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Individual and Contextual Factors Attributing to Teacher Stress Based on Academic Setting and Years of Experience

Lisa Lashley Freeman

Individual and Contextual Factors Attributing to Teacher Stress Based on Academic Setting and Years of Experience

by
Lisa Lashley Freeman

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Dedication

This is dedicated to my beautiful daughters Madelyn, Evalyn, and Sadie, and my loving husband, Samuel. Keep reaching for the stars and know that anything is possible. By observing my academic journey, I hope you will be confident in your future endeavors and understand that success is fueled by desire and determination. Never give up on a dream because one day it just might be your reality.

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Vita

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Education   EDD in Curriculum & Leadership   Graduation Expected: Summer 2024
Columbus State University, Columbus, GA

EDS in Curriculum & Instruction   Graduated: December 2018
Piedmont College, Demorest, GA
T-6 Certified P-5, TSC, Coach certified, Leadership endorsement

MAT in Early Childhood Education   Graduated: December 2007
Oglethorpe University, Atlanta, GA
T-5 Certified P-5

BBA in Marketing and Management   Graduated: May 2002
Columbus State University, Columbus, GA

Work Experience

Georgia
Academic Coach (July 2022-Present)
- Created and implemented Tiered Professional Learning for staff weekly
- Assisted in the creation, review, and presentation of CIP reviews for senior cabinet members and the superintendent
- Collected and maintained data for CIP
- Observed teachers and provided feedback using Get Better Faster strategies
- Reviewed lesson plans bi-weekly and provided feedback to teachers
- Oversaw Tier 1 instruction
- Oversaw Get Better Faster teachers in the building
- Monitored assessment calendars and tracked data trends on unit assessments for EOC classes
- Served as Fire Drill Captain conducting student searches and monitored lockdown procedures
- Served on the Social Studies textbook adoption committee
- Member of Better Seeking Team
- Attended webinars and conferences to consistently learn about changes in education and improvement in instruction
- Assisted with testing documents to ensure a smooth process during the testing window
- Assisted teachers in locating resources and being a source of instruction
- Created and implemented the 1st student-led Milestone Pep Rally before testing

- Developed walkthrough instrument
- Created an electronic data wall
- Assisted RTI Coach
- Monitored tardy sweeps, lunch duty, morning and afternoon supervision
- Observed CAB implementation
- Worked with the District IT department to obtain monthly PL sessions for instructional enhancement
- Created the first two weeks of instruction for teachers focused on relationship-building, shared vision, and goal-setting
- Initiated Tuning Protocols with staff
- Collaboratively plan with EOC teachers using backwards design
- Created unit assessments and templates for instruction
- Modeled best teaching practices
- Created an overview of STAR testing and created a school data tracker for student use
- Assisted with graduation practice and ceremony calling students names for recognition

3rd Grade Level Chair/2nd grade teacher (August 2014-2022)
- Personalized Learning Chairperson
- Leader In Me Action Team Leader
- Lead Teacher Support Coach
- Mentors, observes, debriefs, and trains new teachers at the school level
- Conducts professional learning sessions, oversees safety drills & microphone checks
- Creates STEAM unit lessons using Smart technology and Canvas LMS platform
- Creates common weekly assessments in preparation for a unit, benchmark, and GMAS mastery.
- Conducted Learning Walks
- Began Book Buddies System within the school initially pairing with 1st grade
- MIE & SMART Certified
- MyVoice Co-Chairperson
- Leadership Team & Assessment committee
- RTI Academy trained Core Team
- GLISI Team assisting with the CIP plan and needs analysis
- Math 24 & Math Team Sponsor
- Aggressively monitors and reviews student data to assess effectiveness of instruction
- Created PBL units and lesson plans for co-teaching classroom
- Served on ELA Textbook Adoption Committee
- Served on Student Council
- Team selected for Steam Teachers of the Year Competition
- Served on Bi-Annual Talent Show

- Assisted Administration with interviews of potential staff members
- Interviewed potential students to attend the school
- Implemented RTI through the Bright Bytes platform
- Knowledgeable in Canvas, SchoolCity, Renaissance Learning, Class Dojo, Remind, Aimsweb, SuccessMaker, and Infinite Campus

Kindergarten Teacher (September 2009-May 2013)
- Provided differentiated instruction through small group math and reading
- Served as the Kindergarten PEC classroom with co-teaching
- Served on SACS Standard Four committee and the technology committee
- Served on morale committee implementing "Fat Friday" staff socials
- Conducted bi-weekly Aimsweb to progress monitor at-risk students
- Completed DRAs, conducted GLOs, initiated RTIs, conducted weekly common assessments
- Created math units with zone member Kindergarten teachers
- Collaborated with all primary grades staff to vertically align instruction
- Collaborated monthly with ELA, math, and gifted consultant to ensure instruction provided the highest level of rigor and addressed the needs of all ability groups
- Trained in Math Exemplars, Infinite Campus, TKES

2nd Grade Teacher
- Implemented pilot program StoryTown to address Literacy needs.
- Planned and implemented differentiated standards-based lesson plans

Kindergarten Teacher
- Administered DRAs, utilized GKID grade reporting
- Planned and implemented differentiated lesson plans through Balanced Literacy
- Trained in 21st Century, Guided Math, Math Exemplars
- Worked as an afterschool tutor for SES students

Hamilton County Department of Education, Chattanooga, Tennessee
Kindergarten Teacher (August 2008-July 2009, Allen Elementary)
- Provided instruction through small math and reading groups
- Administered DIBELS testing and progress monitoring on students
- Taught Voyager as an approach to RTI with small group settings
- Planned and implemented differentiated lesson plans through the Learning-Focused methodology
- Taught Everyday Math curriculum
- Trained in Singapore Math

Cobb County School System, Marietta, Georgia
Special Needs Paraprofessional (March 2008-May 2008, Bullard Elementary)
- Assist pre-kindergarten teacher by providing individual instruction for special needs students
- Taught phonics instruction in the teacher's absence

- Provided pull-out specialized instruction and review for special needs kindergartener

Special Needs After School Program Instructor (March 2008-May 2008, Bullard Elementary)
- Assisted instructors in providing one on one attention to special needs students
- Worked with small groups in kindergarten and first grade.

Cobb County Substitute Teacher (April 2007-March 2008)
- Worked in a co-teaching environment
- Worked as an EIP teacher
- Implemented a specials calendar
- Helped cooperating teacher plan and prepare Science Day activities for all eleven Kindergarten classes
- Assisted with monthly grade level LIFT

Other positions held include: Lead Funder, Marketing Intern, Auditor/Appraiser I, and Sales Associate

Community Memberships
- Phi Kappa Phi Honor Society
- Member of PAGE
- 2008 Georgia's Junior Miss Host Family Chairman
- Member of 2004 Cobb County Junior Miss Committee
- 1998 Taylor County's Junior Miss

Abstract

The current study sought to determine the relationship between individual and contextual factors and teacher stress. Through analysis of the individual factors of self-efficacy and personality combined with organizational justice, perceived supervisory support, and work-family conflict, one can evaluate how to effectively support teachers to negate the surmounting pressures of teachers. The mixed methods study utilized Bandura's (1986) Social Cognitive Theory and the JD-R model. The study specifically looked at the interplay between the individual and contextual factors addressing all teacher experience levels and school settings to uncover possible sources of stress perceived as factors preventing attrition. Current research has not revealed information about both factors in combination attributing to stress. Mid-year career teachers and middle school settings were neglected as literature often incorporated these settings under a secondary school label. Through explanatory-sequential research within the Yellow School District (pseudonym), 38 schools were initially surveyed through Qualtrics and analyzed using SPSS and SAS. Following the survey, participatory selection was used to analyze stress within the school with interviews. Teacher stress is a highly researched topic because of its importance in education. The quantitative findings of composite scores for each construct were in the moderate and neutral ranges. Personality and WFC were found as predictors of stress. Additionally, WFC and Personality interactions were statistically significant. The interviews of teacher perspectives of job demands included 1) an overload of tasks and responsibilities, 2) poor communication, 3) lack of consistency, and 4) student behaviors of management and apathy. A subtheme of lack of time appeared. Interviews reported stress could be alleviate in the areas of 1) teamwork and support 2) administrative leadership, and finally 3) teacher self-doubt. Mixed methods results further support the results found.

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Chapter I: Introduction

Teaching is stressful (Bottiani et al., 2019; Han & Garcia, 2022; Pressley et al., 2021; Stoeber & Rennert, 2008) and an emotionally demanding profession (Shakeel et al., 2021). Johnson et al. (2005) declared teaching as one of the most stressful occupations. While the field of education has often struggled to retain teachers, the aftermath of COVID-19 teaching requirements and increased workloads have made the task even more difficult to ensure all classrooms have highly qualified staff as found in the 2022 Professional Association of Georgia Educators (PAGE) report. As much as 16% of educators have left public school settings to work in private school settings (Brady & Wilson, 2021) to avoid surmounting expectations of job demands. The expectations that negatively affect teacher self-efficacy (Bottiani et al., 2019) because of a perceived increase in stress levels within public education were detrimental to teachers. Carver-Thomas and Darling-Hammond (2017) found that "each year schools nationwide must hire tens of thousands of teachers as a result of beginning and mid-career teachers leaving the profession" (p. 1). The need for more teachers was not solely based on the inclusion of the number of teachers reaching retirement and aging out of the profession. The mass exodus has already displayed expansive effects on traditional classrooms and without some type of change, the students will reap the negative results. Classrooms today are filled with stressed and fatigued teachers who are struggling to meet daily demands (Bottiani et al., 2019).

According to Darling-Hammond (2001), stress was the number one reason teachers were leaving the profession. The decline in teacher recruitment was most concerning (Hanks et al., 2020), as the teaching profession has been considered as "bleeding" teachers faster than the positions can be filled (p.121). Mid-career educators are typically teachers who are

focused on enhancing the field of education (Plavsic & Dikovic, 2022); yet the issue has made an impact on them as well. Therefore, a disparity between entering and remaining educators exists that must be remedied quickly for all school-aged children to have adequate teaching staff available.

Within the United States, the issue of teacher stress has trickled down to regions, states, districts, and schools. Teacher stress and burnout is an international problem that does not solely affect the United States but has concerned classrooms around the world (Betoret, 2006; Brady & Wilson, 2021; Celik & Kalkan, 2022; Chaplain, 2008; Howard & Johnson, 2004). To ensure all classrooms are equipped with highly qualified teachers, the problem of teacher retention was an area of great focus (Hanks et al., 2020). The educational systems have strained budgets of limited funding and resources due to the taxable income of its population. The costly financial obligations associated with the hiring process of inexperienced staff and professional development training added to the burden of constrained resources. These limited resources create stress for teachers as they determined how to get the most out of the current supply due to funding and restraints. With constrained resources, teachers were forced to make instructional decisions regarding how they teach and deliver the material to students. With an endless number of resources, teachers would be afforded opportunities to create innovative and extra engaging lessons but often, these resources are purchased by teachers with their personal funds. Funding issues also meant that teachers potentially would teach classrooms with increased class sizes and have limited personnel to collaborate with which limits the time allotted to plan and prepare for the usage of the materials within a lesson. These additional decisions often resulted in more stressed teachers as they ultimately desire what is best for their students.

The research study focused on K-12 teachers currently working within the Yellow

County School District, (pseudonym) in Georgia. The district had urban and suburban school settings. There were twenty-one elementary schools, six middle schools, six high schools, and five alternate setting school types within the district (YCSD, 2022) The district's schools were Title 1 and 100% free and reduced lunch. The district employed 43% (514) inexperienced teachers as opposed to the state of Georgia which had 23% (GOSA, 2021). The Governor's Office of Student Achievement reported that 264 teachers (22%) were teaching out of their certification field in the Yellow County School District. Within the Yellow County School District, waiver teachers were hired to work while obtaining their teaching certificates. The district also employed 82 teachers or 7% of their workforce through emergency provisional waiver programs (GOSA, 2021). These individuals hold a bachelor's degree in an unrelated field and either began earning certification through a university program or the Georgia Teacher Academy for Preparation and Pedagogy (GaTAPP) program. This allowed a person to begin their teaching career and learn how to become a teacher simultaneously to help fill teaching vacancies. Therefore, certain teachers not only instruct their classrooms daily for their role as teachers but also take on the role of students as they complete college coursework or teacher preparatory programs during the evening to become certified educators in the state. The participants of the study included certified and waiver teachers of all experience levels including early intervention teachers and specialty teachers as well. Therefore, all teaching staff apart from the administration was solicited.

Darling-Hammond (2001) reported teachers who enter the classroom with a lack of preparation yield students who underperform their peers. Employing staff with inadequate educational background knowledge including pedagogical processes and/or content-related deficiencies increased school inequity as less qualified teachers are being hired in areas that are

seeking to assist students who are in the greatest deficits of learning (Darling-Hammond, 2001). The lack of background knowledge created additional stress for teachers as they enter the classroom without the foundation of lesson planning elements, instructional strategies, time, and classroom management skills, and learning while teaching will equate to these teachers incurring additional pressure (Rose & Sughrue, 2020). Often schools used classroom data to make grade level or department decisions and new teachers could feel added pressure to perform at the level of their peers (Schaap et al., 2018). In 2020-2021, 95.7% of Georgia teachers who completed non-traditional teacher preparation programs were employed while completing certification requirements according to the 2021 Teacher Leader Workforce report (Flamini & Steed, 2022). In addition, Flamini and Steed (2022) reported that 53% of employees completed traditional tracks while working as a teacher to complete their degrees for initial certification.

Research has provided information on factors that can induce and reduce stress. Self-efficacy has been found to reduce stress in employees who exhibit high levels (Meyer et al., 2022; Yin, 2022; Yu et al., 2014). Certain aspects of personality have been found to increase stress while others buffer the effects. Ruggieri et al. (2022) found these areas of personality were predictors of burnout from teacher stress: agreeableness, curiosity, extraversion, openness, and exploration with emotional stability having the strongest aspect. An employee's perception of the amount of support provided by supervisors (Kang & Kang, 2016) and even colleagues (Bottiani et al., 2019; Droogenbroeck et al., 2014) has also been investigated and proven to increase stress. In contrast, Ong and Sulaiman (2022) argued that perceived supervisory support was unrelated to job stress. An employee's stress level was affected by the employee's perception of the organization. Organizational justice was found to be related to job stress (Ssenyonga & Hecker, 2021). Depending on the type of organizational factor determined whether this construct

increased or decreased an employee's stress level. All employees encounter balancing work and family life roles; however, some individuals experienced conflict which is found to induce stress (Erdamar & Demeril, 2014).

Examining teacher perspectives on contributing factors of teacher stress based on the individual factors of self-efficacy and personality and the contextual factors of organizational justice, perceived supervisory support, and work-family conflict, in addition to insight as to what teachers deem stressful revealed the missing elements of the current teacher retention problems that exist today. Skaalvik and Skaalvik (2007) found a correlation between teacher stress and self-efficacy. In addition, Nojani et al. (2012) linked organizational justice and teacher's job satisfaction. Erdamar and Demirel (2014) found that work-family conflict caused problems with job dissatisfaction, stress, and within the organization. Erdamar and Demirel (2014) confirmed that young, female teachers were more prone to be affected by work-family conflict. The potential ramifications on instructional practices and the effects on student achievement deemed this a necessary topic for discussion as educational leaders continue to combat the issue of teacher stress. To emphasize the existence of the teacher turnover burden within the field due to the stressful nature of the teaching profession (Darling-Hammond, 2001; Schonert-Reichl, 2019; Stoeber & Rennert, 2008), future research was vital.

A review of the literature, a clear purpose, and the methodological processes are presented in the study followed by an analysis of the study and future research considerations.

Background of the Problem

Stress is an experience that all individuals potentially endured in the workplace because of constraints of time and limited resources (Shakeel et al., 2021). In addition, stress is also formed from existing pressure from the organization, the supervisors, and/or colleagues (Shakeel

et al., 2021). Therefore, as the field of education continued to encourage teacher collaboration for planning and review of data, the aspect of support from peers in addition to administration was essential. Stress has many definitions, but stress can be defined as the psychological and physiological response to a person's well-being (Abirami, 2012). Stoeber and Rennert (2008) maintained teachers were among the professionals exhibiting the highest levels of job-related stress.

Another element contributing to teacher stress was work-family conflict and family-work conflict, or negative spillover. If conflict levels are high, then the workplace and home life are affected negatively by this stress-inducing factor (Erdamar & Demeril, 2014). Work-family conflict existed as work-related items were brought into the home. This occurs when teachers become overwhelmed with worry concerning their students' abilities and home life needs. The most consistent and strongest finding of Allen et al. (2000) was the relationship between work and family conflict and stress. Erdamar and Demirel (2014) contended that teachers experience more work-family conflict than family-work conflict led to a reduction in job satisfaction and within the home. Erdamar and Demeril (2014) concluded public school teachers and private school teachers differed in age, institution type, and gender regarding work-family conflict. Erdamar and Demirel (2014) found more work-family conflict existed among public school teachers than among their private school colleagues. However, Erdamar and Demirel (2014) also found young, female teachers regardless of school setting experienced more work-family conflict. Although Erdamar and Demirel (2014) noted no differences in marital status, school level, or content taught, it was found that in the private school setting young teachers experienced more of both types of conflict. Furthermore, Erdamar and Demirel (2014) affirmed that work-family conflict reduced job satisfaction and increased job-related stress resulting in a

reduction in loyalty to the organization.

Researchers contended that educational leaders must begin to focus on teacher well-being and mental health (Herman et al., 2021) overall realizing that home pressures can enter the workplace. Bakker et al. (2019) found employees needed to learn emotional regulation strategies. Bakker et al. (2019) emphasized learning the strategies that increase one's resources allows for the usage of more expansive strategies that can be used both in and out of the home. Bakker et al. (2019) further added the usage of these strategies was the way to end the negative cycle affecting one's well-being and home life.

Self-efficacy has been found to aid teachers in handling stress. Self-efficacy was defined by Bandura (1986) as a person's internal belief that he or she can master a task or situation. Teacher self-efficacy is a teacher's confidence level with the ability to increase student learning (Hattie, 2017; Klassen & Chiu, 2010; Okoro et al., 2002; Protheroe, 2008). Shakeel et al. (2021) clarified that self-efficacy is not a skill, but it is the confidence level of one's skills. Having elevated levels of self-efficacy was crucial to the teacher's mindset believing that a solution to a problem was possible (Pearman et al. 2021). Individuals who suffered from stressful situations without resolving them over time cannot anticipate a positive end to their situation, often choosing to leave the profession. Yin (2022) found improving the self-efficacy of an individual was a viable option to improve a person's well-being. In addition, Yin (2022) found self-efficacy successfully alleviated negative pressure on individuals. Self-efficacy and stress were both correlated with the induction of job burnout (Yu et al., 2014). Yu et al. (2014) and Meyer et al. (2022) also found self-efficacy mediated the effects of perceived stress leading to job burnout. It can be concluded that self-efficacy functioned as a solution for job burnout as individuals who had higher levels of self-efficacy were better equipped to not succumb to the added pressures

increasing their perceived stress levels. Meyer et al. (2022) found that the perception of being in control could create a shield against negative stress. Yin (2022) quantitatively researched self-efficacy to the locus of control with 305 elementary teachers and their subjective well-being to find that self-efficacy was a partial mediator. Malinen and Savolainen (2016) found self-efficacy was a mediating factor in the effect of perceived school climate on job satisfaction and burnout. A person's job satisfaction level could be explained by the degree of need fulfillment within their work environment (Klusmann et al., 2008).

An individual's personality determines how a situation is perceived. Salami (2011) found personality to be a moderating factor as it was interrelated with job stress and was predictive of perceived personal accomplishment. Salami (2011) also concluded that environmental factors such as social support and job stress influenced teacher burnout along with the personal factors of personality traits. Personality and social support were found to be effective in reducing the negative effects of job stress on reduced personal accomplishment; however, emotional exhaustion and depersonalization dimensions of burnout were not effective (Salami, 2011). Personality profiles were found to be resource and vulnerability factors in how people perceive experiences in life and work (Udayar et al., 2020).

Shakeel et al. (2021) declared an individual's personality was attributed to reactions based upon unexpected situations. Ismail et al. (2018) found personalities had a strong correlation with counterproductive work behavior. Bakker et al. (2018) argued that personality traits can have an immediate impact on a person's well-being and concluded that combinations of the facets of personality influence a person's ability to manage situations. Udayar et al. (2020) emphasized that work-related wellness indicators were found in three of the personality traits: extraversion, neuroticism, and conscientiousness. Resilience seemed to help a person cope with

job-related stress and achieve higher satisfaction within their job as opposed to the oversensitive personality profile that potentially reinforces perceived negative aspects of the situation (Udayar et al., 2020).

Teacher stress has been linked to a person's perception of the stress-inducing factor and how a person manages the event (Dicke et al., 2014). Dicke et al. (2014) further explained positive self-efficacy thoughts were the means used to determine how to perceive events. A teacher's self-efficacy was useful in preventing teachers from incurring teacher stress (Shakeel et al., 2021). Kyriacou (2001) clarified teacher stress as a teacher's experience with "unpleasant, negative emotions, such as anger, tension, frustration, or depression, resulting from some aspect of work as a teacher" (p. 28). Kang and Kang (2016) found that perceived supervisory support reduced stress. In addition, perceived supervisory support had a moderating effect on an individual's high-commitment human resource management which was evidenced to report lower stress (Kang & Kang, 2016). Kang and Kang (2016) further concluded that perceived supervisory support was a preceding factor to job-related stress.

Approximately 44% of teachers who enter the field of education left within the first five years of the profession (Chang, 2009; Cineas, 2022). In addition, in Georgia, veteran teachers were choosing not to remain in education according to the PAGE Report (2022). Hattie (2017) has conducted much work on factors affecting student achievement. Hattie (2017) found the effect size of work related to self-efficacy was 0.92 while collective teacher self-efficacy was as great as 1.57. Therefore, the large effect size accounted for the influence of the individual factor that increased positive change among teachers and students. As a teacher's self-efficacy was lowered because of stress-related items, the need for awareness of the malleability feature of self-efficacy is vital. Shakeel et al. (2021) affirmed self-efficacy was an active behavior that was

not fixed.

Traditional teacher stress was compounded under the conditions of teaching during the COVID-19 pandemic (Han & Garcia, 2022; Herman et al., 2021). After COVID-19, teacher requirements and technical expectations altered the traditional classroom and methods of teaching (Pressley et al., 2021; Pretorius & Padmanabhanunni, 2022; Tabatadze & Chachkhiani, 2021; Westphal et al., 2022). Pressley et al. (2021) found teacher stress levels positively correlated to anxiety due to COVID-19 and support was needed to combat teacher stress. Pretorius and Padmanabhanunni (2022) reported teachers needed support to negate the stress factors of anxiety and hopelessness found in women teachers after COVID-19. With the shift in teaching atmospheres and classroom setups, the current research on teacher stress needed to be updated and analyzed from a holistic viewpoint. COVID-19 reinvented traditional instruction requiring more of teachers such as: teaching in a virtual and/or hybrid setting (online and in-person simultaneously), increasing workloads to create engaging technological lessons through websites and social meeting platforms, learning additional avenues to access the content through technology while utilizing content simultaneously, providing those resources to adults supporting their children as they worked their jobs alongside their child, and increased job-related duties and responsibilities many teachers needed to master to continue performing their job well and meeting the needs of the students (Daniel, 2020; Pressley et al., 2021; Shoulders et al., 2021). The unusual environment created much stress for many teachers especially if they were not technologically savvy (Fernández-Batanero et al., 2021).

The cumbersome task of teaching has been noted as stressful (Pressley et al., 2021; Stoeber & Rennart, 2008). Accounting for the numerous inevitable changes in curriculum and instructional delivery demands created a huge issue for teachers to overcome. A teacher who was

not equipped with effective coping strategies could become overwhelmed with teacher stress which ultimately can lead to burnout (Jennet et al., 2003). Dicke et al. (2014) added teachers with high levels of self-efficacy regarding classroom management were not as susceptible to the personality trait of exhaustion and burnout. Westphal et al. (2022) added a teacher's personality and self-efficacy with online teaching were important factors contributing to stress and burnout during the pandemic. Meyer et al. (2022) found self-efficacy to be an important factor in a person's resilience when combatting perceived high levels of stress, making one less vulnerable to COVID-19 beliefs. Yin (2022) found self-efficacy to be a factor in one's ability to overcome negative pressures. Abdel-Khalek and Lester (2017) reported a strong association between self-efficacy and mental health. Shakeel et al. (2021) confirmed high levels of self-efficacy attributed to one using coping strategies when faced with challenges and those who exhibit low levels of self-efficacy are more likely to leave the profession due to experiencing higher levels of burnout. Therefore, higher levels of self-efficacy resulted in teachers being less likely to experience burnout as self-efficacy was viewed as a preventive measure for burnout (Shakeel et al., 2021).

Recently, a review of organizational justice (OJ) within the educational field was a new topic to help support efforts to combat teacher retention with the aspects of job satisfaction (Celik & Kalkan, 2022; Zhou & Ma, 2022). Organizational Justice (OJ), while normally not researched within an educational setting, provided insight into the perceptions of the school as an organization. If injustice was evident, then decreases in job satisfaction, employee work quality, and retention would occur along with an increase in employee absenteeism (Dunaetz, 2020). However, teacher retention was important to study because organizational justice (OJ) perceptions positively impact teacher job satisfaction (Alanoglu & Demirtas, 2021). Personality and organizational justice contributed to counterproductive work behavior and lead to work

stress (Hapsari et al., 2022). Zhou and Ma (2022) found that organizational justice had a significant influence on teacher retention of individuals working at the elementary and middle school levels.

Organizational justice is described as a subjective perception of an employee's idea of fairness within the workplace (Zhou et al., 2020). There are four dimensions of organizational justice: procedural justice (fairness of decision-making), distributive justice (equality of employee work and rewards, interpersonal justice (employee's perception of their manager's treatment towards them), and informational justice (processes and procedure information provided individuals is accurate) as stated by Colquitt (2001). Na'Imah et al. (2022) asserted informational justice is a social component of procedural justice. The vision of a particular school determined what is deemed important, which individuals can provide feedback, and who and how often those individuals can provide feedback to those at the decision-making table. Alanoglu and Demirtas (2021) found teachers' perception of school rules and procedures was based on support. Alanoglu and Demirtas (2021) confirmed bureaucratic aspects that aided in teachers' work helped to solidify positive attitudes and attributed to desirable work completion versus compliance. Oren et al. (2013) emphasized that leadership should be cognizant that employees were consistently examining leadership actions to ensure workplace fairness is just. Herrera et al. (2022) asserted organizational justice had significant effects on a person's well-being concerning age, gender, and school vulnerability. In agreement with Social Exchange Theory, Shakeel et al. (2021) emphasized the need for teacher support. Teachers' contributions of their work and school were equal when provided with appropriate support (Shakeel et al., 2021). Therefore, the aspects of organizational justice and perceived supervisory support were critical to review in school settings, even within the same district, as schools are operated by

different individuals in leadership roles and styles (Hoy & Tarter, 2004). Viewing multiple schools within the same district provided insight into the school as an organization and determined predictors of stress.

All individual schools within a state and district have the same guidelines, though the school's operations are not necessarily managed in similar manners. Each school type has its own culture and climate, clientele, capacity, and leadership values employed. Such factors led to potential differences that can contribute to or negate teacher stress possibilities. It was therefore imperative to view multiple schools within a district to ensure the results were not isolated and only specific to one school. There was potential for the concern of teacher stress to be pervasive within the district. The study identified specific school and/or district needs highlighting specific areas of stress possibilities for leadership to begin supporting the current and future staff.

Previous research has studied teacher-related stress regarding self-efficacy, burnout, student achievement relations, physiological health conditions, teacher retention, and numerous other angles such as organizational justice, perceived stress, and leader support (Aboagye et al., 2018; Alanoglu & Demirtas, 2021; Betoret, 2006; Bottiani et al., 2019; Jennett et al., 2003; Kaihoi et al., 2022; Mori et al., 2022; Plavsic & Dikovic, 2022; Sari et al., 2021; Zhou & Ma, 2022). However, the research studied similar factors such as only contextual factors or individual factors contributing to teacher stress or their effects of stress on teachers as separate ideas. Merely viewing stress within one domain limited the reader to only learn about one or more similar attributes. This investigation provided the potential for discovery of the interaction effects between individual-level and contextual-level factors. For example, how has teacher stress been influenced by the interaction between self-efficacy and organizational justice? How did teachers with higher levels of neuroticism personality factor experience stress when they

have coworker and supervisor support? These are examples of questions that could be investigated by simultaneously modeling the interaction effects of individual-level and contextual-level factors.

Statement of the Problem

According to PAGE (2022), teacher retention was a large problem within the field of education in the state of Georgia. Currently, teachers are experiencing compounded stress levels and job demands that have led many to exit the profession (Han & Garcia, 2022). Previous efforts to retain teachers have not counteracted the surmounting new expectations that have arisen after the COVID-19 pandemic altered traditional classrooms (Pressley et al., 2021). The additional problem of COVID-19 impacted teachers around the world because each teacher was managing an already stressful situation under more constraints and pressure that led to burnout (Fitchett et al., 2019). With the problematic continued teacher shortage existing in multiple countries (Han & Garcia, 2022), the field of education must begin efforts to retain more teachers thus beginning to support the whole teacher. Herman et al. (2021) affirmed teacher health and well-being increased in priority after COVID-19 altered instructional delivery. While research has been conducted regarding teacher stress and self-efficacy (Jennett et al., 2003; Skaalvik & Skaalvik, 2007), much of the research was conducted within pre-COVID-19 conditions and has been completed in isolation.

The Yellow School district currently employs on average 286 new hires each year as referenced in Table 1. The number of waiver teachers hired has grown exponentially after COVID-19 from 24 teachers in 2021 to as great as 178 teachers in 2023. This yielded more teachers within the classroom without a current certificate with only a slight decline for the Fiscal school year 2024 with 129 waiver teachers. This addition of waiver teachers impacted

current teachers who took on the additional responsibility of ensuring their teammate was successful which could have led to increased stress levels for both teachers and students. The constant turnover amongst schools within the district could cause additional strands of stress based solely on the newness of the employees in an everchanging population.

