, the findings revealed that the workloads of special education teacher who provides special education services to students within the juvenile justice system were not related to the low retention rate of a special education teacher who provides special education services to students within the juvenile justice system.

Discussion of the Results in Relation to the Literature

Teacher efficacy, support, and retention. The results of Althauser's (2015) study agree with this study's findings regarding the existence of a bidirectional relationship between support and teacher efficacy. The participants in Althauser's (2015) study enrolled in a professional development program intended to improve their instructional practices within their subject areas. After completing the program, the participants reported increases in their teacher efficacy due to the implementation of the learned instructional practices from the professional development; this

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increased their student achievement scores. Furthermore, the participants reported having a more positive perception of support due to the opportunity to participate in such professional development courses.

While the results of this study indicated a relationship between support and teacher efficacy, the results of this study did not indicate that teacher efficacy was a significant predictor of the retention of special education teachers who provide special education services to students within the juvenile justice system. This finding may have been due to the lack of variability in this study's sample, as all of the teachers investigated in this study reported high levels of teacher efficacy. As indicated in the study conducted by Houchins et al. (2017) concerning the retention of juvenile justice teachers, the teachers who planned to return the following school year reported higher levels of teacher efficacy due to the personal satisfaction of having achieved significant academic gains with challenging students. Therefore, it is possible that the participants in this study were indeed satisfied with teaching special education to students within the juvenile justice system.

Although teacher efficacy was not found to be predictive of retention, the results of this study indicated that support was a significant predictor of retention and that dissatisfaction with school leadership was the leading cause of attrition. This finding coincides with those of the literature. The results of the Houchins et al. (2009) study indicated that a lack of administrative support was a significant reason for the high retention rate of special education teachers who provide special education services to students within the juvenile justice system. Furthermore, Conley and You's (2017) study examined SASS data concerning 2,060 special education teachers and identified administrative support as a significant predictor of the retention of special education teachers. Finally, the results of Duesbery and Werblow's (2008) study indicated that

the most effective strategies for retaining special education teachers include having school leaders provide adequate support.

Stress, teacher efficacy, and retention. Prilleltensky, Neff, and Bessell's (2016) study indicated that stress arises from an imbalance between risk and protective factors; more specifically, stress occurs when risk factors outweigh protective factors. The extant literature indicates connections among stress, teacher efficacy, and retention. However, the findings of this study indicated that stress was not a significant predictor of either teacher efficacy or retention. The results of this research and the findings of the literature indicate that it is possible that stress was found not a significant predictor of teacher efficacy because the high levels of teacher efficacy among this study's sample served as a protective factor that mitigated the negative effects of stress. This study's findings revealed that the statistical mode for teacher efficacy and stress among the non-returning teachers was very high, indicating that the non-returning teachers exhibited high levels of teacher efficacy and experienced high levels of stress. The results of Herman, Hickmon-Rosa, and Reinke's (2018) study indicated that the participants (special education teachers) reported high levels of both stress and teacher efficacy. The participants indicated that their high levels of teacher efficacy served as a coping mechanism for dealing with stressful situations. The literature indicates the existence of a similar relationship among teacher efficacy, stress, and retention. The findings of Sass, Seal and Martin's (2011) study indicated that teachers who exhibited greater levels of teacher efficacy tended to report fewer stressors and intended to return the following school year. Therefore, it is possible that stress can predict retention for special education teachers within the juvenile justice system should such teachers indicate low levels of teacher efficacy.

Burnout, teacher efficacy, and retention. As with the studies conducted by Nuri, Demirok, and Direktör's (2017) and Sariçam and Sakiz's (2014), this study used the MBI and the TSES scale to examine the relationship between teacher efficacy and burnout for special education teachers who provide special education services to students within the juvenile justice system. The results of this study did not indicate that burnout was a predictor of teacher efficacy or of the retention of special education teachers who provide services to students within the juvenile justice system. Similar to the relationship between stress and teacher efficacy, it is possible that the high levels of teacher efficacy exhibited by this study's participants mitigated the negative effects of burnout. The existing literature supports this possibility, as Brunsting, Sreckovic, and Lane (2014) and Wang, Hall, and Rahimi's (2015) studies indicated that teachers with high levels of teacher efficacy also reported low levels of burnout.