Table 1

Yellow County School District Employee Hire Totals

	Fiscal School Year 2024	Fiscal School Year 2023	Fiscal School Year 2022	Fiscal School Year 2021
Number of Total Hires	260	322	332	231
Number of Waiver Teachers	129	178	72	24

Table 1 Employee Hire Information for Yellow County School District, 2021-2024

The issue of retention struggles with high demands of instructional delivery culminated in teachers feeling overwhelmed completing typical teaching tasks. This resulted in teachers leaving even as soon as the beginning of a new school year and many during a school year by walking out. As teachers leave, the relationships cultivated for learning environments become disrupted. This disruption could lead to a reduction in student achievement. In Yellow County School District, 223 teachers did not renew a contract for the 2020-2021 school year with only 24 of them accounting for retirement reasons (Gibson, 2022). The Yellow County School district had a 75% retention rate in 2023 as opposed to previous years of 82% in 2022 and 83% in 2021 according to Georgia Insights (n.d.). The review of the most recent student test scores in Table 2 of the Yellow County School District showed retention and stress were real concerns for this school system.

Table 2

Yellow County (Pseudonym) 2022 CCRPI Scores

Grade Cluster	Content Mastery	Readiness	Graduation Rate
Elementary	41.6	65	N/A
Middle	35.7	65.6	N/A
High	32.5	58.5	81.1

Table 2 Yellow County CCRPI Scores, GADOE, 2022

Many factors contributed to the problem of teacher stress, including individual factors such as personality traits and self-efficacy, and contextual factors such as organizational justice, perceived supervisory support and teacher support, and work/family conflict. The current study contributed to the research literature on teacher stress by viewing individual and contextual factors simultaneously to see the interplay each has on the other.

In the teaching field of education, teaching is not a stand-alone position as many other teacher types interact daily with students. Teachers do not typically work in isolation unless school enrollment did not account for multiple teachers for that content. There was, however, a push for more teacher collaboration and peer support. Almost always at the school level, teachers are provided with a principal, at least one assistant principal, and a grade level or department chairperson. In addition, many teachers are also provided with a mentor (even another team member or academic coach) to offer advice and guidance to teachers throughout the school year (Braun et al., 2019; Karanfil & Atay, 2020; Schwan et al., 2020). While some supports exist in many schools, the amount of support was varied among schools even within the same district as educational leaders are still establishing what components would entail as necessary for a successful mentoring program to be implemented (Schwan et al., 2020).

Supervisory support delivered effectively provided outlets for teachers to reduce potential stressors (Westphal et al., 2022). Shakeel et al. (2021) found social support aided in a teacher's

ability to avoid burnout whereas incompatible relationships extended the reach of burnout.
Bottiani et al. (2019) found colleague support relationships proved to buffer stress and burnout.
A further look inside at which level of support was best suited for teachers is most desirable. The
updated additions to previous research conducted in other countries delivered valuable
information to be utilized by teachers within the United States. The current study offered insight
into teacher stress contributing factors that are both internal (personality and self-efficacy) and
external (organizational justice, perceived supervisory support, and work-family conflict) in
nature and the impact of the contributing factors as a complete picture. Since much of teacher
stress led to teachers exiting the profession, the concept of teacher stress was important to review
the contextual factors in addition to the individual factors of a person's personality and level of
self-efficacy. Identifying factors that contributed to teacher stress would improve the learning
environment, aid cognition, and support teacher attrition (Fitchett et al., 2019) as teacher stress
has been found to have negative effects on daily instruction resulting in lower student
achievement (Blase, 1986; Kongcharoen et al. 2019).

Novice teachers who entered the field not having completed a teacher preparation
program could incur an additional level of stress. These teachers were required to learn while on
the job, a position which is difficult for many. Therefore, these teachers sometimes relied heavily
on receiving support from leaders and colleagues to learn quickly. Some personalities did not
lend themselves to being as open when help was needed to ask for assistance and that too can
create stress to perform. Mid-career individuals were working toward supporting newcomers and
advancing their careers or the educational field (Plavsic & Dikovic, 2022). With this climb and
added responsibilities, potential stressors became strains. Veteran teachers who have found
success with students in the past can become overwhelmed with new initiatives, new programs,

and new technological requirements and expectations that were non-existent at the beginning of their careers. The level of newness to the position has created an overwhelming feeling that they are starting over when they have previously felt confident in their abilities (Carton & Fruchart, 2013). These situations become stressful for many teachers.

With the current teacher shortage being a prevalent worldwide problem, the study sought to address the issue of teacher stress in hopes of bringing awareness to the impact of the individual and contextual factors linked to teacher stress to further information and better understand the impact as it relates to teacher retention. Shakeel et al. (2021) found personality, an individual factor, had a significant relationship to burnout where self-efficacy was concluded to be a mediating factor. The current study was beneficial because reviewing multiple factors provided a more complete picture of teacher stress as opposed to previous research that reviewed these factors in isolation or by type of factor. Khosbayar et al. (2022) concluded individuals were more resilient with high scores in conscientiousness, agreeableness, extraversion, and openness to experience. Stress levels have increased after the COVID-19 pandemic with many of the teaching supports implemented to serve all students during that season becoming a traditional requirement within today's classrooms. Oberg (2023) affirmed the pandemic and increased workload for teachers increased stress levels, exhaustion, and burnout.

To the best of the researcher's knowledge, there was no other research that assesses to what degree the individual (self-efficacy and personality) and contextual (work-family conflict, perceived supervisory support, and organizational justice) factors increased or decreased stress for teachers. Past research on teacher stress has primarily utilized quantitative research. There are a limited number of studies that have taken a qualitative approach to comprehending teacher's perspectives on stress and the role of contextual-level factors. This study methodologically

contributed to the current scholarly literature on teacher stress by integrating quantitative and qualitative research approaches to comprehensively examine teacher stress through the lens of both individual and contextual-level factors.

Purpose of the Study

      The purpose of the study was to investigate the impact of individual and contextual factors on teacher stress within K-12 schools and identify prominent sources of stress perceived by teachers. The study sought answers from respondents from all teaching roles within a school ranging from elementary to middle to high school settings to learn the impact of stressful triggers on the different subgroups of teachers to better understand teacher perceptions. This led to the initial stages of understanding the link of stress to their self-efficacy and personality and the school with organizational justice, perceived supervisory support, and work-family conflict so leaders can better support teachers in these areas. The study of these factors was important because teacher stress escalates teacher turnover, which was linked to reduced student achievement, which is the basis of education (Karanfil & Atay, 2020; Will, 2021). A teacher's self-efficacy was directly linked to student outcomes; teachers with higher levels of self-efficacy yielded greater student achievement success than teachers with low levels of self-efficacy (Okoro et al., 2022). The purpose was further refined to support potential teacher retention, especially in mid-career teachers. Teacher-student relationships were the foundation for student achievement (Spilt et al., 2011). Therefore, as teachers began to leave the classroom, a student's structure, sense of safety, and relationships made were broken creating additional gaps to fill in student learning outcomes (Spilt et al., 2011). The goal was to gain a better understanding of teacher stress factors to combat the existing teacher retention problem within the state of Georgia.

Research Questions/Hypothesis

The study was conducted to gain a better understanding of teacher stress as it relates to self-efficacy, personality, organizational justice, perceived supervisory support, and work-family conflict. The research questions were created to gather evidence concerning the impact that exists between the relationship between self-efficacy and personality to stress and organizational justice, perceived supervisory support, and work-family conflict on teacher stress. In addition, the questions sought to determine the combined effect of the individual and contextual factors being studied on teacher stress and identify job-related factors that teachers perceive as stressful. The current study was aimed to address the following research questions:

RQ 1: What is the influence of self-efficacy on teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant influence of self-efficacy on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant influence of self-efficacy on teacher stress.

RQ 2: What is the relationship between personality traits and teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant relationship between personality and teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant relationship between personality and teacher stress.

RQ 3: What is the relationship between organizational justice and teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant impact of organizational justice on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant impact of organizational justice on teacher stress.

RQ 4: What is the influence of perceived support on teacher stress?

a.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived supervisory support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived supervisory support on teacher stress.

b.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived colleague support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived colleague support on teacher stress.

RQ 5: What is the influence of work-family conflict on teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of work-family conflict on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of work-family conflict on teacher stress.

RQ 6: What are the interaction effects of individual and contextual level factors on teacher stress?

RQ 7: How do K-12 teachers describe the job demands at their current workplace?

7a. What are the teacher's perspectives on the stress created by job demands and how this

stress can be alleviated by individual-level and contextual-level factors?

Conceptual Framework

Based on the social cognitive theory authored by Albert Bandura (1986), the study focused on the impact of individual and contextual factors on teacher stress. Specifically, the study reviewed the personal factors of self-efficacy and personality, the environmental factors of organizational justice, work-family conflict, and the cognitive factor of how the individual perceives stress from supervisory support. The conceptual framework was based on Bandura's Social Cognitive Theory which supported a person's behavior, cognition, and environment mutually contributing to one another (Bandura, 1986). Bandura (1986) stated self-efficacy was a person's internal belief that he or she can master a task or situation. Extending the notion, a teacher's self-efficacy was his or her belief in the ability to promote student learning outcomes (Klassen & Chiu, 2010; Prothero, 2008). The study sought to uncover the impact of each as an individual factor because of the close link between personality as a factor of self-efficacy. Bandura's (1986) social cognitive theory was found to be based on the individual's influence with and on other interactions that are developed by self-efficacy. John Hattie (2017), most renowned for his book, *Visible Learning*, has completed more recent work in the field of self-efficacy. Teachers often reflected on their teaching practice based on student outcomes. Therefore, a person's ability to affect change was important, especially in teaching. The current study was important as it examined factors that contributed to teacher stress which is a major contributing factor to low levels of teacher retention. All teachers could encounter challenges during their career. However, a person's ability to believe they are capable of teaching ultimately determined whether the individual chose to remain in the teaching profession.

Vinz (2022) defined a theoretical framework as a defined theory used to support the

significance of research and provide evidence of the topic's relevance within previous literature. Maxwell (2004) simply stated the framework as the information that supports or informs the research. Several factors can lead to teacher stress. The study specifically looked at the relation of the individual factors of self-efficacy and personality to the contextual contributing factors of organizational justice (also known as workplace fairness), perceived supervisory and colleague support, and work-family conflict. In previous research, self-efficacy was found to be a mediating factor.

Figure 1 showed the study's conceptual framework and depicted the relationship between the individual factors and the contextual factors in addition to the combined effect these have on teacher stress using Bandura's theory focusing on behavioral, personal, and environmental factors and the Job Demands-Resource model (JD-R). The individual factors or personal resources used in the study were self-efficacy and personality. Within the job demands section, the contextual factor of work conflict acted as a behavioral component. Job resources included organizational justice and perceived support from supervisors and colleagues which are environmental factors. The management of personal and job resources, coupled with how work-family conflict reacted to a person's job demands determined an employee's perceived teacher stress. The JD-R model was often used to better understand the fundamental psychological aspects of employee stress as well as motivation. The model was a conceptual tool for understanding and guiding future actions by leadership (Schaufeli, 2017).

Figure 1

Research Conceptual Framework adapted from Granziera et al. (2021)
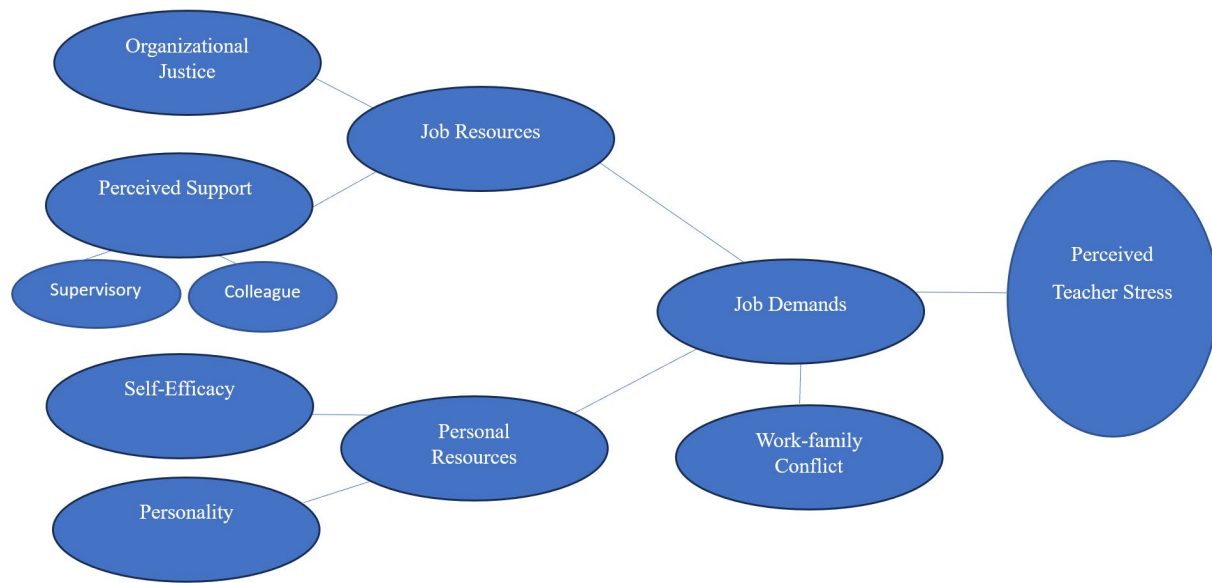
The conceptual framework used in the current study was based on Bandura's theory dating back to 1986, in addition to recent research using the Job Demands-Resources theory of Bakker and Demerouti, (2007). The JD-R model helped to explore teacher experience that would assist in revealing information on the factors that cause teacher stress (Granziera et al., 2021). The JD-R model stated that when job demands are high and job resources are low, stress and burnout occur (Bakker & Demerouti, 2007). Demerouti et al. (2001) found all working conditions could be considered as either a job demand or a job resource.

A job demand was defined as a physical, social, or organizational aspect of the job requiring sustained physical or mental effort which yields physiological and psychological costs (Demerouti et al., 2001). Further, a job demand was considered a strain or drain of energy (Schaufeli, 2017) on the individual while a job resource, a supportive resource was needed to overcome the demand (Bakker et al., 2007; Schaufeli, 2017). Job resources were the physical, psychological, social, or organizational aspects of the job that reduce job demands and the

associated physiological and psychological costs (Demerouti et al., 2001). The resource was used in achieving goals at work as well as increasing personal growth and development through learning (Demerouti et al., 2001). Within the JD-R model, the suggestion of job resources buffering the impact of job demand was evident (Bakker et al., 2007). Characteristics of the work environment and personal traits (Kahn & Byosiere, 1992) and social support (Haines et al., 1991; Skaalvik & Skaalvik, 2018) have been found to buffer job demand effects while Friedman (1999) found supervisory support can buffer or boost burnout. Bakker and de Vries (2021) declared organizational resources such as human resource practices and healthy leadership along with personal resources of proactive personality offered support to employees in regulating short-term fatigue.

The model allowed for the understanding of the interactions between the individual (personal) and contextual (job demands and resources) and stress as it demonstrated the relationship between work environmental factors, personal resources with individuals, and behavioral aspects of using both, personal and job resources (Bakker & Demerouti, 2007).

Methodology Overview

The mixed methods research study addressed teacher stress and the potential relationship with self-efficacy, personality, perceived supervisory support, work/family conflict, and organizational justice to circumvent teacher retention issues within Georgia. An explanatory-sequential research design was used to test the impact of the interplay of individual (self-efficacy and personality) and contextual factors (organizational justice, perceived supervisory support, and work-family conflict) on teacher stress (dependent variable). The study added to the limited literature that exists on teacher stress from both methods and further defined what teachers define as job demands and how the factors studied can help alleviate stress.

The participants of the current research included teachers with varying levels of experience within the Yellow County School District in Georgia. The participants provided representation from K-12 elementary, middle, and high school settings. The participants' ages ranged from recent college graduates to teachers at or above retirement age. All full and part-time teachers regardless of certification were solicited with the exclusion of administration. The study was conducted in Spring 2024 because standardized testing was being planned for and implemented which is commonly known as a 'stressful' time for teachers and allowed for mid-year hires to be among the participants.

The quantitative aspect of the mixed-methods study examined the impact of self-efficacy, personality, work-family conflict, perceived supervisory support, and organizational justice on teacher stress. Data was collected through structured surveys. A purposeful random cluster-level selection occurred after the survey data collection where teachers were able to participate in the qualitative portion of the mixed-methods study. Structured interview questions were used to collect qualitative data. The structured interview questions focused on teacher's perspectives on the stress created by job demands and how the stress can be alleviated by individual-level and contextual-level factors. The qualitative data explored stressful factors within teaching for teachers with all levels of experience in all school settings within public K-12 schools within the Yellow County School District.

The usage of clustered structured interviews allowed participants to receive consistent interview questions in a predetermined order (Stuckey, 2013). Bhatia and Deogun (1998) attributed structured interviews to job interviews where each participant is provided with the same set and number of questions. Structured interviews were used by researchers to further develop known information about a topic by eliciting short responses to open-ended questions

(Dept of Psych EDI Committee, 2018). Bhatia and Deogun (1998) defined clustering as classifying data by characteristics and asserted the usage of clustering to improve efficiency and effectiveness in the analysis of the data. For the current study, clustered structured interviews were used qualitatively to define groups based on school setting to understand the job demands at each school type and insight into teacher perceptions on how to alleviate stressful factors according to their needs as elementary, middle, and high schools operate differently because of their student's age ranges and academic requirements. Young et al. (2018) referenced that interviews enabled researchers to concentrate on participants' priorities of importance when offering their perspectives.

Using the data statistical analysis procedure of structural equation modeling and Pearson's r coefficient, the study sought to determine the interplay among multi-variables of teacher stress as well as thematic analysis to identify specific sources of stress teachers deem most influential. The current study used a correlational design leading to results that potentially empower all educational leaders to invoke positive changes to teacher requirements. The correlational analysis was used to measure the relationship among the variables thus, possibly leading to increases in retention rates for the school systems in Georgia as a result.

After obtaining IRB approval from the school district and Columbus State University, the study began with an anonymous survey using Qualtrics and was analyzed within SPSS with participant recruitment. The current study sought to identify the impacts made on individual and contextual factors that contribute to teacher stress among novices (0-3 years of teaching experience), mid-career (4-15 years), and veterans (16 plus years of experience) teachers within elementary, middle, and high schools to provide a holistic picture of teacher stress. Karanfil and Atay (2020) found teachers regardless of experience level were stressed impacting their well-

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being and their ability to offer effective instruction to students.

The survey was electronically administered to teachers followed by the interview data collection. Valid and reliable measures of the constructs stated in research questions were included in the quantitative surveys and qualitative interviews. Quantitative survey data was analyzed by using correlation and structural equation modeling. Qualitative data analysis began with the researcher reviewing each respondent's work independently. The researcher created an inductive thematic coding system from a review of the responses. Then, the responses were viewed holistically looking for reoccurring themes and/or images. The themes most prevalent were included in the findings. Mixed-methods analysis used the procedures of joint display tables, and data transformation procedures to integrate quantitative and qualitative data (Creswell & Plano, 2017).

Delimitations and Limitations

Delimitations were decisions and boundaries set by the researcher with a review of the study results and the interpretation (Theofanidis & Fountouki, 2018). It is important to note that these decisions created a level of potential bias within the study. The participant's response rate was influenced by the short time frame to collect quantitative and qualitative data when the teachers were contractually working in schools. Also, the researcher used a combination of author definitions to determine how many years of experience were considered as a novice, mid-career, and experienced teacher for the study. Considering the combination of definitions of experience levels, the study yielded different results if the groups were defined within a different parameter. Another delimitation was the decision of which individual and contextual factors to study. The researcher acknowledged there might be other individual and contextual-level factors that might influence teacher stress. The selection of factors in the current study was based on

individual and contextual level constructs that have been demonstrated in the research literature

to be the prominent causes of stress and burnout. The final delimitation was the decision to only

include staff who work with students in academic or specialty roles (art, music, computer,

agriculture, and physical education teachers; media specialists) while eliminating administration.

There was also the potential school employees who were intentionally removed from the sample

population who endure educational settings stress factors because the researcher desired findings

based on classroom setting and was more focused on teacher stress. The removal of incomplete

respondent surveys factored into the results.

Limitations are biases created due to factors beyond the researcher's control (Theofanidis

& Fountouki, 2018). The extensive job demands of teachers may have restricted the response

rate as participation in the study is voluntary. For the same reason, many respondents chose not

to complete the entire survey/interview. There was potential for low response rates which

affected the results if teachers were so stressed, that respondents viewed the survey as one more

thing to complete. Acquiring results from multiple school settings and various experience levels

created a disproportionate response rate from a lack of responses for a certain school type or one

school setting has a higher response rate. To meet the IRB requirements of the district being

studied, the survey was sent out by administrative staff at each school. Due to the lack of control

concerning who received the survey, some participants could have completed the survey and not

be a part of the desired population. The qualitative desired ratio of respondents was met but the

fair representation of elementary interview respondents and middle school was unbalanced.

Definition of Terms

Confirmatory Factor Analysis (CFA): The standard confirmatory factor analysis model of the

multitrait-multimethod (MTMM) is to have each measure load on its trait and method factors

where trait and method factors are correlated and assumed to be independent. The final CFA model will be the initial Structural Equation Model. (Kenny, n.d.)

Construct: a theoretical variable in a model that is tapped by indicators; usually represented by an oval (Kenny, n.d.)

Correlation matrix: A visual grid display of variances due to method can be detected by seeing if the different-trait (survey items), same-method (constructs) correlations are stronger than the different-trait, different-method correlations (Kenny, n.d.)

Covariance matrix: A visual grid display similar to the standard CFA model, but the method factors are uncorrelated which has fewer estimation problems (Kenny, n.d.)

Direct effect: Either X causes Y, Y causes X, or both (Kenny, n.d.)

Exogenous variable or factor: A variable that is not caused by another variable in the model also known as the independent variable. This is usually causing the other variables in the model (Kenny, n.d.)

Endogenous *variable/factor:* A variable that is caused by one or more variables in the model also known as the dependent variable. This may also cause another endogenous variable in a model (Kenny, n.d.)

Indirect effect: The relationship between X and Y is said to be indirect if X causes Z which in turn causes Y (Kenny, n.d.)

Indicator variable: a measure in a structural model that contains measurement error; usually represented by a rectangle or box (Kenny n.d.)

Latent error:

Latent factor (VARIABLE): A theoretical variable in the model that is tapped by indicators and is usually represented by an oval shape. It can also be known as an unmeasured or unobserved

variable or a factor (Kenny, n.d.)

Manifest variable: directly observed variables (O'Rourke & Hatcher, 2013)

Measurement error: irrelevant sources of variance or the score minus the true score (Kenny, n.d.)

Measurement model: the mapping of measures onto theoretical constructs (Kenny, n.d.) describing the relationship among latent factors and indicator variables (O'Rourke & Hatcher, 2013)

Novice (new) teachers: Teachers with 0-3 years of teaching experience (Day & Gu, 2009; Huberman, 1989)

Mid-career teachers: Teachers with 4-15 years of experience. (Day & Gu, 2009; Huberman, 1989).

Organizational Justice (OJ): The subjective perception of an employee's idea of fairness within the workplace (Zhou et al., 2020)

Parsimonious model: A model accounts for covariation in the data with a minimal number of parameters (O'Rourke & Hatcher, 2013)

Path analysis: Determines whether models account for actual relationships observed in sample data and tests theoretical models specifying directional relationships among observed variables. (O'Rourke & Hatcher, 2013)

Perceived Supervisory Support (PSS): The degree to which an employee is supported and respected by a supervisor as well as the supervisor's willingness to help the employee. (Gok et al. (2015, p. 39)

Self-efficacy: A person's internal belief that he or she can master a task or situation. (Bandura, 1986).

Specialty teachers: Special teachers of elective classes such as Art, music, PE, Agriculture, Computer, Early intervention teachers, and Media Specialists

Stress: The unpleasant emotional and physiological condition that is caused by uncertainty or experiences beyond the employee's control and is considered harmful by employees." (Swandarujati et al., 2019)

Structural Equation Model (SEM): Models using the prediction of unobserved (latent) variables are hypothesized (O'Rourke & Hatcher, 2013)

Structural model: The causal and correlational links between theoretical variables (Kenny, n.d.) A model that specifies directional relationships between latent constructs (O'Rourke & Hatcher, 2013)

Teacher burnout: Occurs when the demands of work outweigh personal resources (Santoro, 2011).

Teacher expectations: Achievement gains teachers anticipate students make over time or the school year. (Rubie-Davies et al., 2014).

Teacher stress: "The experience by a teacher of unpleasant, negative emotions, such as anger, tension, frustration, or depression, resulting from some aspect of work as a teacher" (Kyriacou, 2001, p. 28).

Variable: A quantity that may assume any one of a set of values. (Merriam-Webster, 2024)

Veteran (experienced) teacher: Teachers with 16 or more years of teaching. (Day & Gu, 2009; Huberman, 1989).

Waiver teachers: Teachers who are not currently certified teaching on a provisional certificate. These can be teachers earning education degrees as a second career or individuals utilizing the Georgia Teacher Academy for Preparation and Pedagogy (GaTAPP) programs.

Significance of the Study

Literature on teacher stress was sparse when analyzing individual & and contextual level factors in combination. Investigating the interplay between these factors to better understand the underlying causes of teacher stress was important. The study explored all stages of the teacher's experience from novice to mid-career to veteran teachers.

Literature neglected mid-career teachers when investigating factors that impacted their stress as evidenced by the lack of references. Most recently, Kiska (2022) defined novice teachers are those with less than five years of experience, leaving all other teachers to be deemed veterans. The mid-career teacher was often not used in studies as researchers have typically sought after new teacher emphasis and veteran teachers. Cawte (2020) found literature that explored the reasons for mid-career teachers to leave or remain in the profession. However, research was limited regarding the population. The study examined each academic setting from K-12 grade schools. Literature typically addressed primary and secondary schools as entities but neglects to separate middle and high school settings as independent settings that require attention as evidenced by (Adu et al., 2012; Kongcharoen et al., 2019).

The results from the current research had the potential to reveal important individual and contextual-level factors that contributed to teacher stress based on years of experience and type of school (primary, middle, and high).

The study proved beneficial for education at the school and district leadership levels to support teachers within the school and district. The ramifications constructed from the study were not solely applicable to the educational setting studied but to all public schools as teacher retention benefits schools financially as well. Educational stakeholders, at the state level, could provide the information to other districts to combat the issue of teacher stress that exists within

Georgia. Clement (2017) reported teacher stress was higher than ever before witnessed in Georgia alone. The issue of teacher retention was found in all states as well as internationally. The results of the current study should be used to gain insights into factors that influence teacher burnout and stress and eventually retention issues. Unfortunately, teacher stress was not confined to the United States, so international education leaders should utilize the study to address the concerns with their country's educational systems. Stakeholders such as university teacher program leaders should find the study information useful to begin offering support to teacher trainees before entering the classroom. The information proved valuable to the university system to ensure graduates were prepared with the most appropriate knowledge to fill their "toolbox" with information to be successful. Therefore, teacher preparation programs could modify their program requirements with additional content courses focused on these concerns.

There has been much research on teacher retention but each year more teachers continue to leave the profession so one can assume there may be an aspect that has not been addressed or remedied. The inside account from the teachers' perspective provided the essential information for educational leadership to alter the current path. Clement (2017) recommended conquering teacher stress to support teacher retention by recognizing the struggle and relieving work pressures. One way Clement (2017) suggested was by administrators acknowledging when teachers reach the overwhelmed stage and reducing some pressures while continuing to offer support. Rubie-Davies et al. (2020) found that teacher expectations and student outcomes were related, and students were aware of how a teacher perceived their ability levels. Therefore, student achievement continued to be negatively impactful when teachers are stressed and lower their expectations for their students. The explicit and implicit messages offered by teachers affected not only a student's achievement level but the student's self-efficacy (Rubie-Davies et

al., 2020) which can lead to a detrimental self-fulfilling prophecy for the students. Wong et al. (2017) found teacher stress that led to burnout negatively affected student engagement within the classroom and the instructional quality provided by teachers led to teachers exiting the profession. In agreement with Wong et al. (2017), Clement (2017) found that minimal efforts were expended by teachers when their stress levels were high often resulting in those individuals leaving the profession altogether.

In addition, Bottiani et al. (2019) suggested combatting teacher stress and retention by having educational leaders focus on improving teachers' personal, relational, and organizational resources. Bottiani et al. (2019) further contended that as teachers become more stressed, their relationships with the students will also be strained. Therefore, it was important to review these factors to investigate the impact whether desirable or not on teacher stress levels. Bottiani et al. (2019) studied 255 middle school teachers in 33 schools including urban areas within a mid-Atlantic state. The findings proved teacher stress resulted in less instructional engagement and more teacher sensitivity when addressing teacher burnout (Bottiani et al., 2019). Furthermore, Bottiani et al. (2019) concluded a negative relationship between efficacy and stress which opposes other researchers.

The study brought insight to educational leaders as to potential areas of stress as well as how to best support all teachers regardless of years of experience, position within the school, or school type. If administrators were supporting teachers, student achievement could increase. The study results further offered stakeholders such as the federal government, educational leaders, and teachers the ability to become cognizant of the influence of stress factors on individuals and focus their efforts on fully supporting teachers within the school organization.

The study had the potential to provide useful information regarding the impact of certain

stress-inducing factors that benefit the district being researched but potential change within university systems. The results of the study afforded educational leaders an opportunity to add curriculum to better equip and prepare teacher candidates with coping strategies to manage work-related stress as suggested by (Ssenyonga & Hecker, 2021).

The study results proved useful in supporting the retention of teachers as the impact of the stressors and the perception of support at the school level was revealed. The current study looked at teacher stress from an individual level in addition to external contextual factors. Further evaluation from teacher perspectives allowed for insight into where teacher stress stems from as well as how to balance the stress from workload if there are home stressors invading work factors, how the lack or too much support affects teacher stress, and how perceived workplace fairness is essential.

The study provided information as to whether stress was better managed at the school level as an individual versus a holistic approach among the staff.

Summary

The current study sought to find the relationship between individual and contextual factors regarding teacher stress and burnout. Through a review of the quantitative and qualitative data of surveys using Qualtrics and participant structural interviews, educational leaders were enlightened to the aspects of the role of teacher that created the most stress for most people and should begin the much-needed changes within the educational system to thwart positive attrition of teachers. The study's findings offered information in how to fully support teachers and begin to address concerns that will make the most impact at the school level. Chapter 2 provided a review of the literature and an overview of previous literature concerning the topic and further identified the gap not addressed in the literature to date.

Chapter II: Literature Review

At an unprecedented rate, new and veteran teachers across the world were leaving the field of education to work outside the classroom causing tens of thousands of teachers to be hired annually (Carver-Thomas & Darling-Hammond, 2017, p.1). Stress has often been a topic of discussion about teacher retention. It is common knowledge that teachers today are stressed and more often considered burned out than ever before. Stress can be defined as both an internal and external response to a stimulus (Lobel & Dunkel-Schetter, 1990) and was further characterized as an "imbalance between demands and resources" (Carton & Fruchart, 2013, p. 246). Braun et al. (2019) found a teacher's level of stress was based on the following conditions: sex, years of experience, and school type. The age factor supported the idea that new teachers potentially struggled more than veteran teachers as they have the same responsibilities yet lack adequate resources to facilitate the daily demands because of their experience level (Carton & Fruchart, 2013, p. 246).

Conceptual Framework

The study was grounded in Social Cognitive Theory authored by Albert Bandura (1986) to synthesize the interplay between self-efficacy and personality (individual factors) and organizational justice, perceived supervisory support, and work-family conflict (contextual factors) with teacher stress to develop a deeper understanding of the impact of stressors. The framework was foundationally based on Bandura's Social Cognitive Theory which supported a person's behavior, cognition, and environment mutually contributing to one another (Bandura, 1986). Bandura's theory (1986) uses human nature within a triadic reciprocal causation of personal factors, behaviors, and environment and was foundationally built upon the concept of observing others and the influence of and on other individuals. Zhou (2019) asserted these

factors make up how a person views themselves and lead to the choices and actions taken by an individual. With a foundational aspect of Social Cognitive Theory being based on self-efficacy, the study included it as an area of focus. Perceived self-efficacy according to Zhou (2019) affected a person's drive and willingness to endure difficult situations should they arise and ultimately affects the decisions made by individuals.

In addition, the framework chosen was based on the Job Demands-Resources Theory which encompasses all work-related issues into the two categories of either a job demand or resource (Bakker & Demerouti, 2007). Job demands were physical, social, and organizational aspects of the position (Bakker et al., 2005). These demands required sustained physical and mental effort (Bakker et al., 2005) which placed strains on the individual both mentally and physically known as exhaustion (Demerouti et al., 2001). Harmsen et al. (2019) referred to job demands as the "health impairment psychological process (p. 261)." As job demands increase and are not fueled with job resources, the employee's energy was depleted resulting in mental exhaustion or teacher burnout (Schaufeli, 2017). While Demerouti et al. (2001) agreed that increased job demands resulted in exhaustion, they argued it did not result in disengagement. Disengagement, as opposed to exhaustion, occurred when job resources were insufficient (Demerouti et al., 2001). Demerouti et al. (2001) further concluded employees with high job demands and inadequate job resources experience both exhaustion and disengagement, "burnout syndrome (p. 508)." These results led to the negative effects of physical illness on the employee and decreased work performance for the organization (Schaufeli, 2017).

Job resources are physical, psychological, social, or organizational aspects of the position that were used to effectively obtain work goals, reduce job-demand damages, and to promote personal growth (Bakker et al., 2005). According to Demerouti et al. (2001), job resources were

"health-protecting factors (p. 501)." Harmsen et al. (2019) referenced these resources as the "motivational process (p. 262)." In addition, personal resources that include personality and self-efficacy were reviewed in conjunction with job demands of work-family conflict with job resources of organizational justice and perceived supervisory support. It is important to note that while resources tend to create positive effects, they can act as a stressor and were found to be inadequate. Employees with high levels of job demands and few job resources experienced increased amounts of fatigue and demoralization (Bakker et al., 2005). Job demands have physiological and psychological costs (Bakker et al., 2005). Demerouti et al. (2001) found when an organization lacks resources, employees struggled to overcome the negative influences of environmental demands such as work overload which leads to professional and personal ineffectiveness. Job resources such as autonomy, colleague support, and performance feedback have been found to buffer the effects of job demands on individuals experiencing exhaustion and cynicism aspects of burnout (Bakker et al., 2005). Bakker et al. (2005) found that job demands such as work overload, work-family interference, and physical and mental demands were reduced with quality relationships with supervisors, autonomy, feedback, and social support.

Teacher Retention

Renbarger and Davis (2019) declared schools have issues with recruiting high-quality staff and retaining them for consecutive years. Although legislative and policy changes were created to address retention concerns, recruitment, and previous efforts have worked to no avail (Hanks et al., 2020). Within the last ten years, as much as a third of new teachers have begun to leave the profession within their initial five years within the profession (O'Rourke et al., 2008; Shaw & Newton, 2014). Hanks et al. (2020) suggested a variety of legislative and policy approaches such as increased teaching salaries, have been completed yet no dent in the teacher

shortage concerns has resulted. One approach Hanks et al. (2020) offered was the requirement of ensuring employees were highly qualified teachers which caused the opposite effect on the classroom with more teachers currently not meeting the expectation using a quick fix (p. 121) strategy. Hanks et al. (2020) affirmed the issue of highly qualified teachers added to the problem of retention because unprepared teachers often do not remain within the profession. Another approach was to base efforts toward hiring teachers based on personality characteristics after identifying desirable traits of a teacher. Despite the research, the results have not been positive. Hanks et al. (2020) stated policy changes like Teach Like America programs hindered teacher retention because teachers who enter the profession fully prepared are among the greatest number of professionals leaving the classroom. Providing teacher support has been found to aid in teacher retention. Shaw and Newton (2014) found that schools should investigate the role of servant leadership and principals to retain highly qualified teachers. When teachers view administration as caring and supportive, they were less likely to not seek other employment opportunities.

Teachers have recently discussed the possibility of leaving the classroom to seek other job possibilities because of being stressed by numerous issues (Ssenyonga & Hecker, 2021). Teachers leaving the profession mid-year and simply walking away has steadily started becoming a norm. The absence of a teacher is detrimental to the students within that classroom because the sense of structure has been eliminated. McDonald (2019) found the percentage of those entering the educational field (4.5%) and the attrition numbers (8%) had only a slim 3.5% difference. Therefore, swift changes were needed to maintain these teachers and not allow them to succumb to the initial years of teaching. Shaw and Newton (2014) stated that funding for teacher training was costly, valuable, and difficult to obtain. McKillip and Farrie (2019) found

the cost to a district for one teacher leaving was around $17,000. The constant teacher turnover

generated increased costs for the district by having to extend the interview process and creating

the need for additional professional development training sessions for the new hires as well.

Thompson et al. (2019) declared a substantial factor in low retention rates was the teacher's

welfare. Ssenyonga and Hecker (2021) further explained that elevated levels of stress resulted in

negative outcomes, one of which was teaching leaving the profession. The results of teacher

turnover have negative impacts on the students within that classroom and the school (Fitchett et

al., 2019). Teacher turnover is a pivotal issue and one way to address the matter was with teacher

retention efforts that focused on appropriate predictors.

Georgia Teacher Retention

In 2022, the Professional Association of Georgia Educators (PAGE) surveyed almost

4,600 Georgia teachers. The PAGE (2022) study found the number of teachers leaving the field

had risen at least 12 percentage points since 2018. In addition, the number of teachers remaining

in the field over the next five years selecting unlikely or very unlikely to remain in education

increased across the board from 2018-2022. Table 3 shows the details of the report.

Table 3

Teachers Unlikely and Very Unlikely to remain in education

	1-5 years	6-10 years	11-15 years	16-20 years
2021 Respondents	21.9	27.5	22.7	24.8
2020 Respondents	12.0	15.8	14.9	13.8
2019 Respondents	10.5	13.7	12.8	14.9
2018 Respondents	6.6	8.7	10.7	9.6
Increase 2018-2021	15.3	18.8	12.0	15.2

Table 3 *Professional Association of Georgia Educators 2022 Report*

There was an increase of 15.3 % for teachers within the first five years of education, an increase of 18.8% for teachers with 6-10 years of experience, teachers with 11-15 years of experience witnessed an increase of 12 %, and those with 16- 20 years of experience had an increase of 15.2 % from 2018-2021. Teachers with less than 20 years of teaching experience cited burnout as the reason they would leave the field, while veteran teachers shared that burnout was second only to retirement. The survey revealed the number one reason for leaving education was burnout/overwhelmed for teachers (61.1%), school administrators (59.5%), paraprofessionals (21.8%), and school counselors (60.8%). The average of school personnel roles surveyed accounted for 56.5%. Cherie Goldman, the 2022 Georgia Teacher of the Year referenced Georgia losing talented teachers each year because of burnout in a press release sent out by Georgia State School Superintendent Richard Woods (2022, June). Georgia Insights (n.d.) reported that 89.21% of Georgia teachers were retained last year while Yellow County School District had a retention rate of only 75%.

Stress

Teachers that endured sustained high levels of stress and fatigue significantly impacted their personal well-being and student achievement negatively (Lee et al., 2023). Palmer et al. (2014) found that sustained stress and fatigue impacted cognitive abilities such as memory, recalling event details, and logical reasoning. Therefore, as the results of teacher stress were linked to student academic achievement it was crucial teachers do not continue to incur much stress or fatigue. Whitman and Kelleher (2016) asserted that "a lack of sleep deteriorates brain performance" in the areas of memory retrieval and storage (p.121). Palmer et al. (2014) further explained that as the level of fatigue increased the level of stress also increased. Hepburn et al. (2021) contended stressors existed as a person's perception of a situation and their ability to cope are not aligned. An individual's perceptions of their stress level also negatively affected their cognition (Zhu et al., 2022). Therefore, Palmer et al. (2014) elaborated that working memory abilities were susceptible to the effects of stress and fatigue. Therefore, teachers who worked with a lack of sleep may have perceived situations as more stressful creating a reciprocal effect. Zhu et al. (2022) and Lazarus (1993) asserted people interpret stressful situations differently. Thus, what caused much stress to one individual may not affect another person in the same manner.

Jaoul and Kovess (2004) found that elementary educators attributed stress to student behavior, the lack of social support, and the daunting idea of work completed outside of contractual work hours. Yin (2022) contended the elementary teaching profession was met with prominent levels of stress that affected teachers across the globe. While literature was reviewed concerning middle school settings, to the researcher's knowledge no findings specifically addressed them as a separate entity from high schools as well as the comparison of job

difficulties that potentially exist between primary and secondary schools (Plavsic & Dikovic, 2022). Kongcharoen et al. (2019) found teachers who taught higher grade levels incurred higher levels of stress. Therefore, more stress was witnessed as teachers planned for and instructed multiple courses.

Stressors identified by previous teachers were those that included working overtime and heavy workloads (Kongcharoen et al., 2019). The various roles of a teacher were bound to create conflicting perceptions of priority (Babic et al., 2015). Liao et al. (2023) affirmed teachers exerted much time, energy, and psychological decision-making. Work-related stress defined by Otto (1986) was a result of a mismatch of internal and external factors' job expectations with internal and external available resources. The concept of both factors contributing to stress, further suggested stress was individualized. Skaalvik and Skaalvik (2015) confirmed teachers unable to create a proper association between job expectations and their perception of available resources would experience stress. Ssenyonga andxx Hecker (2021) concluded negative school climate, teaching challenges, and the perceptions of workplace pressure were significant sources of teacher stress.

Teaching is an emotionally demanding profession in which Shakeel et al. (2021) acknowledged one used both heart and mind to complete often disguising their own personal emotions. Pressley et al. (2021) noted many teachers strived for perfection which added to the stress levels leading to burnout. As teachers reflected upon their instructional practices and compared themselves to colleagues, their stress levels increased even more.

Kongcharoen et al. (2019) observed no differences in responses between primary and secondary teachers regarding age, income, and stress. Female teachers revealed they endured more perceived stress than their male counterparts (Abirami, 2012; Han & Garcia, 2022).

Additionally, Pretorius and Padmanabhanunni (2022) found that urban teachers, especially females exhibited higher anxiety levels than male counterparts and teachers in rural school districts. Furthermore, Han and Garcia (2022) discovered more experienced teachers reported experiencing more stress than their new counterparts which contradicts Westphal et al. (2022) who found no difference between stress levels and teaching experience. Fitchett et al. (2019) indicated teachers outside of their content experienced higher sources of fatigue.

Stress of Students

Understanding the effects of stress on teachers was important for student achievement too. Students who experienced stress over an extended period were affected negatively by impaired memory and low academic achievement thus hindering learning and the ability to show proficiency in the content (Stewart & Rice, 2022; Whitman & Kelleher, 2016). Therefore, the role of the teacher was compounded by now managing their stress in addition to their students' stress as student achievement is the top priority. Karanfil and Atay (2020) recognized novice and veteran teachers were stressed and declared their well-being is "threatened" by various challenges which, in turn, will affect their instructional effectiveness (p. 62). The level of learning students received was only as good as the quality of the teacher's instruction (Sultana, 2009). Therefore, the need for adequate teachers was essential to student excellence. Berg and Mensah (2014) found that daily perceived difficulties affected how teachers' knowledge and skills are implemented. Zhu et al. (2022) and Bartholomew et al. (2014) further explained that enduring stress for an extended timeframe potentially led to mental and physical illness. Often reaching the level of physical health concerns accentuated the need to leave the profession for teachers suffering from constrained stress factors (Ssenyonga & Hecker, 2021).

Ball et al. (2007) discovered teachers spend about ten hours a week on instructional

planning, and the documentation portion was insignificant in conjunction with other activities completed during the allotted time. More recently, Kaden (2020) found teachers were working even more than they have in the past with an increased number of challenges. Jones et al. (2022) reported teachers have increased their work time hours even after COVID-19 occurred in the Spring of 2020. Therefore, it was suggested that the bulk of the time was spent on typing the lesson plan versus creating all the elements of the weekly plan adds to the stressful tasks teachers endure such as grading, providing feedback, attending professional learning, and meeting with colleagues.

Pressley et al. (2021) explored how teaching during the COVID-19 pandemic impacted teacher stress and anxiety with 329 elementary teachers in the United States. Through the usage of quantitative methods using Spearman Rho's correlation, the researchers concluded that during the first month, no changes occurred to teachers' stress and anxiety levels. Pressley et al. (2021) further found that communication from within the school was a predictor of teacher stress and anxiety and was witnessed that virtual instructors exhibited increased anxiety. Stress has both individual and contextual contributing factors that can increase and decrease stress levels.

Overall, there was more stress on teachers today as they struggled to overcome the greater learning gaps created by COVID-19. Plavsic and Dikovic (2022) found little research on the job demands of teachers in K-12 schools with a severe lack of comparisons of job complexities amongst primary and secondary schools. Plavsic and Dikovic (2022) further concluded that the research on job satisfaction and stress within the teaching profession was extensive but the aspect of what was 'considered difficult' has not been clarified.

Teacher demands

Teachers today denoted the profession as an overwhelming and difficult career with

considerable pressures (CIP Heard Elementary, 2021). Flores (2005) asserted intensification, increased bureaucratization, imposed collaboration, and greater accountability were at the forefront of change. Shimahara (2002) defined intensification as the elimination of teacher autonomy. Shimahara (2002) further explained intensification was caused by prescribed programs, mandated curricula, and step-by-step methods of instruction combined with pressure to respond to various innovations, and diversification of students' academic and social needs. Sachs (2003) similarly described teaching as addressing the whole child's needs with never-ceasing demands that were full of bureaucracy and accountability. The increased duties of a teacher (lesson planning, documentation, etc.) have made a notable impact on teacher morale as well. Rogers (1992, p. v) moreover emphasized increased time and workload pressures were factors teachers identified as stress-inducing culprits. Hoyle (2001) referred to the increased clerical responsibilities for teachers with additional expectations as overload.

These expectations came with accountability measures monitored by the administration only adding to the pressures teachers face daily. Calhoun (2003) strengthened the argument by citing that teacher demands are additionally overwhelming and more often more than one person can solely achieve. Educators followed mandated criteria and many expectations from their school district, and often state that must be followed precisely adding to their stress levels. Teachers often provided character-building lessons in addition to academic standards regarding filling others' buckets when these teachers' buckets are running on fumes from the lack of their buckets being filled.

Santoro (2011) stated federal policy made significant changes within a traditional public school classroom. Santoro (2011) defined teacher burnout as occurring when the demands of work outweigh personal resources. To further clarify, Santoro (2011) defined demoralization as

the term for situations when a person loses the ability to access moral rewards in a challenging environment once obtained from completing their work. Noddings (2014) continued in agreement by adding teachers who do not feel respected or trusted led to strained levels of sustainable morale. Mackenzie (2007) further defined morale into the following categories: personal morale, school morale, and professional morale. Noddings (2014) suggested in combating moral demands, policymakers should allow freedom and creativity in tasks such as lesson planning. Montoya et al. (2020) surveyed 736 people to discuss human capital as being linked to learning (good teaching characteristics) by understanding the traits able to impact educational value. Using a cross-sectional study, Montoya et al. (2020) concluded class atmosphere, professional engagement, efficient use of assessment results, strategies and actions for student assessment, and teaching planning and practice were more important than others.

Previous research conducted on stress was solely completed with internal or external factors in isolation until recently. However, recently Hwang (2022) added these factors as a covariate in the research concerning 8th-grade math teachers' job satisfaction and stress about dialogic instruction. Hence, the study potentially added to the qualitative element missing from the current research. Liu et al. (2022) added that burnout stems from social systems, organizational environments, and individual factors.

Teacher Resources

Teacher resources (personal or job-related) were attributes that allowed teachers to overcome challenges. Personal resources were internal, individual traits that aid a person in managing their emotions such as one's personality and amount of perceived self-efficacy, autonomy, job satisfaction, and well-being. Job-related resources were characteristics and/or programs that support an employee to be able to perform within the organization (Schaufeli,

2017). A few job-related resources were organizational justice, perceived supervisory support, in addition to colleague support for collaboration, and servant leadership. In contrast, job demands were those that "drain energy" (Fisher et al., 2016) such as overload, conflict with co-workers, and job insecurity (p. 121).

Individual Factors Contributing to Stress

There were many contributing factors to teacher stress from individual to contextual aspects. Ssenyonga and Hecker (2021) suggested researching the relationship between work factors and personal characteristics to help understand the contributing factors to teacher stress.

Self-efficacy

Berg and Mensah (2014) found the day-to-day difficulties teachers endure impact how their knowledge and skills are used in practice. The demands negatively affected a teacher's behavior and their relationship with students leading to a potential decline in student achievement (Ssenyonga & Hecker, 2021). Teachers who possessed an elevated level of self-efficacy contributed positively to teacher retention and teacher effectiveness (Bottiani et al., 2019). Increasing self-efficacy and decreasing burnout led to teacher attrition (Jennett et al., 2003). Okoro et al. (2022) found teachers with prominent levels of self-efficacy were those using innovative techniques and investing in the students to realize academic gains. Researchers have found a positive relationship between teacher self-efficacy and student achievement (Adu et al., 2012; Pearman et al., 2021). Wolters and Daugherty (2007) stated teachers who exhibited higher levels of self-efficacy were the ones who take the necessary steps to deliver effective instruction to the students. Hanks et al. (2020) found self-efficacy to be a predictor of teacher retention.

Mentoring, coaching, and self-mentoring should be purposefully employed to provide sufficient support to novice teachers (Carr et al., 2017). The mentor assigned should be available

to listen to and observe the mentee, provide professional learning that was shown to be needed, and be a safe, welcoming person whom they trust to seek advice from and express their frustrations freely (Carr et al., 2017). Braun et al. (2019) found mentoring new teachers with specific, individual feedback is a way to increase self-efficacy as they navigate the uncertainty of teaching.

Moreover, Shenaar-Golan et al. (2020, p. 455) found one's emotional intelligence promoted the development of academic self-efficacy and lessened the usage of avoidance coping strategies. Okoro et al. (2022) declared that teachers with high self-efficacy have greater academic achievement levels than those teachers who had lower levels of self-efficacy. Therefore, it can be asserted that teachers who exhibit prominent levels of self-efficacy had desirable traits. Sari et al. (2021) reiterated self-efficacy perceptions affected a teacher's ability to manage challenges and thus were a factor in the decision to remain in the profession. Teacher self-efficacy had a positive relationship with students' academic achievement (Adu et al., 2012). It was confirmed that new teachers needed a mentor to help sustain high levels of self-efficacy and foster resiliency (Howard & Johnson, 2004). When teachers felt supported by the administration and had a positive working environment their potential to establish and maintain elevated levels of self-efficacy was elevated (Okoro et al., 2022). It is important to note, that Okoro et al. (2022) found teachers in positive working environments had greater potential to have elevated levels of self-efficacy. The varying levels of self-efficacy continue Bandura's Theory of Self-Efficacy that self-efficacy was a malleable item that required cultivation with novice teachers upon entry to the field of education to create enduring development and long-lasting sustainability and growth (Hoy & Spero, 2005).

A teacher's self-efficacy was the most malleable during the preliminary stages of their

career (Tschannen-Moran & Hoy, 2007). Self-efficacy influenced a teacher's instructional practices and in turn, a student's motivation, and overall achievement levels (Skaalvik &Skaalvik, 2007). Hwang (2022) supported the findings that teacher self-efficacy safeguarded teacher stress which resulted in increased job satisfaction. Klassen and Chiu (2010) found the relationship between self-efficacy and teacher experience levels to not be linear, so the possibility of levels rising and falling was possible. Klassen and Chiu (2010) further concluded personal attributes and how a person managed environmental situations affected a person's self-efficacy belief. Sari et al. (2021) further maintained self-efficacy perceptions affect teachers' capacities to oversee challenges, which aided in the decision of whether to remain in the profession.

Klusmann et al. (2008) defined successful teachers as those who provide good instruction. Kyriacou (2001) further explained that successful teachers are those experiencing low-stress levels and are satisfied with their jobs. Pearman et al. (2021) stressed the importance of teacher self-efficacy for pre-service teachers to avoid the decline that is expected during the first year of teaching. Mid-career teachers have achieved confidence in their abilities are aware of the deficiencies within the system and have begun contributing to the profession (Plavsic & Dikovic, 2022). These individuals typically began advancing their degrees and taking on leadership roles within the building. Late-career teachers were more able to deal with difficulties, accept their situation, and focus their efforts on supporting new teachers (Plavsic & Dikovic, 2022). Veteran teachers felt secure in their knowledge and ability to do their job well.

Yin (2022) contended self-efficacy was necessary to combat negative pressures. Santoro (2011) unearthed that burnout was presumed inevitable when referencing teachers working inside high-poverty settings or lower-performing schools. Shakeel et al. (2021) contended that

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elevated levels of self-efficacy lessened the occurrence of teacher burnout and played a mediating role between personality and burnout in teachers.

Naeem et al. (2020) stated if a person believed their work will have negative results, then they become less responsive to put in additional effort when faced with challenges. As teachers become weighed down with mental constraints such as stress, a person's motivation was hindered potentially negatively impacting the student outcomes in the classroom. King and Bunce (2019) further asserted motivation was affected by external factors regarding teachers in addition to students. When teachers, like students, believed a task was unattainable because of a perceived inability, the belief resulted in a lack of motivation creating dissonance within a grade-level team and school. Blase (1986) found teachers acquired *Performance Adaptation Syndrome* which was developed to emphasize relationships between teacher responses to stress and consequences with efficiency. Additionally, students who perceived their academic results were attributable to their poor effort changed their mindset to willing to try when faced with additional tasks to attain success (Melnic & Botez, 2014). Teachers sustained motivation in the same manner. Therefore, teachers who have low levels of self-efficacy would give up when they continued to try after putting forth an effort. Teachers who were not willing to try were those having lower levels of self-efficacy and were prone to leaving the profession (Shakeel et al., 2021) as a result of higher levels of burnout.

The Power of Yet (Von Bergen & Bressler, n.d.) suggested that simply adding the phrase yet to tasks will improve employee behavior. Crum and Phillips (2015) affirmed that a person's belief and mindset of stress would have a guaranteeing effect on judgments, evaluation, and behavior.

Personality

A contributing factor to how an individual manages stress was their personality. Each person is made uniquely, and Marschall (2022) stated teacher identity could play a vital role in the development of teacher self-efficacy as they define the concept of oneself. Since previous research indicated that individuals perceive different situations as stressful the need exists to review the individual factors of personality. Personality was defined by Noreen et al., (2019) as a "continuous and structured collection of mental characteristics and mechanisms that affect people's communication with their physical, psychological, and social environments", as well as various characteristics, beliefs, and mental states that distinguish one person from another (p. 92). Personality types were categorized into five major groups: neuroticism, agreeableness, extraversion, openness, and conscientiousness (Ismail et al., 2018; Rammstedt & John, 2007). MacIntyre et al. (2019) further explained each dimension: Introversion/extroversion combined sociability and activity, agreeableness reflected likeability and friendliness, conscientiousness was a combination of dependability, volition, neuroticism/emotional stability was the tendency to emotionally react versus remaining calm when faced with stress, and openness to experience was referred to culture, intellect, or sophistication. MacIntyre et al. (2019) asserted the traits were on a bipolar continuum where individuals will likely exhibit more than one trait simultaneously.

Shakeel et al. (2021) contended personality was the moderator of how people respond and personality can influence their behavior. Sari et al. (2021) found a person's personality traits predicted proportions in one's self-efficacy perception. Pluut et al. (2022) found social stressors affected individuals based on their personality and their susceptibility to the effects of burnout. MacIntyre et al. (2019) concluded teachers' personality was based on their reactions to stress and

overall well-being. Shakeel et al. (2021) examined the relationship between personality traits and burnout using self-efficacy while assessing school climate as a moderator on 375 public school teachers among three districts in Pakistan. The quantitative study used a deductive approach. MacIntyre et al. (2019) found a significant impact of personality traits on burnout through self-efficacy.

All personality traits were predictors of burnout (Shakeel et al., 2021). However, all traits except for emotional stability were correlated with utilizing resilience when faced with difficult challenges (Khosbayar et al., 2022). Conscientiousness had a negative correlation with stress response (Chen et al., 2017). Agreeableness was found to decrease depressive symptoms and self-reported stress (Ervasti et al., 2019). Williams et al. (2009) found high levels of openness allowed for greater resilience when faced with stress; however, low levels in individuals allowed for more vulnerability to stress. Rammstedt and John (2007) found high levels of neuroticism led to increased stress levels. However, Bellingtier et al. (2021) reviewed personality at the trait level during COVID-19 and found no relationship existed between the trait extraversion and perceived stress.

Table 4 shows personality traits defined by behaviors exhibited by individuals in addition to the effect of stress on each dimension.

Table 4

Personality Traits and behavior effects of stress

Personality Trait (MacIntyre et al., 2019)	Exhibited Behaviors (Khosbayar et al. 2022)	Effect on stress (Schneider et al. 2011; Chu et al. 2015; Chen et al. 2022)
Neuroticism/Emotional Stability (The tendency to emotionally react versus remaining calm when faced with stress)	High levels exhibit worry and sadness. Low levels are resilient and seem relaxed (emotionally secure)	Low level of positive effect and high level of negative (Schneider)
Agreeableness (Reflects likeability and friendliness)	High levels are empathetic and caring. Low levels lack interest in others.	High level of positive effect, low level of negative effect (Chu)
Conscientiousness (a combination of dependability and volition)	High levels are goal-oriented, organized, and typically plan Low levels do not like structure, and often procrastinate when completing tasks	High level of positive effect, low level of negative effect (Chen)
Openness to experience (Refers to culture, intellect, or sophistication)	High levels enjoy adventure, variation, and innovative strategies. Low levels avoid change and dislike new ideas	High level of positive effect, low level of negative effect (Schneider) *Can also have a high level of a negative effect.
Extraversion/Introversion (Combines sociability and activity)	Introversion (social situations) prefer to be alone and are more reserved. Extroversion (social situations) enjoys others being around.	High level of positive effect, low level of negative effect (Schneider)

Liu et al. (2022) conducted a meta-analysis in China on teachers' job burnout and Big Five personality traits. They concluded emotional exhaustion and depersonalization were moderately negatively correlated with conscientiousness, openness, extroversion, and agreeableness. Liu et al. (2022) found a low sense of achievement was also negatively correlated with all five dimensions. Liu et al. (2022, p. 2) defined job burnout as "the exhaustion state of emotion, attitude, and behavior caused by an individual's inability to effectively deal with

various long-term pressures at work." There were three dimensions of burnout: emotional exhaustion, depersonalization, and low personal sense of achievement (Liu et al., 2022). Therefore, teachers who had much responsibility, strong creativity, and ethics, were extroverted, and had high agreeableness were less likely to succumb to burnout whereas those with high neuroticism are more inclined to experience work and family burnout (Liu et al., 2022). Liu et al. (2022) further suggested personality education courses for teachers and incorporating cognitive and behavioral training to help stabilize emotions within personality traits to combat stress.

Ruggieri et al. (2022) studied if the five personality traits were predictors of burnout using 171 teachers in Salerno, Italy with quantitative methods. The results confirmed the relationship between personality and burnout. Ruggieri et al. (2022) concluded the following vital traits capable of predicting burnout: agreeableness, curiosity, extraversion, openness, and exploration with emotional stability being the greatest predictor (Ruggieri et al., 2022). Ruggieri et al. (2022) cautioned researchers to understand the importance of relational and contextual influences and the management of conflicts. Ruggieri et al. (2022) suggested future research be developed to analyze the impact of contextual factors of burnout.

MacIntyre et al. (2019) used quantitative methods from 47 international language teachers to review stress and positivity in their daily lives. MacIntyre et al. (2019) found that personality and stress were consistent with a teacher's well-being. However, they concluded stress was not correlated to personality. MacIntyre et al. (2019) discussed the need for further exploration into the sources of stress that contribute to teacher well-being.

Contextual Factors contributing to Stress

Contextual factors related to stress stemmed from environmental factors affecting an individual (Plavsic & Dikovic, 2022). A few contextual factors related to teacher stress included

job satisfaction, student achievement, job performance, workload, job pressures and documentation, supervisory support, colleague support, work-to-family and family-to-work stressors, school climate, and organizational support. Contextual factors would also include the number of years a person has taught, and within which type of school setting they are working.

Perceived Supervisor Support (PSS)

Effective leadership roles in education affected student learning outcomes in addition to the student-to-teacher relationships (Celik & Kalkan, 2022). Callahan (2016) urged leaders to invest in their teachers by offering the necessary support to increase the amount of retained personnel. According to Eisenberger et al. (1986) and Kurtessis et al. (2015), Organizational Support Theory (OST) was when employees created a general perception about the extent to which their organization valued their contributions and cared about their well-being (perceived organizational support, or POS). The extent to which an employee perceived supervisors contributed and cared for the well-being of their employees was considered perceived supervisory support, (PSS) according to (Eisenberger et al., 2002). Both POS and PSS were linked to employee absenteeism, withdrawal, and turnover (Eisenberger et al., 2002). Eisenberger et al. (2002) also concluded that PSS led to POS which reduced turnover intentions among employees.