Workload, teacher efficacy, and retention. Billingsley (2004), Gersten, Keating, Yovanoff, and Harniss (2001), and Houchins, Puckett-Patterson, Crosby, Shippen, and Jolivette, (2009) indicated that special education teachers often sacrifice instructional time to manage the administrative responsibilities associated with providing special education services. Often, special education teachers report low levels of teacher efficacy due to their workloads restricting the time available for preparing and providing quality instruction. However, the findings of this study indicated that workload stressors were not a significant predictor of teacher efficacy. Also, the findings indicated that dissatisfaction with one's job description or assignment was *not at all important* in the participants' decision to return as special education teachers who provide services to students within the juvenile justice system. This study's failure to identify a relationship between teacher efficacy and workload stressors reflects the possibility that special

education teachers possibly understand and accept that administrative responsibilities have little to do with their abilities to positively impact their students' academic performance.

The results of this study indicated that workload stressors were not a significant predictor of retention for special education teachers who provide services to students within the juvenile justice system. The results of Nance and Calbrese's (2009) study suggested that excessive workloads (the participants reported working 10-hour days at least three times a week) were the most important reason for not returning as a special education teacher. Perhaps workload stressors were not found to be a significant predictor of retention in this study because the special education teachers included in the sample may have known how to manage the stress associated with their workloads. The study conducted by Bettini et al. (2018) found that, in comparison to experienced special education teachers, novice special education teachers indicated that they associated high levels of stress with managing their workloads. Foloștină and Tudorache's (2012) study found that experienced special education teachers managed burnout by using problem-solving coping techniques such as time management and effective planning. Thirty-four percent of the participants in this study indicated having 20 or more years of experience as a special education teacher for students within the juvenile justice system. Hence, it is possible that there is a relationship among years of experience, burnout, and retention. Perhaps burnout was not found to be a significant predictor of retention because the highly experienced participants in this study understood that effective planning and time management are effective tools in managing the workload of a special education teacher.

Limitations

The retention of special education teachers is a nation-wide problem, meaning that all schools that serve special education students are struggling to retain special education teachers

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(Hale, 2015; Moody, 2003, U.S. Department of Education, 2015). However, when examining retention, the participants the majority of participants in this study indicated their intent to return, with only a limited number providing reasons as to why they had chosen not to return as special education teachers who serve students within the juvenile justice system.

Furthermore, the majority of the participants in this study were white, female, and planned to return as special education teachers who provide services to students within the juvenile justice system. Therefore, the results of this study may not accurately reflect the views or behaviors of the wider population (Starr, 2012). Furthermore, the focus of this study served as a limitation, as the results only apply to special education teachers who serve a particular group of students, namely students with disabilities who are part of the juvenile justice system.

This study's sample size was also a limitation. Even though a sample size of at least 138 participants ensured a 95% chance of detecting a relationship among the dependent and independent variables. A larger sample size would have increased the probability of a statistically significant analysis because a larger sample size would indicate a stronger representation of the population. Therefore, the mean of a larger sample size allows for easier detection of outliers or data that significantly differs from the mean values (Fowler, 2014).

Implications of the Results for Practice, Policy, and Theory

Implications for practice. The U.S. Department of Education and the U.S. Department of Justice (2014) have stated that the only way to improve the quality of the special education services for students within the juvenile justice system is to retain qualified special education teachers. This study is unique in that its results identified the variables that predict the retention of special education teachers who provide special education services to students within the juvenile justice system. The findings of this study indicated that support was a significant predictor of retention, and the findings of the literature concur with this result.

Furthermore, as indicated by this study's findings, dissatisfaction with administration was the leading reason for participants choosing not to return as special education teachers who provide special education services to students within the juvenile justice system. According to the literature, a strong support system for special educators includes school leaders who stay abreast of special education policies, provides opportunities to collaborate with other teachers, and implements professional development initiatives to improve the practice of providing special education services (Althauser, 2015; Conley & You, 2017; Gersten et al., 2001, Hale, 2015; Houchins, Shippen, & Cattret, 2004; Mathur et al., 2009). Therefore, the implications for improving the practice of special education should include an assessment of the school leaders' current knowledge of special education policies and the development of a support system that includes opportunities for continuing education courses related to teaching special education to students within the juvenile justice system and mentoring programs to promote teacher collaboration.