Kurtessis et al. (2015) conducted a meta-analysis of Organizational Support Theory from 558 studies. The Organizational Support Theory was found to effectively predict precursors of POS and the effects of POS on employees. Antecedents of POS were found by Kurtessis et al. (2015) to be leadership, fairness, human resource practices, and working conditions. Procedural justice, the fairness of organizational decision-making, showed the strongest relationship among the fairness dimensions and organizational politics had the most negative relationship with POS

(Kurtessis et al., 2015). Kurtessis et al. (2015) found that supervisory support was more related to POS than colleague support. POS was found to be negatively related to job stress, burnout, and work-family conflict, while job satisfaction, job self-efficacy, organization-based self-esteem, and work-family balance were positively related (Kurtessis et al., 2015). Therefore, Kurtessis et al. (2015) concluded POS is instrumental in improving employee well-being and their attitude toward the organization.

Ng and Sorensen (2008) conducted a meta-analysis comparing the effect of Perceived supervisory support (PSS), with perceived colleague support (PCS), and employee attitudes. (PSS) was more strongly related to job satisfaction, affective commitment, and turnover intentions. Job type was a significant moderator (Ng & Sorensen, 2008). Social support was useful for employees "proper functioning within organizational life" (Ng & Sorensen, 2008, p. 245). In contrast to previous researchers, Ong and Sulaiman (2022) found supervisory support not to be related to job stress. Ong and Sulaiman (2022) contended the unrelation could be due to work during the COVID-19 pandemic having employees relate more closely to their colleagues. Clement (2017) reported on employees leaving positions in the business and education world based on the perception of the employee's job dissatisfaction. Leger et al. (2022) suggested increasing supervisory support to cope with stress which leads to helping teachers regulate emotions and the daily events of life. In addition, Pretorius and Padmanabhanunni (2022) contended strengthening the supervisory support at the school for teachers was an imperative action for educational leaders to employ. In other studies, researchers concluded there were both positive and negative employee perspectives regarding relationships with supervisors that can become a source of stress for teachers and affect job satisfaction (Dawley et al., 2010; Litt & Turk, 1985). Ssenyonga and Hecker (2021) argued that teachers receive little support from

school leadership positions as they incur the challenging work role of teacher, but the implementation will reduce teacher stress. Positive supportive environments were linked to staff maintaining work in their current roles (Skaalvik & Skaalvik, 2011) and teachers less apt to incur burnout (Shakeel et al., 2021). Perceived Supervisory Support (PSS) was defined by Gok et al. (2015, p. 39) as the degree to which an employee is supported and respected by a supervisor as well as the supervisor's willingness to help the employee. An employee's perceived support increased as the employee felt empowered by the supervisor (Ozbozhurt et al., 2021). Cochran-Smith et al. (2011) argued effective induction programs and the mentorship teachers received determined whether one remained in the profession. Cochran-Smith et al. (2011) further concluded teachers based their decisions on the following factors: expectations versus school experiences, mentoring opportunities, principal support, collaboration with colleagues, appropriateness and difficulty of teaching assignments/ responsibilities, and opportunities for professional development and leadership roles.

Harmsen et al. (2019) quantitatively studied 393 beginning teachers with three separate measurement periods with mixed induction arrangement elements to determine longitudinal effects on induction. The results showed that perceived stress caused by psychological demands increased over time (Harmsen et al., 2019). Harmsen et al. (2019) argued a reduction in workload reduced perceived demands, negative social impacts and emotions, tension, and discontent. Harmsen et al. (2019) further concluded that perceived social support for effective teaching reduced negative teacher emotions and discontent. Harmsen et al. (2019) asserted that perceived stress antecedents and responses were not fixed and can change with time.

An employee's emotions, behaviors, and attitudes become affected by circumstances in addition to workplace perceptions which are based on the view of the supervisor as well as the

organization (Ozbozhurt et al., 2021). Mori et al. (2022) found psychosocial work factors affected an employee's mental health. Therefore, there was a crucial need for supervisors to provide support and care to manage the well-being of their employees because the concern for their well-being has been a deciding factor in whether to leave the organization (Ozbozhurt et al., 2021).

Glickman et al. (1995) argued administrative supervision was fundamental to the effectiveness of a school. Ghavifekr et al. (2019, p. 30) uncovered clinical supervision had positive impacts on student learning with teacher effectiveness. Skaalvik and Skaalvik (2011) contended administrators should give special attention to teachers' perceptions of emotional exhaustion, their sense of belonging, and job satisfaction. Teacher needs were essential elements for school leaders to address because not satisfying all an individual's needs will lead to demotivation ("ERG theory of motivation," n.d.). Eisenberger et al. (1986) found that employees had beliefs about their organization/supervisors such as whether the work is valued and whether their well-being was a concern. Levinson (1965) found that often employees viewed the organization based on individual supervisory actions. Dawley et al. (2010) sought to increase the understanding of POS and PSS on employee turnover by examining the mediating effects of the constructs of job fit and personal sacrifice using social exchange theory. POS assures employees that leadership was there for them as they incurred workplace stress and perform their job duties (George et al., 1993). Therefore, according to Dawley et al. (2010), PSS was a predictor of POS as well as POS being a predictor of employee turnover intentions. Therefore, PSS was further linked with the variable of personal sacrifice. Teachers working in the service industry sacrificed their time and effort daily for their students so POS was a key factor that educators should consider. Dawley et al. (2010) additionally promoted organizations thwarting turnover by

increasing perceived costs of leaving, providing training on specific skills, and rewarding

longevity within the company. Westphal et al. (2022) asserted principal leadership coupled with

teacher training on self-efficacy reduced stress and burnout.

Pretorius and Padmanabhanunni (2022) examined the relationship between role stress

(conflict and ambiguity) and indices of psychological distress with 355 schoolteachers in South

Africa. Through the use of a quantitative design of structural equation modeling Pretorius and

Padmanabhanunni (2022) concluded significant positive direct effects of role conflict and

ambiguity with anxiety and hopelessness. Pretorius and Padmanabhanunni (2022) declared

teaching identification was a mediator and the implications suggest the importance of leadership

and supervisory support was needed. Valli et al. (2007) noticed accountability efforts that

addressed specific classrooms to measure student achievement and teacher effectiveness are too

ambiguous. It eliminated the idea of collaboration and additional resources and personnel that

serve those students. Brackett et al. (2010) stated more research on principal support was needed.

An employee's perception of the level of support provided by supervisory leaders were found to

improve trust and communication which also reduce stress and increases the work environment

(Mori et al., 2022).

Perceived Colleague Support (PCS)

Social support (social networks such as school, work, classmates, and family members)

has been linked to reducing stress, so support was crucial for supervisors to create opportunities

for their employees to be active members of the association (Karakaya et al., 2014; Mori et al.,

2022). The association led to schools ensuring support was provided for new members to

become acclimated to the current staff and provide support.

Droogenbroeck et al. (2014) quantitatively studied 1878 senior teachers within the 45-65

age range in Fleming, Belgium on how interpersonal relationships, workload (teaching and non-teaching), and autonomy related to teacher burnout. Droogenbroeck et al. (2014) concluded workload was related to emotional exhaustion and autonomy was most closely related to non-teaching workload such as paperwork. Droogenbroeck et al. (2014) reported that teachers were subject to "intensification" from external pressures from parents, supervisors, policymakers, and other experts in the field leading to an extensive teaching role and workload (p. 100). Droogenbroeck et al. (2014) further added the increased job demands led to "deskilling and deprofessionalization (p. 100)" of teachers (Droogenbroeck et al., 2014). Droogenbroeck et al. (2014) asserted non-teaching workload was viewed by teachers as a burden because they are perceived as interrupting the job of teaching the students. Droogenbroeck et al. (2014) argued the quality of relationships with parents, colleagues, students, and supervisors influenced whether the job demand was deemed as stressful or used as a buffer resource to prevent stress. The strongest correlation was between relationships with the supervisor and those of colleagues. Autonomy was closely related to relationships with the supervisor. Droogenbroeck et al. (2014) found relationships with students directly related to all dimensions of burnout and interpersonal relationships at work are significant to burnout predictions. Relationships with colleagues were directly related to emotional exhaustion as well as cynical depersonalization (Droogenbroeck et al., 2014). Therefore, Droogenbroeck et al. (2014) contended relationships with colleagues can buffer the effects of burnout.

Schwan et al. (2020) found providing support through mentorship pairings of mentees and new teachers who had similar jobs and within the same district increased teacher retention which countered Hanks et al. (2020) findings that mentorship was not successful with teacher retention because of inconsistencies and poor implementation. Mentees who were similarly

paired resulted in improved instruction, collaboration, positive interaction, overall improvement, and reflection abilities (Schwan et al., 2020). Being mindful that schools are operated differently based on current leadership and what was viewed as a priority, some schools may implement teacher mentorship differently or fail to even exist. Steinke and Putnam (2011) declared many schools use induction programs to mentor new general education teachers to offer support and combat attrition rates but realize there was limited research addressing technology instructors and the required support they need.

Kaihoi et al. (2022) studied 370 elementary and middle school teachers to discover sources of stress support. Kaihoi et al. (2022) found educators stated colleagues within the same role, grade, and/or subject, similar in age and years of experience were most supportive. An educator's level of burnout was positively correlated to burnout among those in their stress support network and those with whom they spent the most time. Kaihoi et al. (2022) contended perceptions of stress and burnout may be influenced by colleagues and can prove helpful in stress prevention as well as have the "contagion effect (p. 1073)." It was further concluded there were no significant differences between the two school types, gender, or where teachers were in their career stage on stress and burnout (Kaihoi et al., 2022). However, the findings showed teachers sought support from colleagues within the same gender and race.

Ong and Sulaiman (2022) studied 250 Malaysian primary and secondary teachers and the impact of supervisory and colleague support during the COVID-19 pandemic and the spillover effect of stress on teacher turnover. Ong and Sulaiman (2022) found colleague support was significantly related to teacher stress which was highly linked to teacher turnover. Researchers further suggested the importance of colleague support provided by school administrators (Ong & Sulaiman, 2022).

Bottiani et al. (2019) supported positive relationships with colleagues to potentially prevent stress and burnout. Ng and Sorensen (2008) confirmed that PCS, PSS, and POS were closely related, and PSS could adversely affect an employee's attitude toward the organization.

Organizational Justice/Workplace fairness (OJ)

A point of interest was the interactions between supervisors (educational leaders) and employees as the perception of fairness an employee has creates or negates stress (Swandarujati et al., 2020). Celik and Kalkan (2022) proved teachers were concerned with the decision-making of educational leaders down to fairness of the decisions, procedures, and policy. Additionally, the behaviors the administrator exhibits toward them and others, were of utmost importance (Celik & Kalkan, 2022). Haynes et al. (1999) confirmed that job-related aspects contributed to a person's attitude and overall mental health. Ssenyonga and Hecker (2021) asserted a person's dissatisfaction coupled with their view of their current working conditions may contribute to job-related stress. O'Keefe et al. (2019) defined organizational justice as a person's perception of fairness within an organization. The Organizational Support Theory developed by Eisenberger (1986) defined Perceived Organizational Support as a perception of value and care for psychological well-being. The theory focused on the idea of fairness within the workplace affecting an individual's perception of their work and the value it entails. Dawley et al. (2010) addressed the commitment between employees and the organization was based on the exchange between the employee and the supervisor. Dawley et al. (2010) further explained by concluding dedication and loyalty resulted from supervisory demonstrations of how leadership value, care, and respect the well-being of their employees. Positive perceptions of effective organizational justice relieved stress and increased job satisfaction (Celik & Kalkan, 2022). Lambersky (2016) found when leadership could not create positive relationships with staff stress increased for

teachers. Consequently, perceptions of unfair work environments led to potentially hazardous outcomes of intentional defiance, and deviant and/or withdrawal behaviors of employees leading to job dissatisfaction (Pinder, 2014). Celik and Kalkan (2022) furthered Zhou and Ma (2022) in that teacher retention was significantly affected by variables such as organizational justice, salary satisfaction, and the age of the respondent. This further solidified the needed review of organizational justice from all experience levels. Zhou and Ma (2022) quantitatively researched 500 primary and middle school teachers in China, neglecting the view of the secondary high school setting. Therefore, it was exposed as a need to address organizational justice in all school settings. However, Zhou and Ma (2022) did confirm as the age of the respondent increased there was an adverse effect on the teacher's intention to leave.

Colquitt (2001) indicated workplace fairness or justice had become a visible construct over the last few decades. The contextual factor was grounded in Organizational Justice Theory (Sharma, 2018). Colquitt (2001) concluded that there were four main categories of workplace fairness: procedural (the process of decisions), distributive (the decision outcomes), interpersonal (the treatment), and informational (the information provided for decisions). Although some literature refered to the interpersonal and informational domains as a combined dimension (O'Keefe et al., 2019).

The first category of procedural justice referenced perceptions of the formal and informal rule fairness that exists within an organization (Halvorsen et al., 2020). Fairness was witnessed within any organization of everyone being treated regardless of favoritism and equal opportunity for input in the decision-making process (Dunaetz, 2020). However, in the educational setting procedural justice could have been fairness that included administration selecting specific personnel to offer professional development travel opportunities over other staff members,

allowances to arrive late and/or leave early, including staff input to decisions that affect their daily tasks, and the process of teacher evaluations to establishment distributive justice (Celik & Kalkan, 2022). Halvorsen et al. (2020) referred to distributive justice as the extent an employee(s) perceived they could have opportunities provided and resources available. Distributive justice, therefore, included an employee's perception that what another coworker was provided was also available to them in the form of additional training and opportunities, compensation, and equity of work-related tasks (Halvorsen et al., 2020). Colquitt (2001) defined interpersonal justice as an employee's perception of their treatment of others regarding respect and dignity whereas informational justice regards the extent leadership is transparent with rules, procedures, and support. Interpersonal justice within the school setting applied to the servant leadership of a principal such as providing needed support through respect and professional courtesy as opposed to a combative judgmental leadership style or being willing to put the needs of the teacher first when emergencies arise, or disruptive behavior appears within the classroom setting (Celik & Kalkan, 2022).

Summerford (2022) qualitatively examined servant leadership and teacher stress. Summerford (2022) found that accountability increased teacher stress, restricted classroom autonomy, and stemmed as a reason for many educators leaving the profession. Servant leadership could serve as a buffer to teacher stress but was unable to eradicate it (Summerford, 2022). Summerford (2022) further added servant leadership existed when the administration was visible and was aware of what was occurring within the building and attempts to create systems with foresight to resolve potential stressful issues. These administrators shared the responsibilities with teachers, exhibited empathy, were active listeners, and developed individuals into leaders with ethical awareness (Summerford, 2022). Summerford (2022) found

the following 12 ways school-level administrators (as servant leaders) could reduce teacher stress: be understanding, listen, support, promote collaboration, create a positive culture, be fully present, acknowledge teachers and their efforts, be consistent and prepared, be aware of the inner workings of the school, use a balanced leadership style, encourage growth and development of teachers, and avoid assumptions.

Harris (2018) surveyed 108 elementary teachers in 40 different districts within Virginia to determine the relationship between perceived servant leadership and teacher stress. The findings of the study showed that higher levels of servant leadership were related to lower levels of teacher stress. Harris (2018) asserted no significant relationship was found based on gender, an employee's commute to work, and level of education. Respondents varied in race with White participants incurring higher levels of stress than minorities and the amount of leisure availability and exercise which were found to reduce employee stress. Bottiani et al. (2019) findings also showed White women reported higher stress levels than their colleagues of different gender or race. An employee's age, position, and experience were correlated to stress but were found to be minor indicators (Bottiani et al., 2019).

Interpersonal justice included providing emotional support in handling the job duties and working with others in the form of dignity and respect (Celik & Kalkan, 2022). As school leadership informs and communicates with others, informational justice increased because principals were transparent with decisions they are making, in addition to information that is relayed from the district and other stakeholders (Celik & Kalkan, 2022). Combining an employee's perception of these four domains equated to whether the place of work was viewed as fair or unfair (Halvorsen et al., 2020). The complexity of organizational justice was important for school leaders to understand to ensure that these all work within a balance, so employees feel

comfortable with and view the work environment as equitable because it is an element of job satisfaction and perceived stress (Celik & Kalkan, 2022). When inequity arises, perceived stress was elevated and created an unsatisfactory working environment (Celik & Kalkan, 2022).

Clement (2017) purported that colleagues could be a source of resiliency or stress for teachers when personalities do not blend well. According to Sharma (2018), inequity is noticeable when individuals perceive that his/her outcomes to inputs are not equal to those of other colleagues. The concept of inequity was especially true of teachers because employees were morally obliged (Sharma, 2018) to take on other roles. Once a person's views of leadership declined, the desire to perform duties outside of the organizational requirements was no longer applicable. Herrera et al. (2022) using 693 teachers across Chile, analyzed the effect of organizational justice on teachers' subjective well-being and how organizational justice was affected or moderated by collective efficacy. The quantitative study used multiple mediation analysis. Herrera et al. (2022) concluded full mediation of collective efficacy between the relationship of organizational justice and subjective well-being. Additionally, perceptions of collective efficacy was found to be central to explaining well-being as an intrinsic factor. Herrera et al. (2022) found organizational justice showed significant effects on subjective well-being. A sense of belonging, good treatment, and human relations within educational institutions were vital to understanding the well-being of teachers (Herrera et al., 2022).

Work-family conflict (carry-over/trickle-down effect)

One's profession and self were hardly inseparable as more often than not, a person initially defines themselves by the work they do for a living (Morgan, 2021; Zetlin, 2015). It was important to review possible work-family conflict since a person's work life and family life contribute to the person. Erdamar and Demeril (2014) stated that work-family conflict reduced a

person's satisfaction with marriage while family-work conflict decreases job satisfaction. Toprak et al. (2022, p. 1) contended the work of teachers involves extraneous cognitive, emotional, and physical constraints while fulfilling "intra-classroom, inter-school, and intra-school demands." Work-family conflict was defined by Greenhaus and Beutell (1985) as an association of one region impeding upon another domain negatively whereas Zhou et al. (2020) further explained the role conflict when pressures from work and family domains were reciprocally incompatible. Greenhaus and Beutell (1985, p. 77) stated that work-family conflict was "a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible." There are three forms of work-family conflict: time-based conflict, strain-based conflict, and behavior-based conflict (Greenhaus & Beutell, 1985). Work-family conflict (WFC) could begin at home and impede work, or vice versa known as Family-work conflict (FWC) (Haslam et al., 2014). Zhou et al. (2020) stated that (WFC) occurred when an individual's job interfered with family responsibilities which emphasizes the risk teachers who are parents have (Haslam et al., 2014). Leger et al. (2022) contended that it was important to understand daily stress processes through work-family relationships. The contexts of work and family were high sources of stress for individuals (Edwards & Rothbard, 1999). The Pew Research Center (2015) reported that 56% of the two-parent households studied stated they struggled to find a balance between their work and family roles.

Toprak et al. (2022) studied 385 teachers in Turkey to investigate the interplay effects of psychological capital (PsyCap) on the relationship between job stress and work-family conflict. Toprak et al. (2022) argued even teachers who managed stress well are subject to endure stress when faced with challenges that arise from work and family pressures. Toprak et al. (2022) found that work-family conflict increased job stress and (PsyCap) was a moderating factor in

decreasing job stress. Toprak et al. (2022) further contended teachers unable to balance work demands and family roles were more vulnerable to stress.

Work-family conflict was nothing new to any organization. Individuals bring home job-related stress as well as home-related stress into the workplace which potentially results in depressive symptoms if the work-home balance was not met (Zhou et al., 2020). Therefore, the carry-over effect was difficult to isolate and must be considered within the study as a contributing factor to stress. Erdamar and Demeril (2014) surveyed 384 primary and secondary teachers from Ankara to determine the work-family conflict and family-work conflict they endure. Erdamar and Demeril (2014) found work-family conflict resulted from home interruptions at work, work problems addressed within the home, and physical and mental fatigue. The family-work conflict findings of Erdamar and Demeril (2014) stemmed from the at-home tasks taxing the individual's amount of sleep coupled with random unexpected guest arrivals or illnesses within the home. Erdamar and Demeril (2014) asserted that work-family conflict increased stress and reduced job satisfaction and organizational commitment.

Panatik et al. (2011) used 100 teacher respondents from Malaysia examining the level of work-family conflict that existed and the differences among demographics such as gender, marital status, and type of school in addition to determining the impact on life satisfaction, mental health, and turnover intentions. The findings concluded more work-to-family interference existed and had negative effects on life satisfaction and mental health. There were no significant differences among school types or gender. However, single individuals experienced higher levels of WFC. Panatik et al. (2011) resulted in the conclusion that increased work-family conflict would led to increased turnover intentions.

There was no secret that all too often employees bring their work home with them which

affects the home environment (Bakker et al., 2019). However, Pretorius and Padmanabhanunni (2022) declared remote teaching affected a teacher's ability to separate their work/family role lives. The inability to separate roles escalated social encounters at home when employees have incurred stress at work (Pluut et al., 2022). Kossek et al. (2021) contended that individual's careers and work-family dynamics conflicted often with tradeoff pressures. Pluut et al. (2022) asserted stress related to one's work may extend beyond the job and impede upon their personal life. Work-family Spillover Theory used the idea of a person's resources being drained (Edwards & Rothbard, 2000). Spillover was defined by Zedeck and Mozier (1990) as the similarities between the work environment occurring within the home environment. The spillover depleted an individual's resources which hindered job performance (Ten Brummerlhuis & Bakker, 2012). The spillover effect was important because personal resources such as self-efficacy are a major factor in teacher burnout (Worley et al., 2008). Worley et al. (2008) conducted a meta-analysis of 45 exploratory and confirmatory studies to examine the internal structure of stress scores using the Maslach Burnout Inventory (MBI). It specifically reviewed sample characteristics, aspects of the instrument, factor-analytic methods, and investigated the dimensionality of MBI scores, and found strong support for a correlated three-factor model.

Zhao et al. (2022) explored the relationship between teacher job stress and job burnout with 558 primary and secondary school teachers in China. Participants were administered four scales on teacher job stress, teacher job burnout, work-family conflict, and a self-efficacy scale. The results concluded job stress had a significant predictive effect on work-family conflict and job burnout. Zhao et al. (2022) found that work-family conflict was a mediator between job stress and burnout whereas self-efficacy was a moderator. Zhao et al. (2022) concluded the relationship was stronger when teachers had higher levels of self-efficacy. While self-efficacy

was found to moderate the relationship between work-family conflict, it was not able to overcome the effects of teacher burnout.

Allen et al. (2000) found notable reasons to decrease WFC as it was directly linked to job satisfaction and quality of life which aligns with their own findings of WFC response to "flee the situation." Allen et al. (2000) found the most significant negative results of WFC caused stress-related outcomes (Mesmer-Magnus & Viswesvaran, 2005) such as consequences of increased turnover (Greenhaus et al., 1997) and decreased commitment to an organization (Amstad et al., 2011; Mesmer-Magnus & Viswesvaran, 2005). Allen et al. (2000) also concluded that WFC was linked to depression and high blood pressure, more specifically for women who have children. The negative effects led to WFC causing increased job burnout (Amstad et al., 2011). WFC also led to increased tiredness, increased stress levels, decreased performance on the job, and a decline in work satisfaction (Mesmer-Magnus & Viswesvaran, 2005).

Kossek and Ozeki (1999) found that WFC was the root cause of turnover and burnout among the workforces. Pretorius and Padmanabhanunni (2022) agreed that conflicting roles created less job satisfaction, increased turnover, and psychological distress. In the survey, 355 South African teachers were surveyed with measures of the Role Stress Questionnaire, the Professional Identification Scale, the trait scale of the State-Trait Anxiety Inventory, and the Beck Hopelessness Scale. The results of the structural equation analysis indicated significant direct effects of role conflict and ambiguity on a respondent's anxiety and hopelessness while significant negative direct effects occurred in teaching identification which was a mediator. Pretorius and Padmanabhanunni (2022) expounded on the importance of leadership and/or supervisory support as role identification supported the 48% variance indicated by respondents. Teachers who viewed their role of a teacher as a "calling" were determined to undergo all

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pandemic stressors that added to the profession's stress (Pretorius & Padmanabhanunni, 2022).

Leaders should be cognizant of the fact that individuals were not able to simply recover from these work effects by the next workday and that work, and home life are no longer separate from each other (Bartels et al., 2022). It was found that leadership should remain mindful to offer support and create challenges for employees to decrease work/home life stress (Bartels et al., 2022). Edwards and Rothbard (1999) suggested that work-family stress be managed on an individual basis. Toprak et al. (2022) asserted improving the school environment, supportive leadership, autonomy, and individual coping abilities would aid in combatting stress overall.

Teacher Experience Level

The limitations of current research addressed what areas of induction programs could best support novice teachers. New educators faced stress mostly due to frustration and thus became fatigued, whereas veteran teachers managed stress with escape, avoidance, and detachment (Carton & Fruchart, 2013). Carton and Fruchart (2013) found new teachers experienced more stress due to student behavior fearing the existence of inability to manage behavior and appropriate academic outcomes while striving for respect within the organization. Carton and Fruchart (2013) asserted experienced teachers' stress stemmed from decision-making influencing the future of education and a worry about replacement availability. Carton and Fruchart (2013) cited teachers with 7-25 years of experience cited significant sources of stress related to interactions with students' parents. Therefore, Carton and Fruchart (2013) confirmed sources of stress as well as coping vary based on a teacher's experience level. Carton and Fruchart (2013) concluded differences exist among teachers due to experience levels of stress in the ability to experience sources of stress, the method it is handled, and personal disposition.

Karanfil and Atay (2020) concluded novice and veteran teachers were stressed and their

well-being was attacked by various challenges, that in turn, would affect their instructional effectiveness. For new teachers, these challenges stemmed from their future employment being based on grades of assessments, completed seminars, and interviews throughout the year. Karanfil and Atay (2020) argued academic and counseling mentoring for teachers was needed within the school to promote their well-being. Schmoker (2011) added numerous unsuccessful initiatives and ever-changing programs frustrate teachers (p.2). Grove et al. (2014) found teacher observation to be an effective way to support new teachers with their instructional efforts. Observations were effective for school improvement when they were unannounced and focused on the betterment of the teaching without an expansive list of evaluation criteria (Schmoker, 2011). However, a limitation of professional development required support from the administration to relieve teachers from teaching assignments, a supportive and safe culture of teachers willing to learn and grow, and additional teachers to cover the classroom when the observing teachers are not present. The level of learning students received was only as good as the quality of the teacher's instruction (Sultana, 2009). Therefore, schools' missions of increased student achievement and growth were linked to having highly qualified personnel. Idris et al. (2021) explained teacher education was an essential element of effective teaching.

Plavsic and Dikovic (2022) researched novice, mid-career, and late-career teachers and found novice teachers entered education in a 'survival' mode that turned into providing intentional instruction and ended with a mindset of ensuring the students learn the material (Plavsic & Dikovic, 2022). For new elementary teachers, getting the students home safely each day was a job demand in the first weeks of school. Thus, survival entailed the teachers were mainly focused on procedural tasks throughout the day and not ensuring academic needs were being met as they ensure the day-to-day operations are interrupted (Plavsic & Dikovic, 2022).

There was an increased frustration adding stress to teachers' ultimate desire to just teach students well as opposed to the additional documentation and workload continue to climb (Timms et al., 2007).

Hanks et al. (2020) researched multiple districts within one state in the western part of the United States to determine factors that predicted teachers' thoughts about leaving the field of education. Hanks et al. (2020) ascertained that a teacher's career goals, job satisfaction, and belief in equity regarding work and pay rewards were substantive criteria for whether teachers would leave the profession. Self-efficacy, positive beliefs that they are making a difference with teaching, and job security were factors but showed low effect sizes (Hanks et al., 2020). Today, many teachers are entering the classroom without having completed a teacher preparation program (Hanks et al., 2020). These teachers were working overtime with the dual roles of teacher and student to complete the required teacher certification. This created an even more stressful situation regardless of daily tasks. Therefore, induction and training programs should be implemented to provide support to employees to counteract stress challenges.

Indirect effects of teacher stress

Bottiani et al. (2019) conducted a study on 255 middle school teachers within two districts in the Mid-Atlantic state to examine the relationship between stress and burnout with warm-demand teaching practices. Bottiani et al. (2019) reported that a teacher's self-efficacy is negatively related to stress and their stress level affects the relationship between teacher and student. Bottiani et al. (2019) found teachers with high levels of self-efficacy, affiliation with colleagues, and emphasis on student achievement had lower levels of stress and used warm-demand approaches to teaching students in low-income schools. Bottiani et al. (2019) found personal resources such as self-efficacy and teacher affiliations served as a buffer to the aspects

of stress and burnout for teachers considered job demands.

Will (2021) explained teachers' well-being was positively correlated to student well-being which affects student achievement negatively as teacher stress increases. Will (2021) concluded teacher stress led to job dissatisfaction, reaching the level of burnout, and ultimately teachers leaving the profession.

Pearman et al. (2021) concluded teachers' self-efficacy beliefs and their beliefs about their student's abilities were linked. The qualitative study of teacher educators at three different universities in the Mid-West, Mid-South, and Northeast United States focused on teacher perceptions to define self-efficacy, elicit self-efficacy, and effective ways to teach self-efficacy. Pearman et al. (2021) concluded a teacher's ability to meet challenges, use of innovative thinking, and facilitation to be necessary for self-efficacy to develop. Pearman et al. (2021) highlighted the areas of commitment (the desire to improve education) and confidence/self-empowerment (engagement in decision-making for stakeholders) as the two most valuable requirements. In addition, the findings showed developing self-efficacy among teachers can be created by modeling the usage of self-efficacy, utilizing classroom discussions in addition to personal conversations to discuss and reflect on teaching practices were useful when employed. Pearman et al. (2021) were unsuccessful in developing a teacher definition of self-efficacy as many teachers chose character traits one exhibit instead.

Summary

Extensive research has been completed on teacher stress and retention. Studies have concluded that teachers were stressed, and that self-efficacy was a preventative predictor of teacher retention. However, the relationship impacted has not been measured by teacher stress with personality and self-efficacy, along with perceived supervisory support, work-family

conflict, and organizational justice factors. In addition, supervisory support was witnessed as a necessity for job satisfaction. The acknowledgment of work and family roles showed the potential stressors that compound and how the organization can support or defile the employee. Table 5 shows a complete summary of the literature.

Table 5

Summary of Literature

Decreases stress	Can increase or decrease stress perceptions	Increases stress
Self-efficacy	Personality Perceived Supervisory Support Perceived Colleague Support Organizational Justice	Work-family conflict

Table 5 Review of Literature Summary of Findings

Although researchers have addressed individual factors such as personality and self-efficacy in detail, the research does not address the interplay of individual and contextual factors simultaneously. Therefore, the study sought to discover the information along with the combined impact of both types of factors. Additionally, stress factors broken down by years of experience and school settings were acknowledged. Chapter three described in-depth how the data was collected and how these factors would be analyzed.

Chapter III: Methodology

Based upon the literature review findings, a measure of teacher stress at K-12 public school teachers was needed to fill current gaps within the field of education. Using a mixed-methods design provided a thorough picture of teacher stress effects on educators today. Specifically reviewing individual and contextual factors at differing academic school settings and years of teaching experience could be used to inform educational leaders with much-needed knowledge on the subject matter.

To gain a more thorough understanding of teacher stress as it related to individual and contextual factors such as self-efficacy, personality, organizational justice, perceived supervisory support, perceived colleague support, and work-family conflict a mixed methods approach was utilized. The research questions concerned the impact on teacher stress and provided clear evidence of the existing relationship between self-efficacy and personality to stress in addition to organizational justice, perceived supervisory support, and work-family conflict. The research questions also pursued the combined effect of individual and contextual factors concerning teacher stress. Finally, the questions discovered teacher perceptions of job-related factors that were deemed as stressful and how these factors could alleviate perceived stress.

Within this chapter, the researcher provided the methodological processes used within the study such as the research design, participants, the role of the researcher, instrumentation utilized, data collection and analysis methods, and a summary of the information.

Research Design

The study used an explanatory-sequential research design. The design best suited the research as the mixed methods usage provided for the allowance of the qualitative results to further explain the data collection of the quantitative surveys conducted (Creswell et al., 2011;

Guetterman et al., 2015). The quantitative information was collected initially as the work was emphasized within the study, in addition, the qualitative data was used to help provide further analysis and understanding of the quantitative results and possible inconsistencies with the data (Creswell et al., 2011).

The quantitative phase used a correlational research design to focus on the relationship between the individual and contextual factors with stress specifically addressing the usage of the Teachers Stress Inventory, Ohio State Teacher Self Efficacy Scale, The Big Five Personality Scale, Work-Family Conflict Scale, Organizational Justice scale, and Perceived Organizational Support scales. The results were created by the usage of the joint display table. The quantitative portion of the study sought to answer the first six research questions. Correlational research design reviewed two or more factors to determine if a relationship existed among the variables and the extent of the relationship (SAGE, n.d). Therefore, surveys were most often used with quantitative research (SAGE, n.d). Three different types of correlation were possible with this study (Creswell, 2013). Creswell (2013) asserted a positive correlation would exist when both variables showed an increase and in contrast, a negative correlation would exist when one variable rose and the other declined. A finding of no correlation could occur when there was not a linear relationship found among the variables according to (Creswell, 2013). The correlation was conducted using Pearson's r. The correlation coefficient could range from +1.00 to -1.00 and signified the magnitude of the correlation (Creswell, 2013). Minimal correlations would be evident as the number moved closer to 0 or indicates 0 with no correlation (Creswell, 2013).

In mixed methods studies, the research not only collects and analyzes both quantitatively and qualitatively, but it integrated the information into a complete picture through the qualitative phases providing insight into the quantitative results (Creswell & Plano Clark, 2017). Mixed

methods studies used specific mixed methods designs in addition to framing the theory or philosophy (Creswell & Plano Clark, 2017).

The next section of the study sought to answer research question seven and address the overarching question with qualitative information on how to alleviate teacher stress. The phase of data collection was fueled by the results obtained from the quantitative surveys (Toyon, 2021). The researcher used purposeful clustered random sampling to conduct structured interviews focusing on the teachers' perceptions of job demands in addition to how the selected factors can aid in supporting the management of teacher stress. Structured interviews yielded higher validity and reliability results (Dipboye, 1994; Weisner & Cronshaw, 1988). Structured interviews were useful with behavioral sampling (Wernimont & Campbell, 1968). This was due to the interviews utilizing the sequential questions being sequestered in the same order with each respondent (Weisner & Cronshaw, 1988).

Creswell and Plano Clark (2017) determined that mixed-method approaches offered "intuitive and practical" ways to view real-life problems (p. 18). Therefore, the rationale for the design approach was evident. The independent variables were personality and self-efficacy, work-family conflict, perceived supervisory support, and organizational justice. The dependent variable was perceived teacher stress. The following research questions were addressed:

RQ 1: What is the influence of self-efficacy on teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant influence of self-efficacy on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant influence of self-efficacy on teacher stress.

RQ 2: What is the relationship between personality traits and teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant relationship between personality and teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant relationship between personality and teacher stress.

RQ 3: What is the relationship between organizational justice and teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant impact of organizational justice on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant impact of organizational justice on teacher stress.

RQ 4: What is the influence of perceived support on teacher stress?

a.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived supervisory support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived supervisory support on teacher stress.

b.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived colleague support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived colleague support on teacher stress.

RQ 5: What is the influence of work-family conflict on teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of work-family conflict on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of work-family conflict on teacher stress.

RQ 6: What are the interaction effects of individual and contextual level factors on teacher stress?

Qualitative Research Questions

RQ 7: How do K-12 teachers describe the job demands at their current workplace?

7a. What are the teacher's perspectives on the stress created by job demands and how this stress can be alleviated by individual-level and contextual-level factors?

Role of the Researcher

The current study's researcher came into the field of education as a second career. She has been in the profession for 16 years. She began substituting during her educational path of studies and accepted a long-term first-grade substitute position which led to a full-time special education paraprofessional position in a suburban affluent county in Georgia. The researcher later earned her first teaching position in a rural community in Tennessee. In a move back to middle Georgia, the researcher has worked as a Kindergarten teacher, second-grade teacher, and third-grade teacher in an urban setting. She served as a Teacher Support Coach (TSC) for several years and led her school's mentoring program. She currently serves as an academic coach at the high school level.

During her educational career, she found a desire for teachers' health and well-being by witnessing many school initiatives and requirements increasing teacher workload without relief from current responsibilities. As the job demands and documentation requirements increased,

positive student behavior may decrease creating an increase in the existing stressful work cycle for teachers. She wanted to address the teacher as an individual and the work elements that create the strain and remedy the elements teachers perceive as being most stressful.

Participants

The participants for the study were certified and waivered employees including elementary, middle, and high schools at Yellow County School District (pseudonym) within the state of Georgia excluding administration.

Quantitative Participants

Participants for the quantitative portion of the survey were administered a multi-question survey divided into sections regarding stress, self-efficacy, personality, work-family conflict, perceived supervisory support, perceived colleague support, and organizational justice. For the study, all teaching personnel were surveyed. Therefore, the potential survey respondents could have totaled up to 2,190 teachers (National Center for Educational Statistics, 2022). At the time of the study, there were 714 teachers at the elementary level and 580 working within the secondary teacher heading. There were 544 teachers under the instructional support umbrella. However, there were 233 employees listed as ungraded, followed by 61 guidance counselors, and 60 media specialists and support. The following breakdown of the district's personnel demographics was defined in Table 6.

Table 6

Yellow County School District Personnel Demographics

Race Type	Percentage of Teachers
American Indian/Alaskan Native	0.13%
Asian/Pacific Islander	1.19%
Black	77.36%
Hispanic	6.53%
Multiracial	3.23%
White	11.56%

Table 6. Yellow County Ethnicity Demographics

The current teachers within the Middle Georgia Regional Education Service Agency (RESA) area according to Georgia Insights (n.d.) hold bachelor's degrees (45.71%), Master's (37.06%), Education Specialist (14.35%), and only 2.88% hold a Doctorate. At the time of the study, there were 635 (37%) teachers with less than 5 years' experience accounting for the largest group of teachers based on teaching experience (Georgia Insights, n.d.). There were 17% percent of teachers with 5-9 years of teaching experience, 13% with 10-14 years, 12% with 15-19 years, 8% with 20-24 years, and 13% with more than 25 years (Georgia Insights, n.d.).

The anonymous quantitative survey consisted of optional participation in qualitative research. Those questions entailed whether the participants would like to continue in the research study and thereby provide their name and email address for future contact. This survey was not sent to staff within the school under the role of administrator. The emphasis was on teachers working with students, so they were included in the sample size only.

The survey was sent via Qualtrics for anonymous survey data. The account was monitored by the Columbus State University Information Technology Department which had firewalls, anti-theft security, and malware tracking software. The Qualtrics platform was housed within the researcher's MyCSU account and was password protected and can only be accessed by a one-time password which can time out. The only person who could access the survey was the

researcher through their personal account via Columbus State University (CSU). The data was stored on the researcher's personal computer.

Qualitative Participants

Participants for the qualitative data were selected from the participatory interest question from the quantitative survey. Respondents were grouped into clusters of elementary, middle, and high school teachers. The ratio of participants was based on the 4:1 female/male (4,009/1,018) based on the demographics of the teaching population for the region in Georgia according to Georgia Insights (n.d.). To ensure fair representation by gender and years of teaching experience, the 4:1 ratio was doubled to 8:2. Therefore, there were eight females and two males for each school setting. The selection was conducted using a random generator after the researcher inputs each teacher's name into the software to ensure that clustered interviews are utilized.

The elementary teachers selected had one novice, six mid-career, and three veteran teachers represented. The middle school teachers selected had three novice, five mid-career, and two veteran teachers represented. The high school group consisted of three novice, four mid-career, and three veteran teachers.

Once selected, the respondents were renamed for confidentiality as Elementary School (ES) Teachers 1 through 10, Middle School (MS) Teachers 1 through 10 for middle school representatives, and High School (HS) Teachers 1 through 10 for that academic setting. The pool of participants was used to yield the desired number of teachers for each group, and then a selection of fair representations was found using the remaining participants to equalize the perspectives of each group.

Data Collection

The researcher completed the required forms and provided the documentation requested

for county approval to conduct the study. Next, the researcher filed for IRB approval with Columbus State University. After IRB approval was obtained from both parties: Columbus State University and the Yellow County School District, a survey containing the quantitative aspect of the research was administered. The researcher contacted the participants via email with the assistance of the county and/or school leadership selected from the computer-generated report. The email correspondence provided background information on the purpose of the study along with the survey created within the Qualtrics platform. Upon opening the survey participants were provided with the consent to participate as the initial question. If participants did not complete the consent, the survey ended (Appendix I). The participants were provided with two weeks to complete the survey portion of the research initially. After one week, a reminder email was sent to solicit more participation. In addition, the survey remained open for a month to solicit more participation to meet the requirements of data analysis. The following week selected participants were contacted to complete the structured interviews. Participants were entered into a drawing for two $10.00 gift cards to Amazon for completing the survey to support a sufficient response rate. A random computer generator form selected the winners.

Quantitative Data Collection

The survey was created in the Qualtrics platform which had the consent embedded within the form. An email containing the link to the survey was sent to all participants. Upon opening the survey, participants completed the consent affidavit before accessing the survey questions (Appendix I). The failure of the participant to complete the consent form ended the survey and no questions were visible.

The survey combined questions from multiple scales to address the individual factors of self-efficacy (Ohio State Teacher Efficacy Scale) and personality (The Big Five Personality

Inventory) in addition to the contextual factors of organizational justice (Organizational Justice scale), work-family conflict (Work-Family Conflict scale), and perceived supervisory support (Survey of Perceived organization support scale) in addition to perceived stress with the (Teacher Stress Inventory).

The survey items were comprised of some of the questions from the existing scales based on factor loadings. All scales had endured and secured reliability testing in previous studies, but Cronbach Alpha calculations were repeated for the measure. Cronbach alpha was the test of internal consistency or reliability with acceptable scores greater than 0.70, good scores being greater than 0.80, and excellent scores being 0.90 or higher as a general rule of thumb (Tavakol & Dennick, 2011).

The required sample size was determined based on several factors. Typically, the usage of structured equation modeling required 100-250 participants (Wolf et al., 2013). The factors that determined the sample size that achieved adequate statistical power were the degree of bias, statistical power, missing data, and propriety (Wolf et al., 2013). It was found that models with many factors required fewer respondents when using structural equation modeling, so these models required careful evaluation when determining the adequate sample size (Wolf et al., 2013).

Participants were asked about age, gender, ethnicity, level of education, experience level (novice, mid-career, veteran), school setting (elementary, middle, high school), whether they serve in an administrative/supervisory role, and whether their subject/content is tested area in addition to the questions from each survey. The survey began with the participant completing a quantitative survey consisting of 66 questions including demographics and scale items. The final question of the survey allowed participants to show interest by utilizing the opt-in/opt-out of the

qualitative portion of the research study question and inserting their email addresses.

Quantitative Data Collection Instruments

The quantitative measures consisted of all ten questions regarding personality (Big Five Personality scale), nine items addressing self-efficacy (Ohio State Teacher efficacy scale), nine items on supervisory support (perceived organizational support scale), seven items concerning colleague support (perceived organizational support scale), five items concerning work-family conflict (work-family conflict scale), nine items concerning organizational justice (organizational justice scale), and eight items address stress (teacher stress inventory) to encompass all constructs.

Teacher Stress Inventory (TSI). The first section measured teacher stress. The Teacher Stress Inventory (Boyle et al., 1995) originally consisted of 51 items (Kyriacou & Sutcliffe, 1978a) but was reduced to twenty items on a Likert scale ranging from 0 = no stress to 4 = extreme stress. The scale measured five different aspects of teacher stress: student misbehavior, time/resource difficulties, workload, professional recognition, and poor colleague relationships (Boyle et al., 1995). The scale had high face validity (Boyle, 1979). The EFA model had a x^2 value of 156.94 with 70 degrees of freedom. The adjusted goodness of fit index (AGFI) was 0.906 and the root mean square residual (RMR) was 0.053 (Boyle et al., 1995). The EFA showed four items were needed for removal because of low factor loadings (Boyle et al., 1995). The CFA model had found X^2 to be 171.14, 70 degrees of freedom. The adjusted goodness of fit was 0.911 and the root mean square residual is .057.

For the study, the questions selected were based on factor loading weights of .60 or higher. Questions from poor colleague relationships and professional recognition were removed from the portion because they will be addressed within the other scales. Two questions from the section

related to workload were added (Q4, and Q9), three questions related to student misbehavior (Q2, Q5, Q11), and two from the section on time/resources difficulties (Q14, and Q15). Therefore, 7 items from the TSI scale were measured. Q18 which stated "pupils impolite behavior or cheek" was removed based on question clarity as "cheek" was used incorrectly.

Following the stress scale items, the next section focused on the individual factors of the study (teacher self-efficacy and personality).

Ohio State Teacher Efficacy Scale (OSTES). The next measure is teacher self-efficacy. The Ohio State Teacher Efficacy Scale (OSTES) originally comprised of 52 items on a holistic view of "teaching tasks and capabilities" (p. 797) was reduced to 32 based on factor loading values of .595 to .78, and finally 18 items using the removal of lowest loadings for each factor (Tschannen-Moran & Hoy, 2001). The scale was revised again in two forms: a 24-item and 12-item form since questions regarding the weakness of the management area were raised (Tschannen-Moran & Hoy, 2001). The (OSTES) had three factors: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement that uses response stems such as "*to what extent, how well can you, and how much can you*?" (Tschannen-Moran & Hoy, 2001, p. 800).

The usage of the long and short forms also remained high with scores of intercorrelation ranging from 0.95 to 0.98. The long-form Cronbach alpha scores were 0.94 for the OSTES and by subscale is 0.91 for instruction, 0.90 for classroom management, and 0.87 for student engagement. Tschannen-Moran and Hoy (2001) found high reliability (0.90) existed still by selecting four items with the highest loadings from each section of the OSTES and found reliability to remain high with a score of 0.86 for instruction, 0.86 for management, and 0.81 for engagement, thus creating the short form. The long and short forms used Cronbach alpha scores to report reliability testing.

Validity results of the OSTES long form were positively related to both the Rand items which Rand 1($r = 0.18$) and Rand 2 ($r = 0.52$) and the Gibson and Dembo measure ($r = 0.64$, as well as the general teacher efficacy ($r = 0.16$) all with $p < 0.01$. Discriminant validity results found work alienation and pupil control ideology were negatively correlated ($r = -0.31$, $r = -0.25$). The validity testing of the short form of OSTES had similar findings.

For the study, further reductions were made to the survey. The short form of 12 items was initially selected. Then, three items from each construct were selected dropping the least factor loaded item. From factor 1 (efficacy for instructional strategies) Q3 was eliminated, followed by factor 2 (efficacy for classroom management) Q12 and from factor 3 (efficacy for student engagement) Q20 was removed.

Utilizing the short form and to ensure Cronbach alpha could be calculated there were at least two items per construct. To measure efficacy for instructional strategies (Q1, Q2, and Q4) were utilized. To measure efficacy for classroom management (Q9, Q10, and Q11) were used along with (Q17, Q18, and Q19) to measure efficacy for student engagement.

The Big Five Personality (Big Five). The Big Five Personality scale originally consisting of 44 items was reduced to questions with two per construct to ensure Cronbach alpha can be calculated (Rammstedt & John, 2007). Therefore, to examine all five dimensions of personality (agreeableness, conscientiousness, openness, neuroticism, and extraversion) all ten items of the scale were utilized. The survey used a 5-point Likert scale ranging from strongly disagree to strongly agree. Rammstedt and John (2007) used discriminate and convergent validity testing using facets of each personality dimension. Neuroticism positively correlated only with itself having negative correlations with all other personality factors. The study confirmed each dimension of personality was a district trait as the correlations with its dimension were highly

positive (Rammstedt & John, 2007).

Convergent and discriminant validity were substantial with each subscale (Rammstedt & John, 2007). Correlations were 0.44 compared to 0.56 from the BFI-44 (intercorrelation 0.21) reducing the external validity by 0.16. The subscale Extraversion scored 0.69, Agreeableness 0.51, Conscientiousness 0.70, Neuroticism 0.73, and Openness 0.63. All subscales were highly correlated with themselves.

The Big Five Personality Scale was able to account for 70% of the variance with the original 44-question scale and retained 85% of the retest reliability (Rammstedt & John, 2007). Convergent validity ($r = 0.23$) was substantial and discriminate validity was excellent with each scale (Rammstedt & John, 2007). Rammstedt and John (2007) found reductions in validity and reliability by reducing the scale items but were able to conclude enough to support the usage of the construct validity of the BFI-10.

For the current study, all ten items were included in the survey. The following questions addressed each dimension of personality: extraversion (Q1, Q5), agreeableness (Q2, Q7), conscientiousness (Q3, Q8), neuroticism (Q4, Q9), and openness (Q5R, Q10). The following scales addressed the contextual factors of the study.

Work-Family Conflict Scale (WAFCS). The work-family conflict scale was a ten-question survey in which responses from the 7-point Likert scale ranged from "*very strongly disagree*" to "*very strongly agree*" (Haslam et al., 2014). The scale measured the constructs of work-family conflict in addition to family-work conflict.

Convergent and discriminant validity testing concluded overall reliability was 0.70 with Chi-squared testing to be excellent (Haslam et al., 2014) and had good predictive validity. Results found latent constructs helped explain observed variables with a score of 0.50 (WFC

0.60 and FWC 0.56). A moderate correlation was found ($r = 0.49$) between the two factors. The concurrent validity of WAFCS was measured against Frone's subscales (Haslam et al., 2014). The WFC and Frone's same subscale were highly correlated ($r = 0.82$) but showed a decrease against Frone's subscale of FWC ($r = 0.62$). The same high correlation occurred with FWC subscales and Frone's subscale ($r = 0.73$) but against Frone's subscale of WFC, it only scored ($r = 0.35$). Predictive validity was measured by the associations between work-family conflict and family work conflict and parental confidence, coercive parenting, and child behavior (Haslam et al., 2014) and was found to be good. The correlation between the two factors was found to be ($r = 0.49$, $p < 0.001$) and concurrent validity ($r = 0.82$, $p < 0.001$) with Frone's (Haslam et al., 2014). High levels of conflict regardless of type were related to poor parental confidence leading to more coercive parenting which negatively impacted child behavior (Haslam et al., 2014).

Cronbach alpha reliability testing was not used in this study. The calculation of the H coefficient was utilized with scores that can range from 0 to 1. A good score of internal consistency was found (0.70). Haslam et al. (2014) found the scale to be robust and sufficient for testing in multiple research applications.

For the current study, the survey items were reduced to help ensure the entire survey was not too extensive as well as focus on only the work-to-family conflict. In education, family-to-work conflict was not as prominent as work-to-family conflict (Erdamar & Demeril, 2014). This was because Erdamar and Demeril (2014) found that family-to-work conflict consisted mainly of pushing aside work tasks to complete at-home responsibilities and/or acquire sleep versus the finding of work-to-family conflict existing with a 3.30 result of consistently thinking about work problems while at home. In addition, Q4 was also removed because of the redundancy of the questions' context already being addressed. Within the construct of work-to-family conflict (Q1,

Q2, Q3, Q5, and Q6) were utilized.

Survey of Perceived Organizational Support (SPOS). The Perceived Organizational Support Scale (SPOS) had two versions: the long form and the short form. The long form consisted of 36 questions and the short form had 16 (Eisenberger et al., 1986). The survey addressed an employee's perceptions of their contributions being valued by the organization and the employee's well-being (Eisenberger et al., 1986). Questions range from "*strongly agree*" to "*strongly disagree*" on a 7-point Likert scale. The SPOS scale's Cronbach's alpha, the reliability coefficient was 0.97 (Eisenberger et al., 1986). Each of the 36 items reported strong loadings on the main factor and the factor loadings ranged from 0.42 to 0.83 (Eisenberger et al., 1986). The perceived support factor accounted for 93.9% of the common variance and 48.3% of the total variance with a minor second factor accounting for a variance of 6.1 % and 4.4% respectively (Eisenberger et al., 1986). Varimax rotation and Kaiser normalization with a two-factor solution were used with factor analysis and the factor loadings for perceived support were so high the other factors lost significance (Eisenberger et al., 1986). A two-factor oblique rotation was conducted resulting in a -10 correlation further proving the independence of the factor (Eisenberger et al., 1986).

For the current study, the short SPOS version was selected. The scale was used to address perceived supervisory support and colleague support. The word *organization* was replaced with "supervisor" when measuring perceived supervisory support and replaced with "colleague" when measuring perceived colleague support. From the short form, several question items were removed. Q3 was removed because the item was the only question measuring the consideration of the employee's goals and opinions causing a lack of data to compute Cronbach's alpha. The same logic of item removal was used with Q6 (response to employee's possible complaints),

Q17 (improved performance), Q21 (employee satisfaction), and Q35 was removed because the construct it applied to was not identified and whether the job was interesting did not seem relevant to the study.

The remaining items were retained from the short form based on factor loadings with values of at least 0.7. Q7 was removed for reverse coding and some questions with only one question per construct had higher factor loadings that would provide sufficient correlations on a single factor.

To determine Perceived Supervisory Support, participants answered 9 items. Q1 and Q27 measured the employee's performance, Q4, and Q25 measured the employee's goals and opinions, Q8, Q9, Q22, and Q23 measured the employee's well-being, and Q20 measured the employee being requested for a special favor.

When determining Perceived Colleague Support, participants answered 7 items addressing employee performance Q1, employee's well-being (Q8, Q9, Q22, and Q23), measuring employee being requested for special favors (Q20), and measuring employee's goals and opinions (Q25).

Organizational Justice Scale. The Organizational Justice scale measure consisted of twenty items divided by the four types of organizational justice: procedural (7 items), distributive (4 items), interpersonal (4 items), and informational (5 items, Colquitt, 2001). All items used a 5-point Likert response ranging from 1 "*to a small extent*" and 5 "*to a large extent*" (Colquitt, 2001). Some researchers have linked the four dimensions into only three categories combining interpersonal and informational justice (Colquitt, 2001).

Confirmatory factor analysis testing of the scale underwent tests from one factor to all four to determine the best fit (Colquitt, 2001). The scale showed adequate discriminant (patterns

of intercorrelations and the four-factor goodness of fit) and predictive (statistical significance and good fit from the structural model) validity (Colquitt, 2001). Using the full four-factor model, X^2 was found to be 424 with a sample size of 301 equalling = 883.01. The $X^{2/df}$ = 2.08, the IFI was 0.90, the CFI was 0.90 and RMSEA was 0.06. A confidence interval of 0.54 and 0.06 was found with RMSEA (Colquitt, 2001). The structural model provided a good fit with X^2 (424, N = 337) = 1062.88 with X^2/df equally 2.50 (Colquitt, 2001). The IFI and CFI were both 0.91 with RMSEA = 0.067 (0.062, 0.072) (Colquitt, 2001). Reliability testing was conducted using Cronbach alpha testing. Procedural justice scored 0.93, interpersonal justice scored 0.92, informational 0.90, and distributive justice scored 0.93 (Colquitt, 2001). Adequate predictive and discriminate validity were found (Colquitt, 2001).

However, this section of the survey was reduced to 9 related items. Based on the highest factor loadings and omitting items less than 0.7 distributive justice was addressed using Q1, Q2, and Q3. Interpersonal justice items included Q2 and Q3, informational justice items included Q1 and Q2, and procedural justice items included Q2 and Q3.

Qualitative Data Collection

The researcher reviewed the survey for participants who showed interest in the qualitative portion of the study and noted the individual's email address provided. Then, the researcher purposefully divided the participants into groups based on the school setting and years of experience defined by the literature review. Next, using purposeful random sampling within those groups, the researcher selected ten teachers from elementary, five middle, and five high school teachers representing novice, veteran, and mid-career teachers within K-12 public school settings using computer-generated software. The participants' names were entered and run to obtain eight females and two males for each category to form groups.

The qualitative portion began with an introductory email correspondence sent to selected participants. They were provided with details of the research study explaining their role and context in addition to a selection of days and times of the interview to be conducted via Microsoft Teams meetings as all respondents could use the technology provided by the county for recording purposes at their earliest convenience. The email defined the duration of the scheduled meeting and provided an option if that meeting time is not adequate. The researcher collected the data within the interview using clustered structural interviews. Clustered structural interviews used defined groups with a consistent and predetermined order of questions (Stuckey, 2013) which improved the effectiveness and efficiency of data analysis (Bhatia & Deogun, 1998). An interview protocol was established and was utilized to conduct the interview (Appendix J). The protocol allowed the researcher to begin the interview by introducing themselves, provide the research topic information, and then read the informed consent which sought approval from the participant to continue with the study. The researcher informed the participants that the interview would be recorded for transcription purposes and announced the results would be reviewed by only the researcher or their committee chair. The researcher informed the participant that the researcher would use pseudonyms to ensure confidentiality.

At the start of the interview, the researcher implemented the Interview Protocol (Appendix J) where they introduced themselves, provided a purpose for the interview and synopsis of the research study, and obtained consent (Appendix I). Participants were informed their responses would be coded with pseudonyms and the recordings and transcriptions would be discarded after the study was complete. The interviews were conducted and recorded using Microsoft Teams software for meetings which generated auto transcripts. The researcher also made notes during the interview.

Once all interviews were conducted the researcher inserted the participant's name in a computer random generator. The process was completed twice selecting the two winners of the $10.00 Amazon gift card. Once the winners were chosen, the researcher contacted the participants to decide on the most convenient way to retrieve their incentives.

Qualitative Data Collection Instrument

The teachers participated in an interview with 14 questions that pertained to each facet of the quantitative survey. However, some questions had follow-up questions making the total interview question count at least 22 as it was based on responses from participants. Participants responded to structured interview questions (George & Merkus, 2022). Structured interviews were more objective, reducing bias and obscurity when completing data analysis (Dipboye, 1994; Stuckey, 2013). Therefore, the validity and reliability increased with this method because of the set order of questioning and the number of elicited responses within the interview with a standardized process (Dipboye, 1994). Structured interviews were also cost and time-efficient (George & Merkus, 2022). The limitations of using the method included the interview itself being formal which did not allow for researcher flexibility with questioning for participants to provide richer discussion into the topic (George & Merkus, 2022). For these reasons, structured interviews were administered to teachers regarding the important issue of stress to encourage positive change.

The researcher was purposeful with the interview question creation. The researcher and methodologist developed interview questions that were based on providing additional detail to the quantitative information. The researcher and methodologist were careful to include each factor within the study in the interview section. Each question addressed each facet of the study (stress, personality, self-efficacy, organizational justice, work-family conflict, and perceived

supervisory support). Because of the nature of the personality and organizational justice constructs, subset categories were identified, and these areas were broken down into individual component consideration questions. As questions had the potential to solicit further explanation, those questions were also added to the survey. To further investigate the most prevalent sources of stress for teachers, a ranking question of the studied components was also added. In the question, the respondent informed the researcher to which degree the construct is stressful using the following scale (1- stressful, 2-moderately stressful, 3-extremely stressful). However, the question was created in a table format because some teachers may view more than one contextual factor as extremely stressful. The question/construct alignment is listed in Table 7.

Table 7

Qualitative Interview questions and construct alignment

Interview Question	Measuring Construct
1	Stress
1.1	Stress
1.2	Self-efficacy
1.3	Self-efficacy
1.4	Self-efficacy
2	Personality (Extrovert)
3	Personality (Agreeableness)
4	Personality (Neuroticism)
4.1	Personality (Neuroticism)
5	Personality (Openness)
6	Personality (Conscientiousness)
6.1	Personality (Conscientiousness)
7	Perceived Supervisory Support
7.1	Perceived Supervisory Support
8	Perceived Colleague Support
8.1	Perceived Colleague Support
9	Work-family Conflict
10	Organizational Justice (Interpersonal)
11	Organizational Justice (Procedural)
12	Organizational Justice (Informational)
13	Organizational Justice (Distributive)
14	Stress Ranking of Contextual Factors

Table 7. Qualitative Interview Question/Construct Alignment

Data Analysis

The study implemented data analysis with the usage of structural equation modeling for the quantitative results and inductive thematic coding for analysis of the relationship between stress and the selected factors.