Implications for policy. The literature indicated that the workload of a special education teacher is directly related to the legal requirements listed in the IDEA and suggests a relationship among workload stressors, teacher efficacy, and the retention of special education teachers (Billingsley, 2004; Houchins et al., 2009; Nance & Calabrese, 2009). However, the findings of this study indicated that workload stressors were not a significant predictor of teacher efficacy or retention. The results of the workload model indicated support is a significant predictor of workload stressors. Therefore, an implication for improving policy is that supportive services should allow special education teachers to complete the administrative activities required to ensure compliance with the IDEA.

Implications for theory. Teacher efficacy is the relationship between personal attributes and a person's action (Bandura, 1986). The findings of Aldridge and Fraser (2016) and Nuri et al. (2014) indicated that teacher efficacy is an important variable in studying the retention of special education teachers; if a teacher does not believe in their effectiveness as a special education teacher (personal attributes), their desire to remain in the profession will decline (person's actions). However, the findings of this study highlight a very important aspect of teacher efficacy, namely that, it is difficult to retain teachers with high levels of teacher efficacy if other factors are present. The non-returning teachers' statistical mode for teacher efficacy indicated that the non-returning teachers exhibited a great deal of teacher efficacy. However, the non-returning teachers' statistical mode for stress, workload stressors, and burnout revealed that the non-returning teachers also experienced stress a few times a week, that the stressors associated with workload stressors were very noticeable for them, and that they experienced feelings of burnout daily (every day). The findings of this study suggest that, when studying the correlation between teacher efficacy and the retention of special education teachers, high teacher efficacy does not predict retention. The participants in this study indicated high levels of teacher efficacy, along with a significant number of negative influences such as burnout, stress, and workload stressors. Therefore, it may be important to take into consideration the presence of external factors when examining the relationship of teacher efficacy and retention of special education teachers who provide special education services to students within the juvenile justice system.

Recommendations for Further Research

Teacher efficacy and retention. The results of this study indicate that the non-returning teachers had a higher level of teacher efficacy than the returning teachers. Therefore, further research should include possible qualitative studies to help gather a more in-depth look into the

teacher efficacy for special education teachers who serve students within the juvenile justice system. Furthermore, the findings of this study indicate that further research into the relationship between teacher efficacy and retention should focus on implementing specific types of support, such as mentoring programs, intended to decrease the dissonance between expectations and reality. Prior literature supports this recommendation. For example, the results of Hoy's (2000) study suggested that the participants' teacher efficacy significantly decreased after their student-teacher assignments. The participants in Hoy's (2000) study indicated that their experiences did not match their expectations, which lowered their teacher efficacy.

Support and retention. The findings of this study indicated that support was a significant predictor of retention, and the existing literature indicates that an effective form of support is professional development opportunities (Althauser, 2015; Moody, 2003; Ware and Kitsantas 2001). Therefore, additional research concerning how to encourage effective professional developments, which is a form of support, for special education teachers who serve students within the juvenile justice students. Previous literature supports this recommendation. For instance, Lasagna's (2009) study showed that teachers often leave schools with challenging students because they were not adequately trained to teach students with difficult behaviors. Furthermore, the findings of Viel-Ruma, Houchins, Jolivette, and Benson's (2010) study showed that creating relevant professional development opportunities should be examined as one of the means of reducing the attrition rate of teachers in special education. As a means of supporting and retaining special education teachers, the findings of this study and the literature suggest it is necessary to provide professional development opportunities that educate teachers about the characteristics of students within the juvenile justice system.

The findings of this study indicated dissatisfaction with administration was a significant reason for not returning as a special education teacher who serves students within the juvenile justice system. Therefore, an additional recommendation is examining preparation programs for school administrators to determine whether colleges and universities are adequately preparing school leaders to support special education teachers who provide special education services to students within the juvenile justice system (Houchins et al., 2009). The extant literature endorses this recommendation. For example, the juvenile justice school leaders investigated in the study conducted by Houchins et al. (2009) and the findings of DiPaola and Walther-Thomas' (2003) study indicated that many school administrators are not adequately trained to support special education teachers. It is vital that school leaders understand their role in providing special education services, including understanding the expectations of special education teachers and the characteristics of the disabilities protected by the IDEA, as well as how to develop and implement a school culture that supports special education students within the juvenile justice system.