The quantitative data analysis of structural equation modeling was "a collection of statistical techniques" (p. 661) based on a general linear model that allowed researcher to examine one or more continuous and/or discrete independent and dependent variables whether latent, unobserved, or directly observed (Ullman & Bentler, 2012). Diagrams were used to offer visualization of the

text to show the hypothesized relation among the construct and its variables making the model (Ullman, 2006). Structural equational modeling (SEM) was used to examine multiple relations of constructs concurrently (Ullman, 2006). Therefore, the study used SEM to measure the relationships between the different constructs.

The qualitative data analysis included inductive thematic coding. Inductive thematic coding was the interpretation and analysis of the interview transcription responses to identify categories or themes that emerge from the data collection (Fereday & Muir-Cochrane, 2006). The use of inductive thematic coding was used to interpret themes that continued to appear from the data collection of clustered structured interviews with participants. The interview was designed to align with the constructs measured in the quantitative phase of the study and provide deeper a level of information on teacher perspectives of the factors that cause stress.

The mixed methods analysis included the usage of joint display tables to explain how the quantitative and qualitative data can be interpreted and explained.

Quantitative Data Analysis

Once the survey window closed through Qualtrics was completed, the researcher inserted the survey information into SPSS. Using descriptive statistics and a test of correlation, the findings were calculated using a structural equation modeling and a chi-squared test. Structural equation modeling (SEM) was used when multiple constructs are being measured to evaluate their relation to one another and can test many types of theoretical models (Schumacker & Lomax, 2010). There were five steps to implementing SEM testing: model specification, model identification, model estimation, model testing, and model modification (Schumacker & Lomax, 2010). The main reasons to use (SEM) were to use multiple variables to investigate, increase validity and reliability scores as the measure of error is considered, the usage allows for more

advanced analysis, and the software was user-friendly (Schumacker & Lomax, 2010).

Model specification occurs when the researcher creates a model that included all parameters and their relationships the researcher was studying (Schumacker & Lomax, 2010). In this step, the researcher used the literature to develop a model to show the relationships between the latent constructs and the indicator variables. In the study, the latent variables were the constructs: Perceived Supervisory Support, Perceived Colleague Support, Organizational Justice, Work-family conflict, Self-efficacy, and Personality. The indicator variables were the survey items that represented the individual characteristics of the constructs. During the model specification, the measurement models were identified. There are two different types of models: confirmatory factor analysis (CFA) and structural equation modeling (SEM). A measurement model that depicted the relationship between the latent constructs and indicator variables was also referred to as the confirmatory factor analysis. Confirmatory Factor Analysis (CFA) was further developed by Karl Jöreskog in the 1960s by testing if constructs were defined by a set of items (Schumacker & Lomax, 2010). Later Karl Jöreskog, Ward Keesling, and David Wiley developed SEM by combining path models and confirmatory factor analysis models which was initially referred to as the JKW model, linear structural relations model (LISREL) (Schumacker & Lomax, 2010). The second type of measurement model was the structural model which reviewed the causal relationships between the constructs. Schumacker and Lomax (2010) stated the goal during model specification was establishing the greatest model that created the sample covariance matrix. In Figure 2, a model specification of the study was presented.

Figure 2

Model Specification
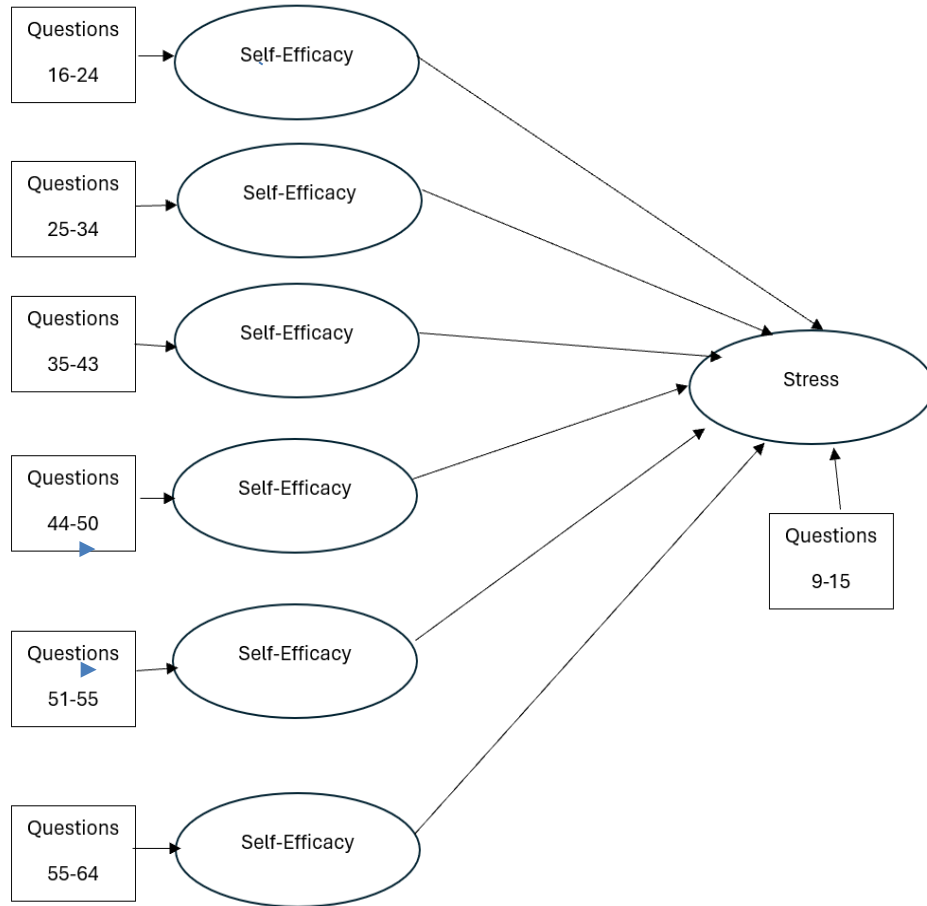
Model identification was conducted by reviewing how well the proposed theoretical

measurement model fit with the sample covariance matrix derived from the sample data. In the

model identification phase, the researcher determined the identification problem and answered if

the parameter estimates can be determined (Schumacker & Lomax, 2010). Parameters were

needed because there can be an endless number of possibilities to explain the data (Schumacker

& Lomax, 2010). According to Schumacker and Lomax (2010), there were three types of

parameters: free parameters (unknown and need estimation), fixed (free, but fixed to a value

which is usually 0 or 1), and constrained (unknown and constrained to more than one parameter). The goal was to not have a misspecified model. Misspecified models could have biased parameters which are known as specification errors (Schumacker & Lomax, 2010). Model identification was based on how many of these parameters existence. There are three types of model identification: under-identified, just-identified, and over-identified (Schumacker & Lomax, 2010). Under-identified estimation occurs when one or more parameters were not determined from the S matrix data (Schumacker & Lomax, 2010). A model is just-identified when all parameters were determined with just enough information as the name implied and over-identified when there were multiple ways to estimate a parameter because there was much information provided in the S matrix also known as identified (Schumacker & Lomax, 2010).

Model estimation was calculated to minimize the difference between $\sum$ and S with fitting function (Schumacker & Lomax, 2010). Model testing included two stages. The first was a global test that evaluated the fit of the model and the second assesses individual parameters (Schumacker & Lomax, 2010). There were three ways to avoid identification problems. The first method was to ensure the observed variables measure the latent variables with the model by having each latent variable or the variance of each latent variable fixed to 1 (Schumacker & Lomax, 2010). This helped to eliminate scale problems. Indeterminacy could occur if the data fits more than one model (Schumacker & Lomax, 2010). The next method occurred with the usage of nonrecursive and reciprocal models. Recursive models have the flow of causal pathways and could be unidirectional, from one direction to another whereas nonrecursive models were bidirectional or reciprocal (Schumacker & Lomax, 2010). The last way to avoid identification problems was to begin with a parsimonious or simple model with only essential parameters utilized (Schumacker & Lomax, 2010). This was completed by having the least

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amount of constructs to explain most of the framework.

The third stage was model modification, and it was completed when the initial fit is not as strong as desired (Schumacker & Lomax, 2010). In the model modification stage, a review of the parameters were concluded. The parameters within the structural equation model should have been like the parameters in the sample covariance matrix. As the parameters aligned, the fit increased. Schumacker and Lomax (2010) stated when the sample covariance matrix S was subtracted from $\sum$, the SEM model and equals 0, it was referred to as being a perfect fit. SEM was a derivative of the CFA model, it would follows multivariate normality (Schumacker & Lomax, 2010). Therefore, tests of skewness and kurtosis were needed. The study used categorical data indicating small to moderate skewness and kurtosis values. These values could fall in the range of -1 to $+1$ as well as -1.5 to $+1.5$ which further suggested Maximum Likelihood testing should be tested (Schumacker & Lomax, 2010).

The following tests were run for the study: Maximum Likelihood (ML), Chi-squared, Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Standardized Root-Mean Square Residual (SRMR), Root-mean-square error of approximation (RMSEA), Normed Fit Index (NFI), Comparative Fit Index (CFI) and Akaike Information Criterion (AIC). A test for Maximum Likelihood was conducted initially as it was a common test used in SEM to ensure the variables in the model have a normal multivariate distribution (Schermelleh-Engel et al., 2003). The advantage to using maximum likelihood was that testing the fit is there was no difference between using original or transformed data or method analyzed by correlation or covariance (Schermelleh-Engel et al., 2003). Maximum likelihood is like a lock and key system in that if the key does not fit correctly, adjustments were made until it was a good fit. Adjusting maximum likelihood was done by running a series of iterations to get the best fit between the sample

covariance matrix and the SEM covariance matrix.

Next, tests of significance were conducted by using the Chi-squared test and the Chi-squared difference test (Schermelleh-Engel et al., 2003). These tests were used when using complex models and larger sample sizes. The Chi-squared test was used to test the theoretical model (Schumacker & Lomax, 2010). The test results ranged from a saturated model which equals 0 (a perfect fit or no difference having all model paths included) to an unsaturated model where no paths are in the model (Schumacker & Lomax, 2010). The Chi-squared testing assessed the significance of the model (Schermelleh-Engel et al., 2003). The Chi-squared difference test measured the difference in model fit. This was based on the confidence interval and degrees of freedom. If the testing result was significant ($p < 0.05$), then the null hypothesis should be rejected (Schermelleh-Engel et al., 2003). However, if the difference test was not significant then, the null hypothesis is accepted (Schermelleh-Engel et al., 2003). Should neither of the two models become nested, further testing would be completed to compare them using goodness of fit measures using the Akaike Information Criterion (AIC) (Schermelleh-Engel et al., 2003). The test could be used without the models being nested (Schermelleh-Engel et al., 2003). The Akaike Information Criterion (AIC) compared models with latent variables with fit scores ranging from perfect (0) to poor represented with a positive number (Schumacker & Lomax, 2010). The lowest number was the best model fit.

Descriptive goodness of fit tests also included goodness of fit and the adjusted goodness of fit. The Goodness of fit test measured the amount of variance and covariance in the model with scores ranging from 0.90 to 0.95 resulting in a good fit (Schumacker & Lomax, 2010). Hu and Bentler (1999) made the argument that the proposed minimum 0.90 scores Bentler and Bonnet (1980) originally claimed indicated model acceptance should be raised to 0.95. Due to

the argument continually being made, alternate testing was implemented.

The fourth step of SEM is Model testing which reviewed how well the data fits the model (Schumacker & Lomax, 2010). This was when a comparison of the $\sum$ matrix and s matrix was completed. A review of the individual parameters within the model was conducted of free parameters and those that are statistically significant ($\alpha < 0.05$) (Schumacker & Lomax, 2010). If the ratio of the estimate of the causal pathway was less than 0.05 it was said to be statistically significant. If the ratio is more than 0.05, the pathway was not significant (Schumacker & Lomax, 2010). Each hypothesis used this testing for pathway significance. If the sign of the parameter is (+) it signified a positive impact had occurred. A (–) sign indicated a negative impact. An important aspect Schumacker and Lomax (2010) highlighted was that "the parameters should make sense." Therefore, when the study results showed increases and decreases, the parameters were logically aligned. For example, if organizational justice showed an increase of +1 and stress scores also increased something was not accurate because the stress score should have been reduced.

Path analysis was the multivariate extension of linear regression (Frances et al., 2004). Path analysis allowed for multiple regression models to be run simultaneously (Frances et al., 2004). The difference between the path analysis model and confirmatory factor analysis was that path analysis focuses on the observed variables only without latent constructs. The CFA model utilized latent constructs and indicator variables which were the actual survey questions measuring each construct. This exploratory step was completed before the confirmatory factor analysis model specification to determine the correlations between the variables (Frances et al., 2004). Path analysis also determined the degree of impact that was made by the independent variables on the dependent variables. For this dissertation, the researcher utilized the composite

scores associated with the constructs that were stated in Figure 2. There were 14 rules that must be followed according to O'Rourke et al. (2013) shown below to conduct path analysis. These same rules also applied to CFA and SEM analyses.

RULE 1: Only exogenous variables are allowed to covary.

RULE 2: A residual term is identified for each endogenous variable in the model.

RULE 3: Exogenous variables do not require residual terms.

RULE 4: Variance should be estimated for every exogenous variable in the model, including residual terms.

RULE 5: In most cases, covariance should be estimated for every possible pair of manifest exogenous variables; covariance is not estimated for endogenous variables.

RULE 6: For simple recursive models, covariance is generally not estimated for residual terms.

RULE 7: One equation should be created for each endogenous variable, with that variable's name to the left of the equals sign.

RULE 8: Variables that have a direct effect on that endogenous variable are listed to the right of the equals sign.

RULE 9: Exogenous variables, including residual terms, are never listed to the left of the equals sign.

RULE 10: To estimate a path coefficient for a given independent variable, a unique path coefficient name should be created for the path coefficient associated with that independent variable.

RULE 11: The last term in each equation should be the residual (disturbance) term for that endogenous variable; this term will have no name for its path coefficient.

RULE 12: To estimate a parameter, create a name for that parameter.

RULE 13: To fix a parameter at a given numerical value, insert that value in place of the parameter's name.

RULE 14: To constrain two or more parameters to be equal, use the same name for those parameters. (p. 116)

The last step of SEM was Model Modification. Within SEM, the model indicated which pathways needed to be modified or refined to improve the fit indexes. Model modification uses a specification search to alter the original model to determine a better-fitting model (Schumacker & Lomax, 2010). As a review of the parameters indicated no correlation between the two pathways, the pathway were deleted and in contrast, if there were big correlations between two pathways, then the pathway remained open (Schumacker & Lomax, 2010). Critical values indicating significance would also be reviewed to determine if pathways should remain. Theoretical significance could allow pathways to remain even though they may show no statistical significance (Schumacker & Lomax, 2010). Lastly, a review of residual errors occurred. The study having multiple indicators would have a matrix of unexplained data which are the error terms. The residual matrix was reviewed with the sample covariance matrix to determine the fit based on the difference. If the difference is high, there was a poor fit (Schumacker & Lomax, 2010). Schumacker & Lomax (2010) stated the higher the amount of unexplained or error terms that exist, the poorer the prediction of the model. Larger values (1.96 or 2.58) indicate misspecification which means a variable must be removed (Schumacker & Lomax, 2010).

Schumacker and Lomax (2010) suggested eight steps to follow in conducting the specification search. The first step was to create a model specification based on empirical

research and theory (Schumacker & Lomax, 2010) followed by the next step to test the implied theoretical model. The third step was to conduct a specification search on the measurement model and then on the structural model (Schumacker & Lomax, 2010). Next, a review of both models was needed to discover if the parameters match the predictions of direction and amount. Schumacker and Lomax (2010) stated the determination of whether the goodness of fit index was the best match occurred in this step. The next step was to review the nonfixed parameters for statistical significance and determine whether they should be fixed in another model (Schumacker & Lomax, 2010). The sixth step examined the indices of modification expected parameter changes to evaluate if fixed parameters should be free parameters within another model (Schumacker & Lomax, 2010). Step seven was to analyze the standardized residual matrix to ensure logically that the values made sense followed by the final step in the process was to conclude an acceptable model (Schumacker & Lomax, 2010). An acceptable model could be validated in a few different ways: a new sample or dividing the sample in half using one for the model and the other half through cross-validation (Schumacker & Lomax, 2010). This could be done using a single sample cross-validation index (ECVI) when using other models (Cudeck & Browne, 1983; Kroonenberg & Lewis, 1982).

Testing of the overall model fit was used to measure the extent of the SEM compared to the empirical data (Schermelleh-Engel et al., 2003).

The study used standardized root-mean-square residual and root-mean-square error of approximation. The root-mean-square error of approximation RMSEA measured the model against the population to determine the level of fit (Schermelleh-Engel et al., 2003). Cudeck and Browne (1983) defined the results of the Root-mean-square error of approximation (RMSEA) test further indicating a good fit resulted with a score of less than 0.05, an adequate fit when the

values are 0.05 to 0.08, and results of 0.08 to 0.10 are deemed a mediocre fit. A lower score is desired; however, a score greater than 0.10 would not be accepted (Cudeck & Browne, 1983). The standardized root-mean-square residual (SRMR) test determined the badness of fit (Jöreskog & Sörbom, 1981) as it determined any discrepancies within the data. A good fit was found when the results were low and less than 0.05, the results were found to be acceptable when lower than 0.10 (Schumacker & Lomax, 2010). The Root-mean square residual resulted in a perfect fit at 0 with lower scores being desirable.

The next tests included comparing the model against others. The normed fit index (NFI) took the Chi-squared test and aligned it with a group of models that range from least restrictive to saturated. The NFI used the same score from 0 to 1 and results of 0.90 to 0.95 are a good model fit (Schumacker & Lomax, 2010). These tests were overall model fit measures used to assess the theoretical model for rejection or acceptance of the model. The comparative fit index (CFI) was a good fit with a score of 0.95 (Schermelleh-Engel et al., 2003). When the model is not a good fit, adjustments were made and re-tested. The Adjusted Goodness of fit test was created to test the overall model of fit (Schermelleh-Engel et al., 2003). It accounts for the variables and was altered based on the degrees of freedom with results of a good fit ranging from 0.90 to 0.95 (Schumacker & Lomax, 2010).

As the results were submitted, the researcher created a spreadsheet of those participants willing to be included in the qualitative phase of research using structured interviews. In between scheduling and holding interviews, the quantitative analysis was conducted.

Qualitative Data Analysis

The analysis of the data was completed in sections over several days beginning with initial transcript review readings, theme creation, frequency, coding, and reviewing results with

the second coder. To refine the process the researcher reviewed one construct at a time and then aligned questions in sections to complete the analysis process. The researcher began by viewing the recorded interviews to ensure the transcription was accurate and making any revisions necessary based on possible limitations of the recording system inserting inaccurate depictions of the respondent's speech. The researcher input the transcribed responses into a spreadsheet to display responses simultaneously in an easy-to-read, side-by-side display. All interviews were analyzed through the same process.

The first cycle of data analysis implemented initial coding. Initial coding according to Saldana (2009), suggested this model for beginning research coders. In the first phase, the researcher re-read the responses making mental notes on ideas possibly repeated to develop a coding frame (O'Connor & Jeffe, 2020). The researcher then reviewed the initial list of topics that appeared during the interview and used open coding. Open coding was the creation of categories and codes using notes and multiple reviews of transcripts (Elo & Kyngäs, 2008). Coding was the initial step in analysis and the interpretation of reporting (Saldano, 2009). As the respondents used repeated statements or words, the researcher created a list of the phrases that continued to appear within the interview answers.

In the second cycle of coding, pattern coding was implemented. Pattern coding was normally implemented after initial coding (Saldano, 2009). The researcher began to use color highlighting when those words/phrases were used. When/If phrases seem similar, the researcher created an overall theme and used the direct words as subthemes creating sections with the list (O'Connor & Jeffe, 2020). This is what Saldana (2009) referred to as descriptive coding. The researcher reviewed the interview responses again and began to tally how many times the phrases appeared overall throughout all the interviews. The same procedure was followed with

all interview responses. If a new phrase or topic was found, the word was added, and the tally

count would continue throughout the interviews until all had been reviewed thoroughly. The data

from the initial responses was used to create a table of coded ideas, emerging ideas, and the

frequency of usage.

The researcher used colleague and cohort member, Charles Baima, as a second coder to

ensure that the transcript codes were accurately measured to develop the codes and created

consistency to create interrater reliability (O'Connor & Jeffe, 2020). Intercoder reliability

accounted for the "trustworthiness (p.3)" of the results of reliability testing (O'Connor & Jeffe,

2020). The second coder coded the same transcripts separately and then discussed the findings

with the researcher (Sutton & Austin, 2015). The researcher and second educational coder coded

for one quantitative construct at a time using all interview transcripts. The Kappa coefficient was

then calculated to measure interrater reliability (McHugh, 2012). Kappa coefficient values

ranged from -1.0 to 1.0 with no agreement found to an almost perfect agreement, respectively

(Cohen, 1960). A score of 0 was rarely found but signified a random occurrence (Cohen, 1960).

When the coefficient scores fell between 0-0.2 it was labeled as no agreement to a slight

agreement (Cohen, 1960). Cohen (1960) stated a fair agreement would be found with values of

0.21 to 0.40 while a moderate score was 0.41-0.60. A score of 0.61-0.80 indicated a substantial

agreement was found and scores of 0.81 to 1.00 earned a rating of almost perfect (Cohen, 1960).

During the next step in the process the researcher created a table to view the themes and

subthemes alongside each other to summarize overarching themes amongst both data sources.

Therefore, themes emerged from the data and were an outcome of coding being implemented

(Saldano, 2009). After a review of the data simultaneously, an overall initial interpretation of the

results was concluded. The following information was displayed in table formats. The

explanation was aligned to get a collective perspective regarding each topic. The researcher

reviewed the data to highlight the viewpoints acknowledged by teachers within each academic

setting and years of experience level to look for trends. After reviewing each question's

responses, an overall theme was created for the questions regarding teacher stress (see Appendix

G).

Mixed Methods Data Analysis

The explanatory sequential research method results incorporated three levels of

integration: the design, methods, and interpretation and reporting. The usage of explanatory

sequential design allowed for integration through design with the qualitative information gained

to build upon the initial quantitative results (Creswell et al., 2011; Guetterman et al., 2015).

Specifically, integration through connecting was utilized as the qualitative sample will be

linked to the quantitative sample demographics. The participants of the interviews chose to be a

part of the qualitative portion of the study by marking their interest within the survey that

occurred previously. Integration through connection occurred when one data source was linked

to another through sampling (Fetters et al., 2013). Integration through building was also

implemented as the qualitative interview questions were directly aligned to the quantitative

constructs and helped to inform the wording of the responses (Fetters et al., 2013). Integration

through building allowed for "one database to inform the data collection approach of the other"

(Fetters et al., 2013). Integration was used to better explain the quantitative survey responses

(Fetters et al., 2013). In agreement with Fetters et al. (2013), the quantitative results reviewed

descriptive statistics, mean scores, and standard deviations reviewing normality and skewness. In

addition, the qualitative results used thematic analysis to create coding systems as suggested

(Fetters et al., 2013). The ideas were merged to integrate the sources of data. The final layer of

integration was through the interpretation and reporting procedures.

The integrated information was shown through a side-by-side joint display table. Joint display tables allowed the visual information to bring forth further meaning by analyzing the data simultaneously (Fetters et al., 2013). Therefore, the information displayed within the joint display table included the construct name, the quantitative results, and the qualitative phrases used within the survey. For example, using the construct of teacher stress, the quantitative results showed a person who was highly stressed would be further proven with aligned interview statements of being highly stressed. In addition, those who were not highly stressed would have quantitative results that showed low stress and the interview responses would also align. The joint display table provided a complete picture of the level of the person's stress and statements confirming its existence and degree of impact. Figure 3 shows the mixed method design protocol being utilized.

Figure 3

Mixed Methods Design Protocol
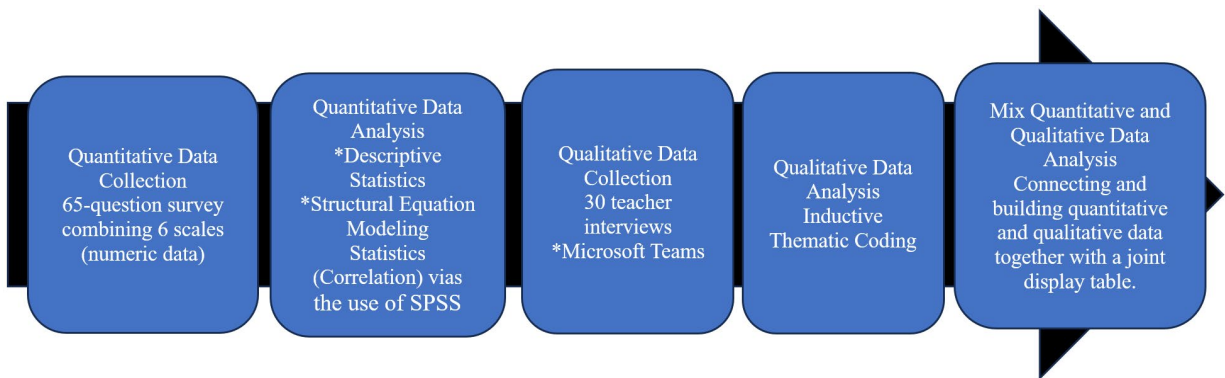
Summary

The current chapter focused on defining and providing the purpose for the research design selected and the methodology of the study. The study analyzed the impact of stress and the individual (personality and self-efficacy) factors and contextual (perceived supervisory

support, perceived colleague support, work-family conflict, and organizational justice). In addition, the study desired to determine what teachers perceived as job demands and how the factors can help to alleviate stress. Cronbach's alpha was used to test reliability and convergent and discriminant validity testing was conducted with findings within adequate ranges. The usage of explanatory sequential design included data collection and analysis to further build upon initial quantitative data regarding teacher stress through surveys and interviews. The usage of structural equation modeling and descriptive analysis in addition to inductive, open thematic coding with intercoder reliability measured was employed and integrated through the usage of side-by-side joint display tables.

Chapter IV: Findings

The current chapter contained the findings from the mixed methods research addressing individual and contextual factors attributing to teacher stress based on school setting and experience level within the Yellow County School District of Middle Georgia. The methodology used an explanatory-sequential approach to data collection with the researcher initially administering a survey to participants followed by respondent interest in a deeper dive into teacher perceptions with interviews. The approach was geared toward not only obtaining the relationships between stress factors but also included teacher perspectives to derive a more thorough examination of stress in the education setting.

The study was based on the initial conceptual framework and JDR Model of Job-Demands-Resources Theory (Bakker & Demerouti, 2007) and Bandura's Social Cognitive Theory (1986). The JDR Model and conceptual framework were used to compare the theory to the survey response models of data. Bandura's Social Cognitive Theory encompassed the teacher's individual and external facets attributing to whether they are in control ultimately playing a role in whether a teacher would succumb to stress or overcome it.

The quantitative data analysis began with the descriptive statistics within IBM SPSS Statistics and then initial models with the SAS program. The qualitative data analysis used inductive thematic coding beginning with initial coding and open coding to determine themes amongst the interviews. The process was followed by the use of a second coder to determine interrelated reliability using Kappa Coefficients.

The current chapter intended to uncover useful information attributing to teacher stress such as the main sources of stress and the degree to which the relationships among the factors studied impact overall teacher stress. The study expected to answer the following research

questions:

RQ 1: What is the influence of self-efficacy on teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant influence of self-efficacy on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant influence of self-efficacy on teacher stress.

RQ 2: What is the relationship between personality traits and teacher stress?

Null Hypothesis (Ho) for Relationship of Individual Factors

There is no statistically significant relationship between personality and teacher stress.

Alternative Hypothesis (Ha) for Relationship of Individual Factors

There is a statistically significant relationship between personality and teacher stress.

RQ 3: What is the relationship between organizational justice and teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant impact of organizational justice on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant impact of organizational justice on teacher stress.

RQ 4: What is the influence of perceived supervisory support on teacher stress?

a.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived supervisory support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived supervisory support on teacher stress.

b.Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of perceived colleague support on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of perceived colleague support on teacher stress.

RQ 5: What is the influence of work-family conflict on teacher stress?

Null Hypothesis (Ho) for Relationship of Contextual Factors

There is no statistically significant influence of work-family conflict on teacher stress.

Alternative Hypothesis (Ha) for Relationship of Contextual Factors

There is a statistically significant influence of work-family conflict on teacher stress.

RQ 6: What are the interaction effects of individual and contextual level factors on teacher stress?

RQ 7: How do K-12 teachers describe the job demands at their current workplace?

7a. What are the teacher's perspectives on the stress created by job demands and how this stress can be alleviated by individual-level and contextual-level factors?

Quantitative Participants

All teaching staff within Yellow County were invited to participate in the survey portion of the study. The quantitative portion of the study had 330 teachers respond to the survey link. There were a small number of teachers, 15 of whom chose not to complete the survey when provided the consent question. There were many surveys with partial data; therefore, only 250 fully completed surveys were used for the quantitative data analysis. The participants were overwhelmingly female (79%) as opposed to the male population representing 21% of the

respondents. Table 8 showed the breakdown of the surveys completed by gender.

Table 8

Quantitative Respondents by Gender

Gender	Count	Percentage
Female	238	79%
Male	62	21%

Participant age ranges were represented as follows: 18-25 years old 10%, 26-35 years old 21%, 36-45 years old 26%, 46-55 years old 30%, 56-65 years old 13 %, and 1% representing the age group of over 65-year-olds. Table 9 shows the age of the respondents who completed the survey.

Table 9

Quantitative Respondents by Age

Age	Count	Percentage
18-25	29	10%
26-35	63	21%
36-45	77	26%
46-55	89	30%
56-65	39	13%
Over 65	4	1%

Participants by ethnicity were as follows: 46 % were White, 48 % were African American, 2% Asian, and 3 % as other. The proportion showed the majority of the teaching population was not as involved in the study as the other ethnicity groups as African Americans account for 78% of the teaching population of this district. Table 10 showed the breakdown of respondents by ethnicity.

Table 10

Quantitative Respondents by Ethnicity

Ethnicity	Count	Percentage
White	139	46%
African American	145	48%
Asian	7	2%
Other	10	3%

Reviewing participants by teaching experience level, 20% were made up of novice teachers, mid-career teachers had 42%, and veteran teachers accounted for 38% of the population. Table 11 shows the breakdown by teaching experience.

Table 11

Quantitative Respondents by Teaching Experience

Teaching Experience	Count	Percentage
Novice (0-3 years)	60	20%
Mid-Career (4-15 years)	127	42%
Veteran (16 plus years)	114	38%

The survey participants' representation by education level was teachers holding a Bachelor's degree was 33%, Masters at 45%, Education Specialists at 17%, and those holding a Doctorate at 6%. The bulk of respondents held a Bachelor's or Master's degree. Table 12 showed the respondents by education level.