Burnout and retention. Although burnout was not found to be a significant predictor of any of the constructs investigated in this study, this research's findings indicated that there were high levels of burnout among special education teachers who provide special education services to students within the juvenile justice system. The returning teachers' statistical mode for burnout indicated that they experienced burnout a few times a week. However, the non-returning teachers indicated experiencing burnout daily (every day). Therefore, additional research should focus on how a school's organizational climate might be improved to reduce feelings of burnout on the part of special education teachers, such as allocating more educational resources and incorporating more related services to mitigate feelings of burnout — anger management, etc.)

The existing literature supports this recommendation. For example, the results of Lavian (2012) and Langher, Caputo, and Ricci's (2017) studies indicated the existence of a significant relationship between a supportive school environment and the reduction of burnout on the part of special education teachers (specifically, special education teachers who serve at-risk students with severe behavior challenges).

Stress and retention. The results of this study indicated that stress was not a significant predictor of any of the constructs. However, the findings of this study indicated the non-returning participants experienced high levels of stress. The non-returning participants' statistical mode for stress indicated the non-returning participants experienced stress a *few times a week*. To possibly increase retention, additional research is needed to develop a school climate that reduces the imbalance of risk and protective factors for special education teachers who provide special education services to students within the juvenile justice system. The existing literature supports this recommendation. For example, Fore, Martin and Bender's (2002) study recommended that schools develop support systems that are specific to the identified risk factors, such as providing additional planning periods (protective factor) to special education teachers to aid in managing the workload (risk factor).

Workload and Retention. The findings of this study indicated the existence of a bidirectional relationship between support and workload stressors. Bettini, Jones, Brownell, Conroy, and Leite's (2018) findings support those of this study. The results of the Bettini's et al. (2018) study indicated that special education teachers can manage their workloads effectively when they frequently collaborate with other teachers who are more knowledgeable of the administrative responsibilities associated with providing special education services.

However, the results of this study also indicated that workload stressors were not a significant predictor of teacher efficacy and retention, which is in contrast to the findings of the literature. The findings of Billingsley (2004) and Huberman's (1993) studies indicated that the inability to manage the stressors associated with the workload of a special education teacher is related to stress, burnout, and low teacher efficacy on the part of special education teachers, as well as to their low retention rate, and the high retention rate of special education teachers. The participants of both studies indicated a strong probability of not returning as special education teachers due to the low teacher efficacy and high levels of stress associated with managing the responsibilities associated with providing special education services. Even though the results of this study did not identify workload stressors as a significant predictor of retention, the findings did indicate high levels of workload stressors on the part of the non-returning teachers.

Therefore, to possibly increase retention, there is a need for additional research on how to develop an effective school-wide support system that allows special education teachers to complete their administrative responsibilities and provide quality classroom instruction effectively. Fore, Martin, and Bender (2002) suggested that schools can assist in mitigating the stressors associated with managing the workload of special education teachers' by providing them with additional planning periods and adjusting their caseloads by reducing the number of students.

Conclusion

The literature suggested that the high recidivism rate for special education students within the juvenile justice system is a result of inadequate educational services. Many juvenile justice facilities are currently implementing reforms intended to address the deficits in special education. However, the success rate of juveniles with disabilities within the juvenile justice

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system is subpar in comparison to youth without disabilities (National Juvenile Justice Network, 2016; Van et al., 2014). The only way to improve the success rate of youth with disabilities within the juvenile justice system is to improve the retention of qualified special education teachers (Houchins et al., 2017). The literature presented several variables that affect the retention rate of special education teachers who provide special education services to students within the juvenile justice system, including stress, burnout, teacher efficacy, workload stressors, and support. Using the theoretical lens of teacher efficacy, this study examined the relationships among teacher efficacy, burnout, stress, support, workload stressors, and the retention of special education teachers who provide special education services to students within the juvenile justice system. Using six multinomial logistic regression models, the findings of this study were used to answer the following research questions.