Table 12

Quantitative Respondents by Education Level

Level of Education	Count	Percentage
Bachelor's	100	33%
Masters	134	45%
Education Specialist	50	17%
Doctorate	17	6%

Based on the academic setting, 33% of the population were from elementary schools, 28% were middle schools, and 39% were high school teachers. A fair representation of each group was represented. Table 13 showed the respondents by academic setting.

Table 13

Quantitative Respondents by Academic Setting

Academic Setting	Count	Percentage
Elementary School	100	33%
Middle School	83	28%
High School	118	39%

There were 87% of teachers surveyed not working in a supervisory role within the schools and 13% were in a leadership type position. Table 14 showed the respondents by supervisory role.

Table 14

Quantitative Respondents by Supervisory Role

Supervisory Role	Count	Percentage
Yes	39	13%
No	262	87%

In addition, teachers surveyed who taught testable grades or courses accounted for 38% of the respondents with 62% not teaching testable content. Table 15 showed the respondents by teaching testable content.

Table 15

Quantitative Respondents by Testable Content

Testable Content Teacher	Actual Number of Respondents	Percentage of Respondents
Yes	114	33%
No	187	62%

Quantitative Findings

The quantitative results used SPSS to run descriptive statistics. To conduct path analyses accounting for multiple regression equations to be computed simultaneously, the SAS program was utilized. SAS was a syntax-based program of codes to determine a good fitting model of exogenous and endogenous manifest variables. Next, within SAS computations and modifications were completed to develop the final confirmatory factor analysis (CFA) also known as the measurement model that began the structural equation modeling (SEM) process. SEM was used to determine the relationships between the constructs with LISREL modeling, and linear structural relations. Finally, SPSS was used to conduct multiple regression analysis on the interactions between the constructs found to be statistically significant.

Estimates of internal consistency as measured by Cronbach's alpha were within acceptable limits for variables (i.e., $\alpha \geq .70$) (O'Rourke et al., 2013). All variables fell within the acceptable ranges except for the constructs of Personality (-.086) and Perceived Colleague Support (.599) as shown in Table 16 based on reliability analysis. The Cronbach alpha score was based on inter-item correlation and with the construct of Personality the correlations were not good in that they are small. For example, a review of items showed the correlation of extraversion also with itself is only 0.90, so even the items that measured the same subdimension of the personality had a low correlation. Personality descriptives were reviewed to note variances between subpopulations of respondents to determine if that could explain the low correlation value. However, running the statistics by subgroup never met the required minimum value of 0.70 and only slightly increased each Cronbach alpha (0.26 for elementary). Therefore, the researcher concluded that even though the results are based on a standardized scale of Personality, the scale and Cronbach alphas were not based on the item itself but rather

on the responses that people give to those items. A scale might be reliable and good for a certain population, but not work well with some other populations in addition to multiple subpopulations. The correlations were run separately and remained low among elementary, middle, and high school teachers. In addition, some participants may have created bias to not represent themselves negatively or consistently in viewing their personality traits. Therefore, all items were not functioning properly and the results in the items not measuring what they should be measuring based on the current population.

Table 16

Descriptive Statistics

Measurement	M	SD	1	2	3	4	5	6	7
Stress	3.244	.787	(.82)						
Self-Efficacy	3.129	.527	-0.027	(.89)					
Personality	3.294	.335	0.064	0.070	(.019)				
Perceived Supervisory Support	4.896	1.414	-0.236	0.213	0.032	(.95)			
Perceived Colleague Support	5.539	1.053	-0.172	0.312	0.074	0.423	(.90)		
Organizational Justice	3.770	.771	-0.256	0.396	0.144	0.676	0.417	(.93)	
Work-family Conflict	4.258	1.387	0.414	-0.176	0.061	-0.306	-0.349	-0.231	(.85)

N = 250. Cronbach's alpha (internal consistency) estimates are reported in parentheses.

The path coefficients and t-values were reported to show the goodness of fit. The path from self-efficacy to stress showed statistical significance with values less than 0.05. Organizational justice to stress and work-family conflict to stress showed a statistical significance of less than 0.01. The results were reported in Table 17.

Table 17

Standardized Path Coefficients and Associated Significance Values (t values)

Paths	Standardized Path Coefficients	t-values
Self-efficacy to Stress	0.124	1.9822*
Personality to Stress	0.065	1.1356
Perceived Supervisory Support to Stress	0.008	0.0988
Perceived Colleague Support to Stress	0.014	0.2075
Organizational Justice to Stress	-0.237	-2.8899**
Work-family Conflict to Stress	0.384	6.6680**

$N = 250$. Statistically significant t values $> |1.96|$ * $p < .05$ ** $p < .01$

Table 18 shows goodness-of-fit indices for three models although the last model is of primary interest for the findings. The first model is the initial measurement model, also known as the confirmatory analysis (CFA). The chi-square value for the initial model was used as a baseline statistic to compare subsequent models to explain the need for the modifications. The initial model chi-square value was extremely large at 3346.36 showing 1462 degrees of freedom. All subsequent models displayed only small reductions in the chi-square value and degrees of freedom. The table supported the revisions made to the models as the models are becoming slightly improved having only the RMSEA scores fall into the acceptable fit range.

Table 18

Goodness-of-Fit Indices for Various Models, JD-R Model Study

Model	χ 2	df	Δχ 2	Δdf	SRMR	CFI	GFI	NFI	RMSEA	RMSEA CL90)
Initial Model	3346.36	1462			.077	.799	.656	.788	.072	.075 - .069
Revised Model 1	3202.21	1355	144.15	107	.078	.802	.656	.791	.074	.077 - .071
Revised Model 2	3089.55	1303	112.66	52	.078	.802	.658	.790	.074	.078 - .071
Revised Model 3	2957.12	1252	132.43	51	.078	.810	.661	.794	.074	.078 - .071

Table 18 Note: N = 250; χ2 = chi-square; df = degrees of freedom; SRMR = Standardized Root Mean Square Residual; CFI = Comparative Fit Index; GFI = Goodness of Fit Index; NFI = Non-normed Index ; RMSEA = Root Mean Square Error of Approximation; RMSEA CL90 = RMSEA 90% Confidence Limits

Path analysis was conducted for the study to assess the viability of the theoretical model testing elements of the Job-Demands Resource Theory model of Bakker and Demerouti (2007) adapted by Granziera et al. (2021). The analyses were conducted using PROC CALIS (maximum likelihood method of parameter estimation) based on the Variance-covariance matrix in SAS. The sample size of 250 participants provided sufficient power to reflect medium to large effect sizes. Goodness-of-fit indices for the various models were presented in Table 18. The chi-square statistic was reported to enable comparisons between the initial model or null model and subsequent revised models. This table also reported the Standardized Root Mean Square Residual (SRMR), the Goodness of Fit Index, (GFI), the Comparative Fit Index (CFI), the Non-normed Index (NFI), the Root Mean Square Error of Approximation (RMSEA), and 90% confidence limits for the RMSEA statistic (RMSEA CL90). Comparative fit values greater than .94 indicated a good fit between data and path models (Hu and Bentler 1999). SRMR and

RMSEA values less than .090 indicated acceptable fit was found. In addition, values that were less than .055 indicated good model fit (McDonald & Ho, 2002). Ideally, the full 90% range for the RMSEA was acceptable to ideal limits (Byrne 2009; McDonald & Ho, 2002). In accordance with theory, the initial theoretical JD-R model hypothesized that self-efficacy and personality would each significantly predict teacher stress as personal resources and job demands of organizational justice, perceived supervisory support, and perceived colleague support would also predict stress with the job demand of work-family conflict also predicting teacher stress. The six exogenous variables (Self-efficacy, Personality, Perceived Supervisory Support, Perceived Colleague Support, Organizational Justice, and Work-family conflict) were all assumed to be correlated. Estimated path coefficients for this initial model each differed significantly from zero, $\chi 2$ (7, N=250) = 3346.36, p < .01. Squared multiple correlation values reported small observed variances among the dependent variable.

The CFI and SRMR for this model did not suggest a good fit reporting (CFI = .80; SRMR = .077). However, the RMSEA =.072 was in the acceptable range indicating this had poor model fit. Additionally, the full range of 90% confidence limits for this RMSEA value fell outside of acceptable parameters (.079 $\geq$ RMSEA CL90 $\geq$ .069). The fit indices were provided to compare the fit. However, the Chi-Square value was extremely large meaning the overall fit of the model was poor. The Comparative fit (CFI) should have been between 0.9 and 1.0 so it showed a lower score as well.

Modification indices were then examined to ascertain if the suggested revisions were theoretically reasonable. First, there was a review of the effects in linear questions, to determine line equations that were not statistically significant (p < .001). A review of the t-values suggested the variable PE2 (survey item) within factor 3 was not a good indicator (.846) of the

personality factor of extroversion. Similarly, POE2 of factor 3 (.111) was also not a good indicator for Personality openness. Therefore, these path coefficients had to be removed as they were not statistically significant. In addition, a review of the squared multiple correlations table showed how much of the variance of the correlation between the factor and the specific survey item, essentially how much of the variance the construct was explaining in that survey item. The correlation for PE2 was almost close to 0 with a score of .0002 and similarity, again POE2 (.014). These items showed the lowest correlations. The error variances reported for these survey items are also high with PE2 (1.536) and POE2 (.681). Not only were the path coefficients not significant, but the correlations were very low or basically zero correlated to the personality factor. In addition, a review of the standardized effects in linear equations reported both factors again showed no statistical significance with values of PE2 (.846) and POE2 (.108).

The stepwise multivariate Wald test showed pathways that could be deleted to not drastically affect the overall fit indices. The Wald test suggested the paths LV18F3 (PE2) and LV26F3 (POE2) be removed which were the survey items previously reviewed confirming the elimination of these survey items. The Rank Order of Lagrange Multiplier (LM) statistic for paths from exogenous variables was also reviewed. The LM revealed paths that could be added to not drastically affect the fit indices by decreasing the chi-squared value. However, a rule of thumb of these analyses stated each survey item was assumed to have unidimensionality, essentially it should represent only one construct and not correlate with other factors. If a variable reflected more than one, then it was said to not be a good survey item. PCSEP was reporting representations of factor 6 (organizational justice) and factor 4 (perceived supervisory support) therefore these two variables were removed. The removal of these variables was completed in the Revised Model 1 which enabled all of the remaining variables to be statistically

significant.

T-values for only self-efficacy, organizational justice, and work-family conflict path coefficients were statistically significant ($p < .05$, $p < .01$). The resulting model, called "revised model 1," was then re-estimated. A chi-square difference test also confirmed that the deletion of these two variables resulted in a slight improvement in model fit. When comparing the initial model chi-square value to the revised model 1, the change in chi-square was reduced along with the degrees of freedom $\Delta\chi2$ ($\Delta df=107$) $= 144.15$, $p <.05$, $p < .01$.

The squared multiple correlation values were now all statistically significant. However, the goodness of fit statistics was still not good. The narrower the fit among the RMSEA lower and upper limits indicated better results. The SRMR was fair as the smaller the number the better fit. The RMSEA remained in the acceptable range (.074) but it was the only statistic reporting adequate values as the CFI is 0.802, the GFI was 0.656, the NFI was 0.791, and the SRMR was 0.078. The full 90% confidence interval for this statistic remained less than ideal (.077 $\geq$ RMSEA CL90 $\geq$ .071). Therefore, more modifications could be implemented. The examination was completed to determine if additional revisions would improve the model. Initially, a review of the Lagrange multiplier was completed. The variable PCSEP appeared as a suggestion from the initial model also reported in the revised model 1. Therefore, this must be removed from the revised model 1 as it was loading on two different factors (constructs).

With the new revision, the model was now called revised model 2. Table 18 reported a significant decrease in the chi-square value and degrees of freedom from the initial model with $\Delta\chi2$ ($\Delta df=52$) $= 112.66$, $p < .01$. Also, all goodness-of-fit indices except for RMSEA $= .074$ being acceptable were still reported values that were not within ideal parameters. The CFI $=$ 0.802, GFI $= 0.658$ stayed relatively the same, the NFI $= 0.790$ slightly decreased, SRMR $=$

0.078, and (.078 ≥ RMSEA CL90 ≥ .071). Even though the model was improving, there was not much change occurring. The reason for this was due to the sample size not being great enough. The survey window was extended from two weeks to over a month with the total number of complete responses only reaching 250 participants. The model fit could have been better if even 50 more participants had completed the survey. Therefore, a review of the indices must be completed again to ascertain if more revisions could improve the model fit.

A review of the effects of linear equations was no longer required as all variables were reported as statistically significant, and no parameter could be removed from the Wald tests. A review of the Lagrange Multiplier showed PSSF1 was loading on two different factors (F3 Personality) and (F5 Perceived Colleague Support) which was not acceptable. So, in the third round of revisions, these were removed resulting in the revised model 3. The chi-square value again was reduced $\Delta\chi2$ ($\Delta df=51$) = 132.43, p < .01 from the initial model as shown in Table 18.

The RMSEA score of 0.074 being acceptable was reported as the same value. The CFI was slightly increased at 0.810, the GFI = 0.661 slightly increased, the NFI = 0.794 slightly decreased, and the SRMR = 0.078, as (.078 ≥ RMSEA CL90 ≥ .071). Therefore, although slight improvements were occurring, there was not much going on with the additional revisions to the model fit. This was again due to the low sample size (250) and there were not many free parameters or degrees of freedom for the estimation. A review of the Lagrange Multiplier was again completed to determine if additional modifications were needed to complete the CFA Measurement model and there were not any survey items in the table that were loading on two different factors.

This explained that all the other survey items were unique and if more were opened it would not make sense because it would have complicated the model. Based on these findings,

the revised model 3 best represented the data. The revisions made to the initial model had slight

adjustments improving the model estimation. It was then proposed that the model in Figure 4 be

the accepted model. Therefore, this was the final CFA model and the initial SEM model. It was

recommended that the model be tested against larger sample sizes.

Assessing the statistical power of the model was initially completed to ensure poorly fit

models were rejected. The initial CFA model showed the correspondence between the indicator

variables and the latent constructs they were measuring to not be a good fit with the survey

items. While the study had 250 participants, which exceeded the minimum requirement of 200,

the fit was very poor (O'Rourke et al., 2013). The initial measurement model results were

reported in Table 18.

The effects in linear equations were shown in Table 19. O'Rourke et al. (2013) declared t-

values greater than 1.96 (or less than -1.96) were significant with a value of $p < 0.05$.

Variables were also statistically significant when values were greater than 2.58 at $p < 0.01$ (or

less than -2.58) (O'Rourke et al., 2013). All predictors were statistically significant for the

constructs except for Personality. Personality showed variables 17, 18, 22, and 26 were not

statistically significant.

Table 19

Effects in Linear Equations

Variable	Predictor	Parameter	Initial Model Estimate	Final CFA Estimate
TSW1	F1	LV1F1	0.44234	0.44210
TSW2	F1	LV2F1	0.53747	0.53747
TSSM1	F1	LV3F1	0.81413	0.81422
TSSM2	F1	LV4F1	0.77846	0.77828
TSSM3	F1	LV5F1	0.80676	0.80694
TSTR1	F1	LV6F1	0.44351	0.44345
TSTR2	F1	LV7F1	0.45929	0.45925
SE	F2	LV8F2	0.42690	0.42667

Variable	Predictor	Parameter	Initial Model Estimate	Final CFA Estimate
SEIS2	F2	LV9F2	0.50829	0.50810
SEIS3	F2	LV10F2	0.58448	0.58398
SECM1	F2	LV11F2	0.80604	0.80643
SECM2	F2	LV12F2	0.80156	0.80180
SECM3	F2	LV13F2	0.83028	0.83031
SESE1	F2	LV14F2	0.75947	0.75915
SESE2	F2	LV15F2	0.73403	0.73404
SESE3	F2	LV16F2	0.73102	0.73096
PE1	F3	LV17F3	-0.20371	-0.20854
PE2	F3	LV18F3	-0.01453	-
PA1	F3	LV19F3	0.45872	0.45009
PA2	F3	LV20F3	-0.50193	-0.49810
PC1	F3	LV21F3	-0.28989	-0.28771
PC2	F3	LV22F3	0.28643	0.28567
PN1	F3	LV23F3	0.48601	0.49396
PN2	F3	LV24F3	-0.57126	-0.58032
POE1	F3	LV25F3	0.48059	0.46975
POE2	F3	LV26F3	0.11935	-
PSSEP1	F4	LV27F4	0.90524	0.90882
PSSEP2	F4	LV28F4	0.83754	0.84118
PSSEGO1	F4	LV29F4	0.92488	0.92513
PSSEGO2	F4	LV30F4	0.93113	0.93017
PSSEW1	F4	LV31F4	0.87219	0.87092
PSSEW2	F4	LV32F4	0.90339	0.90199
PSSEW3_Reverse	F4	LV33F4	0.56510	0.56549
PSSEW4_Reverse	F4	LV34F4	0.72996	0.72746
PSSF1	F4	LV35F4	0.70954	-
PCSEP1	F5	LV36F5	0.83259	-
PCSEW1	F5	LV37F5	0.87227	0.86594
PCSEW2	F5	LV38F5	0.85162	0.84564
PCSEW3_Reverse	F5	LV39F5	0.57419	0.58204
PCSEW4_Reverse	F5	LV40F5	0.64644	0.65255
PCSSF1	F5	LV41F5	0.76371	0.78178
PCSGO1	F5	LV42F5	0.89308	0.89310
OJPJ1	F6	LV43F6	0.58121	0.58108
OJPJ2	F6	LV44F6	0.63279	0.63255
OJDJ1	F6	LV45F6	0.55915	0.55904
OJDJ2	F6	LV46F6	0.67667	0.67674
OJDJ3	F6	LV47F6	0.66774	0.66771
OJINT1	F6	LV48F6	0.96399	0.96400

Variable	Predictor	Parameter	Initial Model Estimate	Final CFA Estimate
OJINT2	F6	LV49F6	0.96491	0.96497
OJINF1	F6	LV50F6	0.77459	0.77464
OJINF2	F6	LV51F6	0.74860	0.74847
WFC1	F7	LV52F7	0.92512	0.92489
WFC2	F7	LV53F7	0.77559	0.77556
WFC3	F7	LV54F7	0.93122	0.93144
WFC4	F7	LV55F7	0.66437	0.66443
WFC5	F7	LV56F7	0.35211	0.35215

The initial model was previously shown in Figure 4. The Confirmatory Analysis used the theoretical constraints informing the program of which items were aligned to which construct. However, the final CFA or initial Structural Equation Model was not a good fit. The CFA continued to correct for measurement errors with a review of the path coefficients and standardized errors to identify which survey items were not a good indicator of the construct. The measurement error could be due to an item not running well or the misinterpretations of the question by respondents. Multicollinearity occurs when there are items within the constructs that were highly correlated and potentially should be removed. Removal of variables (survey items) was a judgmental process. There must be two survey items for each construct to be able to run the analysis.

In the model, V1-V56 were the survey items. F1-F7 represented the constructs. All of the 56 survey items were used in the initial CFA model which converged and produced maximum likelihood estimates and fit indices. Although a poor-fitting model was concluded, most of the survey items were statistically significant having values <.001. The correlation coefficients for each variable and construct were also shown in Figure 4. The error variance of the variable (survey item) was also listed in the model and represented by E1-E56. The CFA corrected for the measurement error by reviewing which specific indicator variables had low correlations also

called path coefficients and high standardized error (bias). Measurement error was the bias that was created due to misinterpretation of meanings in survey items by respondents which reduced the capacity of the indicator variables to fully represent the attributes of the construct being measured.

Figure 4

CFA/Initial Model
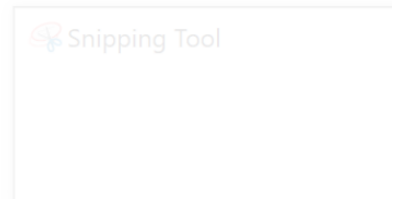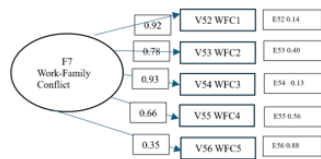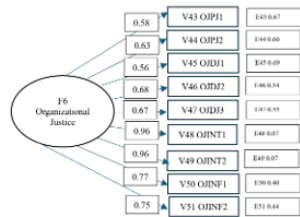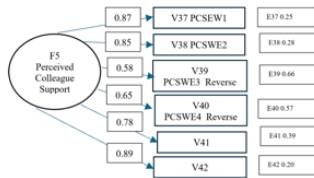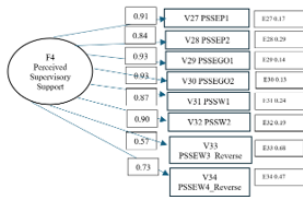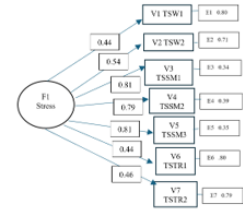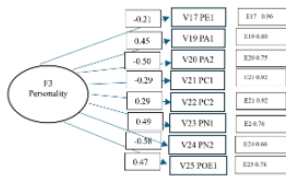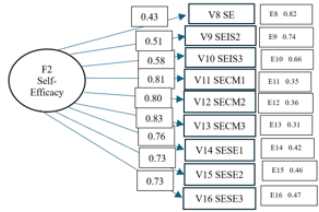
The Wald test was conducted to determine paths that could be deleted and not affect the goodness of fit negatively (O'Rourke et al., 2013). Based on these suggestions, variable 18 was removed. The model was rerun and the removal of variable 26 was conducted. The Wald test was based on the greatest correlation scores in Table 20.

Table 20

Stepwise Multivariate Wald Test

Parm	Cumulative Statistics		
	Chi-Square	DF	Pr > ChiSq
LV18F3	0.03753	1	0.9482
LV26F3	2.58376	2	0.1875

In the first iteration, the variable PCSEP1 was showing correlations with both F6 and F4 so it was removed. The second iteration had variable PSSF1 correlations with F3 and F5 so those were also removed. In the final iteration the LM suggested removing OJDJ3 as it correlated with F2 and F3 but this suggestion was not ranked high on the scale so, it was not removed and the model was retained as the final CFA model. Table 21 showed the variable PCSEP1 was removed in the first iteration and PSSF1 was removed in the second round of modifications.

Table 21

LaGrange Multiplier paths from Exogeneous Variables Removed

To	From	LM Stat	Pr > Chisq	Parm change
*PCSEP1	F6	170.39248	<.0001	2.53932
*PCSEP1	F4	45.69941	<.0001	0.32941
**PSSF1	F3	541.10394	<.0001	19.19771
**PSSF1	F5	35.07759	<.0001	2.27369

*1st Iteration **2nd Iteration; LM Stat =Lagrange Multiplier statistic, Pr > Chisq = p-value, Parm change = parameter data change amount

To continue to improve the model fit, a review of the standardized results for covariances

among exogenous variables was completed. Table 22 showed the results from the final CFA model.

Table 22

Final CFA Standardized Results for Covariances Among Exogenous Variables

Var1	Var2	Parameter	Estimate	Standard Error	t-value	Pr > (t)
F1	F2	CF1F2	-0.15718	0.06963	-2.2575	0.0240
F1	F3	CF1F3	-0.42283	0.07334	-5.7653	<.0001
F1	F4	CF1F4	-0.25985	0.06498	-3.9989	<.0001
F1	F5	CF1F5	-0.20017	0.06825	-2.9327	0.0034
F1	F6	CF1F6	-0.29101	0.06375	-4.5648	<.0001
F1	F7	CF1F7	0.39807	0.06035	6.5961	<.0001
F2	F3	CF2F3	0.42141	0.07115	5.9226	<.0001
F2	F4	CF2F4	0.24592	0.06361	3.8662	0.0001
F2	F5	CF2F5	0.37585	0.06002	6.2617	<.0001
F2	F6	CF2F6	0.37538	0.05838	6.4298	<.0001
F2	F7	CF2F7	-0.15029	0.06704	-2.2416	0.0250
F3	F4	CF3F4	0.33412	0.07278	4.5905	<.0001
F3	F5	CF3F5	0.28908	0.07625	3.7910	0.0002
F3	F6	CF3F6	0.46124	0.06660	6.9252	<.0001
F3	F7	CF3F7	-0.30990	0.07496	-4.1341	<.0001
F4	F5	CF4F5	0.37443	0.05818	6.4355	<.0001
F4	F6	CF4F6	0.74634	0.03020	24.7101	<.0001
F4	F7	CF4F7	-0.24677	0.06275	-3.9328	<.0001
F5	F6	CF5F6	0.40059	0.05676	7.0578	<.0001
F5	F7	CF5F7	-0.32547	0.06139	-5.3015	<.0001
F6	F7	CF6F7	-0.23225	0.06304	-3.6838	0.0002

The squared multiple correlations were shown in Table 23 with the initial and final CFA model R^2 values reported along with the final CFA error and total variance. The R^2 values accounted for the variance that existed between the variable and construct it was explaining. The variables removed in the final CFA were reported as (-) in the table.

Table 23

Squared Multiple Correlations

Parameter	Variable	Final CFA Error Variance	Final CFA Total Variance	Initial Model R-squared	Final CFA Model R-squared
TSW1	V1	0.97146	1.20745	0.1957	0.1955
TSW2	V2	0.86436	1.21549	0.2889	0.2889
TSSM1	V3	0.41615	1.23471	0.6628	0.6630
TSSM2	V4	0.56156	1.42427	0.6060	0.6057
TSSM3	V5	0.48320	1.38514	0.6509	0.6512
TSTR1	V6	1.08192	1.34676	0.1967	0.1967
TSTR2	V7	0.96212	1.21928	0.2110	0.2109
SE	V8	0.36602	0.44749	0.1822	0.1820
SEIS2	V9	0.29912	0.40321	0.2584	0.2582
SEIS3	V10	0.29811	0.45239	0.3416	0.3410
SECM1	V11	0.20146	0.57613	0.6497	0.6503
SECM2	V12	0.16924	0.47390	0.6425	0.6429
SECM3	V13	0.16029	0.51606	0.6894	0.6894
SESE1	V14	0.20340	0.48006	0.5768	0.5763
SESE2	V15	0.26820	0.58154	0.5388	0.5388
SESE3	V16	0.32085	0.68898	0.5344	0.5343
PE1	V17	1.59540	1.66794	0.0415	0.0435
PE2	V18	-	-	0.000211	-
PA1	V19	0.79433	0.99613	0.2104	0.2026
PA2	V20	0.88275	1.17404	0.2519	0.2481
PC1	V21	0.98185	1.07046	0.0840	0.0828
PC2	V22	0.47106	0.51292	0.0820	0.0816
PN1	V23	1.05173	1.39118	0.2362	0.2440
PN2	V24	1.06245	1.60194	0.3263	0.3368
POE1	V25	1.03465	1.32761	0.2310	0.2207
POE2	V26	-	-	0.0142	-
PSSEP1	V27	0.52083	2.99257	0.8195	0.8260
PSSEP2	V28	0.50495	1.72684	0.7015	0.7076
PSSEGO1	V29	0.40312	2.79679	0.8554	0.8559
PSSEGO2	V30	0.42224	3.13287	0.8670	0.8652
PSSEW1	V31	0.62430	2.58508	0.7607	0.7585
PSSEW2	V32	0.54718	2.93541	0.8161	0.8136
PSSEW3_Reverse	V33	2.52540	3.71259	0.3193	0.3198
PSSEW4_Reverse	V34	1.63157	3.46546	0.5328	0.5292
PSSF1	V35	-	-	0.5034	-
PCSEP1	V36	-	-	0.6932	-
PCSEW1	V37	0.31498	1.25913	0.7608	0.7498
PCSEW2	V38	0.47909	1.68162	0.7253	0.7151
PCSEW3_Reverse	V39	2.14569	3.24500	0.3297	0.3388

Parameter	Variable	Final CFA Error Variance	Final CFA Total Variance	Initial Model R-squared	Final CFA Model R-squared
PCSEW4_Reverse	V40	1.19097	2.07423	0.4179	0.4258
PCSSF1	V41	0.56277	1.44739	0.5833	0.6112
PCSGO1	V42	0.26693	1.31894	0.7976	0.7976
OJPJ1	V43	0.49796	0.75182	0.3378	0.3377
OJPJ2	V44	0.58413	0.97375	0.4004	0.4001
OJDJ1	V45	0.61182	0.88996	0.3126	0.3125
OJDJ2	V46	0.50886	0.93881	0.4579	0.4580
OJDJ3	V47	0.50993	0.92018	0.4459	0.4458
OJINT1	V48	0.06616	0.93560	0.9293	0.9293
OJINT2	V49	0.06771	0.98353	0.9310	0.9312
OJINF1	V50	0.38091	0.95243	0.6000	0.6001
OJINF2	V51	0.45245	1.02877	0.5604	0.5602
WFC1	V52	0.42959	2.97118	0.8558	0.8554
WFC2	V53	1.16651	2.92716	0.6015	0.6015
WFC3	V54	0.43628	3.29484	0.8672	0.8676
WFC4	V55	1.91178	3.42291	0.4414	0.4415
WFC5	V56	2.30694	2.63351	0.1240	0.1240

Note: Removed items would not report values so they are represented with a (-).

To calculate Cronbach's alpha composite reliability the following formula was utilized.

$(SL_i)^2 / ((\sum L_i)^2 + Var(E_i))$ where S is the sum, Li stands for standardized factor loadings for that factor, and Var(Ei) = error variance associated with the individual indicator variable. This value was calculated for each construct. For stress, Cronbach's alpha reliability score was .814. The reliability scores are reported in Table 24.

To calculate the variance extracted estimates also reported in Table 24, the following formula was used $(\sum L_i)^2 / ((\sum L_i)^2 + \sum Var(E_i))$. This showed how much of the variance was being explained by the survey items towards the construct. Fornell and Larcker (1981) found extracted variance estimates smaller than .50 indicated the measurement error was larger than the captured variance of a factor. Additionally, Fornell and Larcker (1981) encouraged constructs variances should be greater than .49 as smaller estimates question the construct and indicator variables validity.