R1. To what extent do the following variables predict the level of support for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, stress, burnout, and teacher efficacy?

The results of this study indicate the stressors associated with managing the workload of a special education teacher and teacher efficacy are significant predictors of support. The findings of this study indicated

R2. To what extent do the following variables predict stress for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, burnout, and support?

The results of this study indicate there are significant predictors of stress.

R3. To what extent do the following variables predict the workload stressors for special education teachers who provide services to juveniles within the juvenile justice system: stress, teacher efficacy, burnout, and support?

The results of this study indicated that support is a significant predictor of workload stressors.

R4. To what extent do the following variables predict the level burnout for special education teachers who provide services to juveniles within the juvenile justice system: workload stressors, teacher efficacy, stress, and support?

The results of this study indicate that there are not significant predictors of burnout.

R5. To what extent do the following variables predict teacher efficacy for special education teachers who provide services to juveniles within the juvenile justice system: support, workload stressors, stress, and burnout?

The results of this study indicate support is a significant predictor of teacher efficacy.

R6. To what extent do the following variables predict retention of special education teachers who provide services to juveniles within the juvenile justice system: teacher efficacy, support, workload stressors?

The results of this study indicated that support was a significant predictor of the retention of special education teachers who serve students within the juvenile justice system. Additionally, the findings of this study revealed that dissatisfaction with leadership was the most significant reason behind special education teachers choosing not to return as a special education teacher who serves students within the juvenile justice system.

The findings of this study led to the identification of significant factors that impact the retention of special education teachers who serve students within the juvenile justice system.

First, the findings suggested that special education teachers who serve students with disabilities within the juvenile justice system have a strong sense of teacher efficacy, meaning that they believe they are capable of ensuring the academic success of their students. Second, the findings indicated that support was a significant predictor of both teacher efficacy and the retention of special education teachers who serve students within the juvenile justice system. Finally, the findings indicated that dissatisfaction with school leadership was the leading cause for the respondents choosing to not return as special education teachers who serve students within the juvenile justice system.

The special education community and the juvenile justice community share similar goals. Both communities seek to provide services intended to ensure that youth can become productive, contributing members of society (Holmquist, 2013; U.S. Department of Education, 2015). Hopefully, the findings of this study will encourage further research towards retaining special education teachers to provide the special education and rehabilitative services needed for youth to successfully transition back into society.

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Survey Items Original Survey Instruments, and Constructs

Demographics

1. What is your gender?
o   Male
o   Female

2.What is your ethnicity?
o   American India or Alaskan Native
o   Asian or Pacific Islander
o   Black or African-American, non-Hispanic
o   Hispanic
o   White or Caucasian, non-Hispanic
o   Other: _____

3. Are you a highly qualified special education teacher?
o   Yes
o   No

4. Please indicate your special education certification.
o   Learning Disabilities
o   Emotional Disabilities
o   Intellectual Disabilities
o   Other_____

5. Which best describes the number of years you worked as a special education teacher within the juvenile justice system or as a special education teacher at a school with a high population of students involved in the juvenile justice system?
o   0-3 years (1)
o   4-7 years (2)
o   8-11 years (3)
o   12-15 years (4)
o   16-19 years (5)
o   20 + years (6)

	Original Survey Instrument	Constructs
6. Please click "no" if you are a former special education teacher who provided services to students within the juvenile justice system. I plan to return to my school next year in the role of a special education teacher. o Yes o No o Unsure	SASS-TFS	Retention of Special Education Teachers

FOR TEACHERS WHO MARKED "NO" or "Unsure" TO QUESTION 6: Indicate the level of importance EACH of the following played in your decision to leave your position as a special education teacher who provides services to students within the juvenile justice system.

Not at all Important (1)
Slightly Important (2)
Somewhat Important (3)
Very Important (4)
Extremely Important (5)

	Original Survey Instrument	Constructs
7. I wanted to take a job more conveniently located OR because I moved.	SASS-TFS	Retention of Special Education Teachers
8. Other personal life reasons (e.g., health, pregnancy/childcare, caring for family).	SASS-TFS	Retention of Special Education Teachers
9. I wanted to receive retirement benefits from last year's school system	SASS-TFS	Retention of Special Education Teachers
10. I wanted or needed a higher salary.	SASS-TFS	Retention of Special Education Teachers
11. I needed better benefits than I received at last year's school.	SASS-TFS	Retention of Special

		Education Teachers
12. I was concerned about my job security at last year's school.	SASS-TFS	Retention of Special Education Teachers
13. I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).	SASS-TFS	Retention of Special Education Teachers
14. I was dissatisfied with the large number of students; I taught at last year's school.	SASS-TFS	Retention of Special Education Teachers
15. I felt that there were too many intrusions on my teaching time at last year's school.	SASS-TFS	Retention of Special Education Teachers
16. I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.	SASS-TFS	Retention of Special Education Teachers
17. Student discipline problems were an issue at last year's school.	SASS-TFS	Retention of Special Education Teachers
18. I was dissatisfied with the administration at last year's school	SASS-TFS	Retention of Special Education Teachers
19. I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.	SASS-TFS	Retention of Special Education Teachers
20. I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.	SASS-TFS	Retention of Special Education Teachers

Teacher's Sense of Self-Efficacy Scale
(Tschannen-Moran, & Hoy, 2001).

Directions: The following questions are from the *Teacher's Sense of Self-Efficacy Scale* (Tschannen-Moran, & Hoy, 2001). The questions designed to gain a better understanding of the kinds of things that create difficulties for special education teachers in their school activities. Please indicate your opinion about each statement by indicating the appropriate rating on the 9-point scale. Nothing (1, 2) Very Little (3, 4) Some Influence (4, 5) Quite a Bit (6, 7) A Great Deal (8,9)

21. How much can you do to control disruptive behavior in the classroom?	TSES *Classroom Management*	Teacher Efficacy
22. How much can you do to get children to follow classroom rules?	TSES *Classroom Management*	Teacher Efficacy
23. How much can you do to calm a student who is disruptive or noisy?	TSES *Classroom Management*	Teacher Efficacy
24. How well can you establish a classroom management system with each group of students?	TSES *Classroom Management*	Teacher Efficacy
25. How much can you do to motivate students who show low interest in school work?	TSES *Student Engagement*	Teacher Efficacy
26. How much can you do to get students to believe they can do well in school work?	TSES *Student Engagement*	Teacher Efficacy
27. How much can you do to help your students value learning?	TSES *Student Engagement*	Teacher Efficacy
28. How much can you assist families in helping their children do well in school?	TSES *Student Engagement*	Teacher Efficacy
29. To what extent can you craft good questions for your students?	TSES *Instructional Strategies*	Teacher Efficacy
30. How much can you use a variety of assessment strategies?	TSES *Instructional Strategies*	Teacher Efficacy
31. To what extent can you provide an alternative explanation or example when students are confused?	TSES *Instructional Strategies*	Teacher Efficacy

| 32. How well can you implement alternative strategies in your classroom? | TSES *Instructional Strategies* | Teacher Efficacy |

Maslach Burnout Inventory-Educators Survey
(Maslach, Jackson, & Leiter, 1996).

Directions: The following survey items are from the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). The purpose of the questions is to measure your level of burnout. Survey items 20-28 will measure also measure levels of stress. Please read each statement carefully and decide if you ever feel this way about your current or former position. Then, indicate how strong the feeling is by indicating the appropriate rating on the 6-point scale. If you have never had this feeling, select Never. If you have had this feeling, indicate how often you feel it by selecting the phrase that best describes how frequently you feel that way.

Never (0)
A few times a year or less (1)
Once a month or less (2)
A few times a month (3)
Once a week (4)
A few times a week (5)
Every day (6)

33. Working with people all day is really a strain for me.	MBI-ES *Emotional Exhaustion*	Stress
34. Working with people directly puts too much stress on me.	MBI-ES *Emotional Exhaustion*	Stress
35. I feel frustrated by my job.	MBI-ES *Emotional Exhaustion*	Stress
36. I feel fatigued when I get up in the morning and have to face another day on the job.	MBI-ES *Emotional Exhaustion*	Stress
37. I feel emotionally drained from my work.	MBI-ES *Emotional Exhaustion*	Stress
38. I feel like I'm at the end of my rope.	MBI-ES *Emotional Exhaustion*	Stress
39. I feel burned out from my work.	MBI-ES *Emotional Exhaustion*	Stress
40. I feel used up at the end of the workday	MBI-ES *Emotional Exhaustion*	Stress

41. I feel I'm working too hard on my job.	MBI-ES *Emotional Exhaustion*	Stress
42. I worry that this job is hardening me emotionally	MBI-ES *Depersonalization*	Burnout
43. I feel students blame me for some of their problems.	MBI-ES *Depersonalization*	Burnout
44. I've become more callous toward people since I took this job.	MBI-ES *Depersonalization*	Burnout
45. I don't really care what happens to some students.	MBI-ES *Depersonalization*	Burnout
46. I feel I treat some students as if they were impersonal objects	MBI-ES *Depersonalization*	Burnout
47. I feel I'm positively influencing other people's lives through my work.	MBI-ES *Personal Accomplishment*	Burnout
48. I feel very energetic.	MBI-ES *Personal Accomplishment*	Burnout
49. I have accomplished many worthwhile things in this job.	MBI-ES *Personal Accomplishment*	Burnout
50. I can easily understand how my students feel about things.	MBI-ES *Personal Accomplishment*	Burnout
51. I deal very effectively with the problems of my students	MBI-ES *Personal Accomplishment*	Burnout
52. I can easily create a relaxed atmosphere with my students.	MBI-ES *Personal Accomplishment*	Burnout
53. I feel exhilarated after working closely with my students.	MBI-ES *Personal Accomplishment*	Burnout
54. In my work, I deal with emotional problems very calmly.	MBI-ES *Personal Accomplishment*	Burnout

Teacher Stress Inventory
(Fimian, 1988).

The following survey items are from the Teacher Stress Inventory (Fimian, 1988). The purpose of the following questions is to measure workload stressors. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate how strong the feeling is by indicating the appropriate rating on the 5-point scale.

Not Noticeable (1)
Barely Noticeable (2)
Moderately Noticeable (3)
Very Noticeable (4)
Extremely Noticeable (5)

55. There is little time to prepare for my lessons/responsibilities	TSI *Workload Stressors*	Workload Stressors
56. There is too much work to do.	TSI *Workload Stressors*	Workload Stressors
57. The pace of the school day is too fast	TSI *Workload Stressors*	Workload Stressors
58. My caseload/class is too big	TSI *Workload Stressors*	Workload Stressors
59. My personal priorities are being shortchanged due to time demands	TSI *Workload Stressors*	Workload Stressors
60. There is too much administrative paperwork in my job.	TSI *Workload Stressors*	Workload Stressors

School and Staffing survey: Teacher follow up survey.
(National Center for Education Statistics, 2009)

Support

Directions: The following survey items are modified from the School and Staffing Survey:
Teacher Follow up Survey (National Center for Education Statistics, 2009). The purpose of these
questions is to measure the levels of support at your current or former school. Please indicate how
strongly you agree or disagree with the statement by indicating the appropriate rating on the 4-
point scale.

Strongly Disagree (1) Somewhat Disagree (2) Somewhat Agree (3) Strongly Agree (4)

61. My school administration's behavior toward special education teachers is supportive and encouraging.	SASS-TFS	Support
62. Necessary materials such as textbooks, supplies, and copy machines are available to special education teachers.	SASS-TFS	Support
63. My school facilitated and encouraged professional development activities for special education teachers.	SASS-TFS	Support
64. My school encourages professional collaboration between general and special education teachers.	SASS-TFS	Support

Appendix B: Permission to use Original Survey Instruments

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PhD
PROFESSOR OF EDUCATIONAL LEADERSHIP

December 18, 2017

Kendra,

You have my permission to modify and use the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in your research. You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch . Please use the following as the proper citation:

Tschannen-Moran, M & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education

Appendix C: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously- researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Aca   ʼollowing:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work nor will I provide unauthorized assistance to others.

Explanations:

What does "fraudulent" mean?

"Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is "unauthorized" assistance?

"Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another's work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*

Kendra K. Byrd

Digital Signature

Kendra K. Byrd

Name (Typed)

2/13/2019

Date