Discriminant reliability used chi-squared difference test to indicate when different instruments were used to measure unrelated or divergent constructs with which the correlation coefficients between the measures were weak or strongly negative. The initial model had a Chi-square value of 3346 with 1462 degrees of freedom and the final model was 2957 with 1252 degrees of freedom. So, 3346 – 2957 = 389 was the difference in Chi-squared values. The degrees of freedom change was 2957 – 1252 = 210. A review of the Chi-squared distribution table listed values to only 100 degrees of freedom. Following the distribution list at a .05 interval and 100 degrees of freedom, a critical value of 124.34 existed. O'Rourke et al. (2013) found discriminant validity was demonstrated when chi-square is significantly lower for the first model. This meant that the best model was the one that had the two constructs viewed as distinct (but correlated) factors (O'Rourke et al., 2013). The Chi-square was found to be 389 and greater than the critical value of 124, therefore the chi-square test was rejected. This meant the difference between the two models was clearly significant at .01, the standard measurement model in which the factors were viewed as distinct but correlated constructs provided a significantly better fit than the fit found by the unidimensional model. The test supported the discriminant validity of perceived supervisory and colleague support.

The variance extracted test concluded all factors were good (>.50) except for personality with a value of .002. The outputs are provided in Table 23. The Chi-square difference test for discriminant validity was implemented. The factors F4 and F5 were constrained and are = 1 in the covariance statement. These factors had the highest covariance value of 0.63229. The Final CFA model/initial SEM model chi-square = 2957.1237 had 1253 degrees of freedom. The SEM model chi-square was = 2964.0325 with 1254 degrees of freedom. The difference in chi-square was = 6.9088 and the difference in degrees of freedom = 1. The critical value at 1

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degree of freedom was = 3.84. Therefore, a rejection of the null was determined since the critical value of 3.84 was less than the calculated chi-square value of 6.9088 which indicated that F4 and F5 were distinct factors. Convergent reliability could be explained when scores from different instruments used to measure the same latent construct were found to be highly correlated (O'Rourke et al., 2013). Stress was negatively correlated with organizational justice.

Table 24

Composite Reliability and Variance Extracted Estimates

Construct and Indicators	Standardized Loading	Indicator Reliability[a]	Error Variance[b]	Variance Extracted Estimate
Stress (F1)		.814		.402
TSW1	.442	.196	.804	
TSW2	.537	.289	.711	
TSSM1	.814	.663	.337	
TSSM2	.778	.606	.394	
TSSM3	.807	.651	.349	
TSTR1	.443	.197	.803	
TSTR2	.459	.211	.789	
Self-efficacy (F2)		.893		.490
SE	.427	.182	.818	
SEIS2	.508	.258	.742	
SEIS3	.584	.341	.659	
SECM1	.806	.650	.350	
SECM2	.802	.643	.357	
SECM3	.830	.690	.310	
SESE1	.759	.576	.424	
SESE2	.734	.539	.461	
SESE3	.731	.534	.466	
Personality (F3)		.002		.183
PE1	-.209	.044	.957	
PA1	.450	.203	.797	
PA2	-.498	.248	.752	
PC1	-.288	.083	.917	
PC2	.286	.082	.918	
PN1	.494	.244	.756	
PN2	-.580	.337	.663	
POE1	.470	.221	.779	

Construct and Indicators	Standardized Loading	Indicator Reliability[a]	Error Variance[b]	Variance Extracted Estimate
Perceived Supervisory Support (F4)		.950		.709
PSSEP1	.909	.826	.174	
PSSEP2	.841	.708	.292	
PSSEGO1	.925	.856	.144	
PSSEGO2	.930	.865	.135	
PSSEW1	.871	.759	.241	
PSSEW2	.902	.814	.186	
PSSEW3_Reverse F4	.565	.320	.680	
PSSEW4_Reverse	.727	.529	.471	
Perceived Colleague Support (F5)		.900		.606
PCSEW1	.866	.750	.250	
PCSEW2	.846	.715	.285	
PCSEW3_Reverse	.582	.339	.661	
PCSEW4_Reverse	.653	.426	.574	
PCSSF1	.782	.611	.388	
PCSGO1	.893	.798	.202	
Organizational Justice (F6)		.914		.553
OJPJ1	.581	.338	.662	
OJPJ2	.633	.400	.600	
OJDJ1	.560	.313	.687	
OJDJ2	.677	.458	.542	
OJDJ3	.667	.446	.554	
OJINT1	.964	.929	.071	
OJINT2	.965	.931	.069	
OJINF1	.775	.600	.400	
OJINF2	.748	.560	.440	
Work-Family Conflict (F7)		.863		.578
WFC1	.925	.855	.145	
WFC2	.776	.602	.399	
WFC3	.931	.868	.132	
WFC4	.664	.442	.559	
WFC5	.352	.124	.876	

Note a = calculated as the square of the standardized factor loading. B = calculated as 1- the indicator reliability.

Overview of the Analysis

A review of the data was analyzed by using the SAS CALIS procedure. The covariance structure models with multiple indicators were tested for all six latent constructs. The analysis began with the Anderson and Gerbing (1988) two-step procedure.

Initially, the confirmatory factor analysis developed a measurement model that demonstrated an acceptable fit to data. The second step allowed the initial measurement model to be iterated to create a structural equation model that best represented the theoretical model initially developed. The theoretical model was tested and revised to create a statistically acceptable model with the best model fit.

The Measurement Model

A measurement model accounted for the relationship between latent variables, or factors (constructs) and the manifest indicator variables (survey items) that measure those latent variables. The model used in the current study consisted of six latent variables corresponding to the JD-R Model of Job Demands Resource Theory (Bakker & Demerouti, 2007). The constructs used were Personality and Self-Efficacy as personal resources, Work-family conflict as a job demand, and Organizational Justice, Percevied Supervisory and Colleague Support as job resources with Stress as the dependent variable (N = 250). All six latent variables were measured by at least two manifest or indictor variables as required for covariance structures analysis (i.e., latent variable models).

The Initial Measurement Model. The latent variables were indicated with the letter "F" and the manifest variables were represented with the letter "V" in addition to the identifier of the survey item within each construct. For example, WFC1 represented the construct work-family conflict and 1 represented the first survey item. Additionally, OJPJ1 represented the

construct organizational justice and the type of justice being tested which was procedural

justice with question 1, the first of this type of survey item. This form of identifying the

variables with labels was based off Bentler (1989).

Table 23 showed the labels of the constructs and indicator variables. The figure showed

that the stress construct (F1) was measured by manifest variables V1 through V7, the self-

efficacy construct (F2) was measured by manifest variables V8- through V16, and so forth.

The measurement model computed in the first stages of this analysis did not report directional

relationships between the latent constructs but did report directional paths between latent

variables. Measurement models estimated covariance that connect each latent variable with

every other latent variable. In a diagram, a curved, two-headed arrow would join variable to

other variables (O'Rourke et al., 2013). Essentially, the measurement model was equivalent to

the confirmatory factor analysis model. Therefore, each latent construct was open to covary

amongst the latent constructs (O'Rourke et al., 2013). This measurement model was estimated

using the maximum likelihood method, $\chi2$ (df=1462) = 3346.35, p < .01. Statistical Power

value was 0.80 based on final CFA model (revision 3) chi-square degrees of freedom = 1252

and sample size = 248. The power was calculated with the SAS syntax provided by

MacCallum et al. (1996).

Revised Measurement Model 1. The Wald test confirmed two variables that were

reported in the effects of linear equations, the multiple squared correlations, and the

standardized effects of linear equations should be removed. The variables are LV18F3 (PE2,

.8464) and LV26F3 (POE2, .1078) both reported non statistical significance. Therefore, the

variables were removed.

The removal of the previous variables showed reductions in the chi-square value as it

was reduced by 144.15 points and the degrees of freedom reduced by 107. However, only the RMSEA reported acceptable values. Therefore, more modifications to determine a better fit were needed. The findings are shown in Table 18.

Revised Measurement Model 2. All parameters in the model were significant and there were no parameters that needed to be dropped in the model. A review of the Lagrange Multiplier showed that PCSEP1 was loading on two separate factors (F4, Perceived Supervisory Support and F6, Organizational Justice) which was not allowable. Therefore, this variable had to be removed. This reduced the chi-square value and degrees of freedom but again only the RMSEA (.074) was found to be in the acceptable range. Table 18 reported the complete results. Therefore, more modifications were needed to improve the overall fit of the model.

Revised Measurement Model 3. A review of the new model's statistics showed the Lagrange multiplier suggested removing another variable loading on more than one construct. The variable PSSF1 was correlated to (F3) Personality and (F5) Perceived Colleague Support. Therefore, this variable was removed resulting in a lower chi-square value and degree of freedom, yet only the RMSEA value was found to be in the acceptable range. Continued review of the data showed no other loadings on other constructs having the revised measurement model 3 be acceptable and the final CFA model which in turn was the initial SEM model. Table 18 shows the complete findings.

In Table 23, the reliability estimates for response to the observed or indicator variables (the square of the factor loadings) were listed. The composite reliability values for latent constructs were also reported. Composite reliability was a measure of internal consistency that is equivalent to a coefficient alpha (O'Rourke et al., 2013). The constructs reported adequate reliability for all constructs except for Personality (.019) which fell outside of the greater than

144

0.70 range. Table 23 also explained the extracted variance estimates for each indicator

variable. This value was the amount of variance within each construct due to the inclusion of

the measurement error. Fornell and Larcker (1981) suggested values to be greater than 0.50.

For these constructs, perceived supervisory and colleague support, organizational justice, and

work-family conflict met the criteria. Therefore, the revised measurement model 3 was

retained as the study's final measurement model against the stress construct.

The Structural Model

The Initial Structural Model. With structural equation modeling (SEM), specified

directional paths between latent factors could show causal relationships. As the final CFA model,

the initial SEM model existed, the goodness-of-fit indices were not ideal. Therefore,

modifications should have occurred to improve the overall fit of the model. The Chi-square value

was 2957.12 with 1253 degrees of freedom. However, the RMSEA (.074) has remained as the

only acceptable value. Therefore, adjustments were made.

The review of effects of linear equations explained that self efficacy (F2), Supervisory

support (F4), Perceived Colleague support (F5), and organizational justice (F6) were not

significant predictors for stress as causal relationships between the constructs. However, (F3,

.004) Personality and (F7, <.0001) Work-family conflict were predicting stress. All six

exogenous variables were explaining 27 percent (26.75) of the variance in stress (F1). The Wald

test suggested that pathways be removed. However, removal of these pathways of the latent

constructs cannot be completed because there was just one endogenous construct here. With the

review of exogeneous variables rank order Lagrange Multiplier table, the variable TSW2 was

loading on two different factors (F7, 0.190 and F2, 0.363) and was therefore removed. It was

suggested that removal of parameters was better than adding new parameters when modifying

models (Bentler & Chou, 1987). Table 24 shows the findings in detail.

The chi-square value for the measurement model was subtracted from the chi-square

value for the theoretical model with the resulting difference of (2957.1237 - 2858.1029 = 99.02).

The review of the difference between the models was conducted by using the degrees of

freedom. The change in degrees of freedom or Δdf was (1252 – 1203 = 49). The df of 49 fell

between two critical chi-square values of 40 degrees reporting =55.758 and 50 degrees = 67.505

(p < .01). This confirmed the significance of the chi-square was the actual value was greater than

this range listed above. In other words, the theoretical model was justified because the SEM

modification led to a significant decrease in the chi-square value. This justified the model

modification and improved the overall model fit to the data.

Revised Structural Model 1. The new model of recent revisions reported the reduced

Chi-square value to 2858.10 with 1203 degrees of freedom. The RMSEA had not changed at

(.074) still reported in the acceptable range but the overall fit of the model was still not good. A

review of the statistics suggested removal of pathways but that could not be completed as there

was only one dependent construct used in the study. Therefore, the revised model 1 was retained

as the final SEM model even though an acceptable fit was not determined.

The highest correlation of a survey item to a particular construct was used to then free the

parameter. So, for stress, the TSSM1 had the highest correlation 0.66 out of all the other survey

items. That explained why it had been freed. Similarly, for self-efficacy, SECM3 had the highest

R-squared value (0.69), Personality had PN2 (0.34), Perceived Supervisory Support PSSEGO2

(0.87), Perceived Colleague Support PCSGO1 (0.80) , Organizational Justice OJINT1 (0.93),

and Work-family conflict WFC3 (0.87).

Table 25

Structural Model Fit Indices

Model	χ 2	df	Δχ 2	Δdf	SRMR	CFI	GFI	NFI	RMSEA	RMSEA CL90)
Initial SEM Model	2957.12	1253	132.43	51	.078	.806	.661	.794	.074	.071 - .077
Final/Revised Model 1	2858.10	1203	98.9	50	.078	.809	.665	.797	.074	.071 - .078

Note: N 250; χ2 = chi-square; df = degrees of freedom; SRMR = Standardized Root Mean Square Residual; AGFI = Adjusted Goodness of Fit Index; CFI = Comparative Fit Index; GFI = Goodness of Fit Index; NFI = Non-normed Index ; RMSEA = Root Mean Square Error of Approximation; RMSEA CL90 = RMSEA 90% Confidence Limits

The RMSEA decreased however, the Chi-squared value was still extremely high. Therefore, modifications for this model could be reviewed to determine if a better fit model can be used. First, a review of the effects of linear equations showed F2 (0.524) , F4 (0.588), F5 (0.907), and F6 (0.559) were not statistically significant. This explained that self-efficacy (F2), Perceived Supervisory support (F4), Perceived Colleague support (F5), and Organizational Justice (F6) were not significant predictors for stress as causal relationships between the constructs. However, (F3, 0.004) Personality and (F7, < 0.0001) Work-family conflict were predicting stress.

A review of the squared multiple correlations table showed all six exogenous variables were explaining 27 percent (26.75) of the variance in stress (F1). A review of the standardized equations reported the same results with only Personality (F3) and Work-family conflict (F7) as predictors of stress with statistical significance.

The Wald test suggested that pathways be removed. However, removal of these pathways

of the latent constructs could not be completed because there was just one endogenous construct here. If these pathways were removed, then these factors could not be related to each other because our initial theoretical model did not specify pathways between these six factors. All these six factors were only predicting stress, but none of these were predicting each other. So essentially, self-efficacy was not predicting personality. This was a poor fitting model because the study only looked at how the constructs predicted stress as opposed to reviewing how the constructs influenced each other.

For example, a person who had reported high levels of self-efficacy would be able to manage their family conflict comparatively better than those who have a low self-efficacy score. On the same note, a person with a high level of supervisory support and coworker support, those who have that support it would be correlated. In such situations, maybe those individuals would be able to handle their work-family conflict better. So, the pathways were not able to be removed suggested in the Wald test because then these constructs would be just hanging by themselves, and they would not be connected to any other construct. Next, there was a review of exogeneous variables rank order Lagrange Multiplier table. The variable TSW2 was loading on two different factors (F7 = 0.190 and F2 = 0.363). This was the biggest priority, so it was removed. The results showed there was not much change occurring. The CFI was 0.80 and the Chi Square showed a big decrease in value. The RMSEA continued to be acceptable (0.074) but the other values did not fall into acceptable ranges. There were not any other survey items showing up as suggestions to remove so this resulted in the Revised SEM model being accepted as the Final SEM model. Therefore, this was a limitation in the initial theoretical model in that it looked at one endogenous construct, which was stress. In addition, the factor of social desirability could have also been in play. Social desirability occurred when a respondent does not respond

accurately to a survey question by underreporting undesirable traits and perspectives while

overreporting findings that can make the respondent be viewed in a more positive light (Latkin et

al., 2017).

The Chi-Squared difference test 71.42 critical value based on the chi-square distribution

table, showed the revised model was a better fit than the initial structural model. Figure 5 shows

the final SEM model.

Figure 5

SEM Final Model
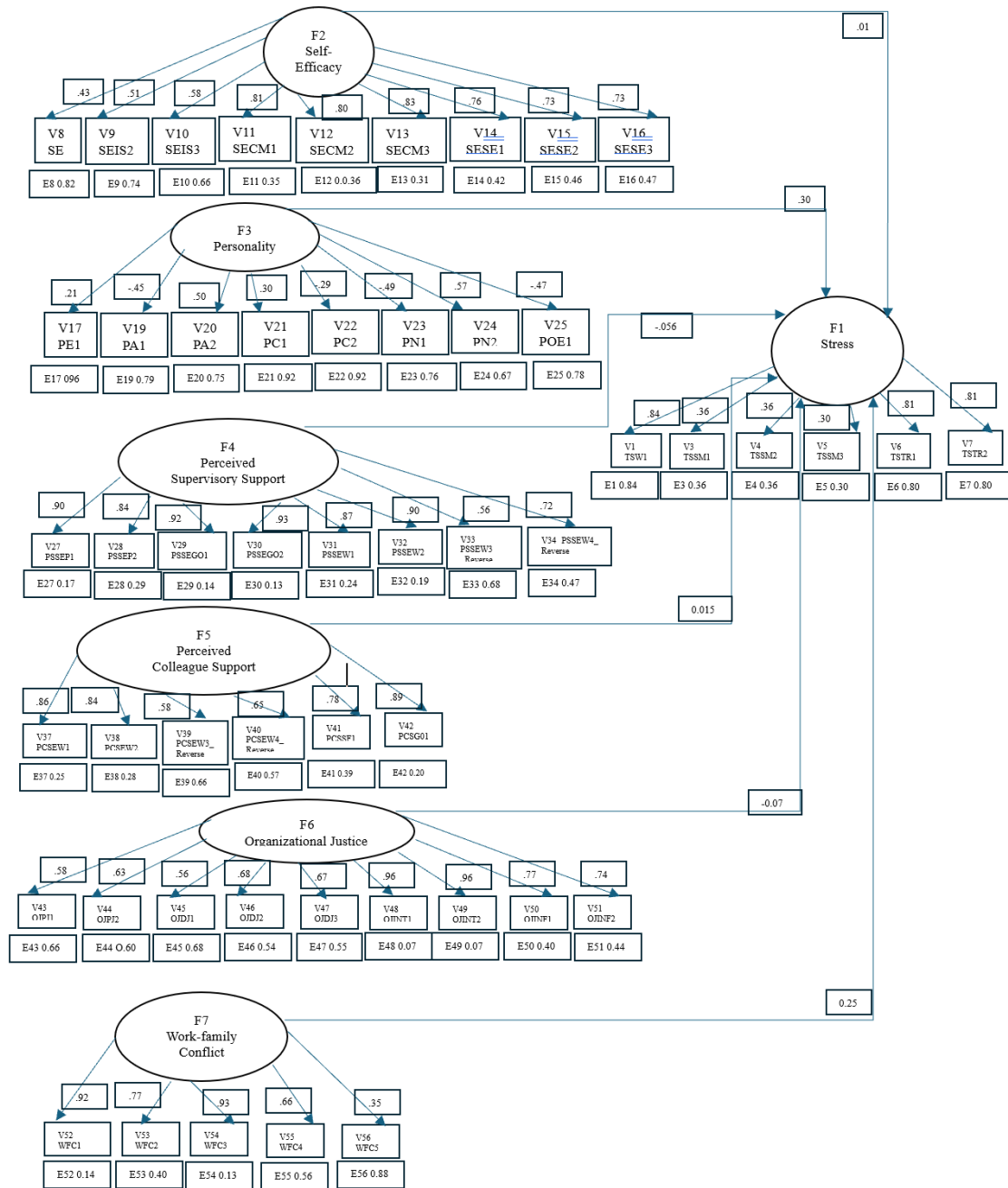
Quantitative Research Question Findings

The research questions RQ1, RQ3, and QR4a and QR4b were found to not be statistically

significant, and the null hypotheses were accepted. This meant self-efficacy, organizational

justice, and perceived supervisory and colleague support were not found to be predictors of teacher stress. However, research questions RQ2 and RQ5 were found to be statistically significant, and the null hypotheses were rejected. This verified that Personality and Work-Family Conflict were found to be predictors of stress.

To answer RQ6 the interactions between individual and contextual factors were reviewed. The findings were calculated based on only the statistically significant constructs which included one individual factor and one contextual factor. The results showed the interactions between the contextual (WFC) and individual (Personality) factors were also statistically significant constructs. The interaction between Personality and Work-family conflict was found to be statistically significant ($p < .001$) in increasing stress levels for teachers. Table 26 shows the model summary of the interaction of Personality and Work-family conflict. The Personality composite score and the interaction between the two constructs were only used because the initial analysis had very high correlations between the WFC composite score and the interaction term (0.409). The variance inflation factor for collinearity for WFC composite was very high at 92.319. The Durbin-Watson value (1.854) showed a good score and the independence of observations which fulfilled an assumption with a regression model. Therefore, these statistics explained that when certain Personality factors interact with WFC, the stress of teachers increased. The R-squared change value was 0.175 and the adjusted R square was 0.168. The variance explained by Personality, WFC, and the interaction of both terms as independent variables was 16.8%.

Table 26

Model Summary

Model	R	Adjusted R Square	Std Error of the Estimate	R Square Change	F Change	df 1	df 2	Durbin-Watson
1	.418[a]	.168	.71740	.175	26.146	2	247	1.854

a. Predictors: (Constant), Interaction_Pers_WFC, Personality Composite b. Dependent Variable: Stress Composite

Table 27 shows the ANOVA multiple linear regression statistics on the Personality and Work-family composite scores. This was a statistically significant model (<. 001). The F-value reported 26.146 and the significant F change was < .001.

Table 27

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.912	2	13.456	26.146	< .001[b]
	Residual	127.122	247	.515		
	Total	154.034	249			

a. Dependent Variable: Stress Composite b. Predictors: (Constant), Interaction_Pers_WFC, Personality

Table 28 shows the coefficients of the personality composite score and the interaction term of both personality and WFC. The dependent variable stress and the interaction term showed statistical significance. The correlations of the individual composite of personality were not significantly impacting stress, but when the interaction term was added, this interaction term was also significant. The standardized Beta coefficient for personality was -0.094 and the interaction term was 0.442 with statistical significance at < 0.001. This meant that when the personality factor interacts with WFC the teacher's stress level can increase by 0.442 units.

Table 28

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Standard Error	Beta	1	Sig.	Tolerance	VIF
1	(Constant)	2.981	.450		6.623	< .001		
	Personality	-.221	.145	-0.094	-1.520	.130	.871	1.148
	Interaction _Pers_WFC	.070	.010	.442	7.145	< .001	.871	1.148

a. Dependent Variable: Stress Composite

A review of the construct composite scores in relation to the demographics are shown in Table 29. Females were largely affected in all subgroups. The age group 18-25 years old were affected most with three out of the seven constructs reporting the highest scores. The Asian population was most affected with scores being reported the highest in five out of seven constructs. The level of education was fairly consistent with each having two constructs being reported as the highest except for those who held an Education Specialist degree. Novice teachers reported the highest scores with four out of seven constructs. Elementary teachers had five out of the seven constructs reported with the highest composite scores. Teachers of testable content had the highest scores four out of seven times and those serving in a supervisory role five times out of seven reported the highest composite scores. These were the subgroups that need the most attention.

Table 29

Construct Composite Scores by subgroup most affected

Subgroup most affected By construct	Gender	Age	Ethnicity	Level of Education	Level of Teaching Experience	Academic Setting	Teaching Testable Content Role	Supervisory Role
Teacher Stress	Female 3.2893	Over 65 3.4286	Other 3.6735	Doctorate 3.9810	Veteran 3.2754	Elementary 3.3115	Yes 3.3004	Yes 3.2704
Self-Efficacy	Female 3.1850	56-65 3.2730	Black 3.2298	Masters 3.1952	Veteran 3.1672	Middle 3.1651	No 3.1387	Yes 3.1825
Personality	Male 3.3231	26-35 3.3857	Asian 3.3857	Bachelors 3.3412	Novice 3.3694	High school 3.3206	Yes 3.3258	No 3.2941
Perceived Supervisory Support	Male 4.6241	18-25 4.7164	Asian 5.2338	Masters 4.6527	Novice 4.6605	Elementary 4.9080	No 4.6049	Yes 4.6169
Perceived Colleague Support	Female 4.9639	18-25 5.0933	Asian 5.2222	Bachelors 5.0052	Novice 5.0998	Elementary 4.9946	Yes 4.9485	No 4.9530
Organizational Justice	Female 3.7851	18-25 3.9644	Asian 4.0635	Education Specialist 3.8405	Novice 3.8617	Elementary 4.0000	No 3.7988	Yes 3.8492
Work-Family Conflict	Female 4.3360	36-45 4.4613	Asian 4.7429	Doctorate 4.5867	Mid-Career 4.4500	Elementary 4.4000	Yes 4.3464	Yes 4.4643

Quantitative Summary

The results found as separate constructs self-efficacy, organizational justice, and work-family conflict were statistically significant rejecting the null hypotheses for RQ1, RQ3, and RQ4a and RQ4b. However, as predictors of stress only Personality and work-family conflict were found to be statistically significant in which the null hypotheses for these constructs were accepted for RQ2 and RQ5, having with scores $p > 0.001$. Therefore, self-efficacy, perceived supervisory and colleague support, and organizational justice were not found to be predictors of stress. In addition, the interaction of Personality and WFC with stress was statistically significant as well. Table 29 showed the subgroups most affected by construct and demographics with the

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highest scores from each category. Therefore, work-family conflict was not only individually predicting teacher stress, but when it interacted with personality also, it was predicting the teacher stress.

Qualitative Participants

The qualitative portion of the study used participatory selection to develop clustered structured interviews to define teacher groups based on school setting to uncover job demands at specific school settings and insight into teacher perceptions on how best to lessen stressful factors due to student population differences, academic standards, and the organization. Young et al. (2018) referenced the use of interviews for researchers to focus on the participant's levels of importance based on each perspective. To answer the qualitative research questions, the researcher interviewed 30 participants who showed interest from the completion of the survey portion of the study. Teachers provided an email address that the researcher used to contact them to inquire about academic settings and years of experience. The researcher then put the respondents' names into a computer-generated website and selected eight female and two male representatives from each group trying to fairly represent the career experience level as well. As you will notice, some school settings were not fairly represented because of a lack of interest in the survey to acquire the desired representation shown in Table 30.

Table 30

Qualitative Participants Breakdown

	Elementary	Middle	High
Novice	1	2	3
Mid-Career	6	6	4
Veteran	3	2	3

Qualitative Findings

Teachers were asked interview questions (Appendix H) aligned to the survey constructs of teacher stress, self-efficacy, personality, perceived supervisory support, perceived colleague support, work-family conflict, and organizational justice. Finally, teachers were asked to rank the three contextual stress categories to determine if one area was perceived as more stressful than the others. For these results, the qualitative respondents were referenced as ES for elementary teachers, MS for middle school teachers, and HS for high school teachers.

Research Question 7 and 7a

The qualitative results sought to answer the following research question:

RQ 7: How do K-12 teachers describe the job demands at their current workplace?

After initial coding, open coding revealed teachers believe the following themes (areas) describe stress stemming from job demands for teachers: 1) an overload of tasks and responsibilities (with a lack of time to complete them), 2) poor communication, 3) lack of consistency, and 4) involve student behaviors of management and apathy. A subtheme of lack of time appeared.

To ensure interrelated reliability, the Kappa Coefficient was calculated for each theme. The process began with the researcher creating an Excel spreadsheet with separate pages for each theme. The researcher listed all interview participants and inserted a 1 if the theme was found within the transcript. If the theme was not evident within the transcript a zero was marked. The same method was completed with the second coder's transcripts. Then the codes were aligned to see whether an agreement or disagreement was made. If the theme was found in the researcher's transcript but not the second coder then the disagreement was highlighted in green. If the second coder had a theme that the researcher did not, then it was highlighted in red. The

total absent and present were entered and added to the second coder's work. The Kappa

coefficient formula according to Hallgren (2012) was

Kappa Coefficient =

$$\frac{pa - pe}{1 - pe}$$

Hallgren (2012) states P(a) represents the observed percentage of agreement and P(e) is

the probability of expected agreement due to chance. The observed agreement was found with

the sum of the diagonal values being divided by the total number of subjects (Hallgren, 2012).

P(e) was the probability of chance of agreement among absent observations using marginal

means from each observer. P(e) was found by counting the total number of present

observations divided by the total number of interview transcripts (Hallgren, 2012).

The theme of Communication was unable to be calculated since Observer 2 did not have

any absences in the data although there was an agreement of 76.67%. The themes of

Consistency (0.366) and Student Behavior (0.259) showed fair agreement among the

observers. A moderate agreement was found with the theme of Overload of Responsibilities

with 56 present and 4 absences recorded with 93.33% agreement found (29 + 27)/60. Overload

of Responsibilities was the highest Kappa Coefficient from themes found when answering the

question. The marginal mean for Observer 1 was 29/60=0.48 and Observer 2 was 27/60= 0.45.

The probability of obtaining agreement by random assignment was obtained by multiplying

the marginal mean scores from each observer (Hallgren, 2012). For Overload of

Responsibilities, the coders' random agreement was 0.216 (0.48 x 0.45). The probability of

chance agreement was calculated as the sum of (1 – the marginal mean) multiplied (Hallgren,

2012). Therefore, (1-0.48) x (1-0.45) = (0.52 x 0.55) = 0.286. The total probability of chance

agreement was found by adding both factors, randomness and chance, (0.216 + 0.286) =

0.502. The Kappa Coefficient for Overload of Responsibilities was (0.56-0.502)/(1-0.502)= (0.56- 0.498) = 0.062. The themes of Consistency (0.366) and Student Behavior (0.259) both had fair agreements respectively from the Kappa coefficient. Consistency showed a 91.67% agreement and Student Behavior had 76.67% agreement. The other theme calculations are reported in Table 31. It appeared that the observers had agreement among the themes but the differences account because of the differentiation of when the theme appeared by participant which decreased the overall Kappa coefficient when one observer found the theme and the other did not and vice versa. Therefore, the criteria upon which each coder determined the theme was not aligned.

Table 31

Kappa Coefficients by Theme

Type of Observation	Observation Construct	Observation 1		Total	% Agreement	Kappa Coefficient
		Absent	Present			
Communication	Absent	27	3	30	76.67 %	n/a
	Present	0	30	30	[(27 + 30)/60]	
	Total	27	33	60	*100	
Consistency	Absent	26	4	30	91.67%	.366
	Present	1	29	30	[(26 +29)/60]	(Fair
	Total	27	31	60	*100	Agreement)
Overload of responsibilities	Absent	29	1	30	93.33%	.474
	Present	3	27	30	[(29 + 27)/60]	(Moderate
	Total	32	28	60	*100	Agreement)
Student Behavior	Absent	24	6	30	76.67%	.259
	Present	8	22	30	[(24 +22)/60]	(Fair
	Total	32	28	60	*100	Agreement)

Table 31 Communication unable to compute with 0 absences with Observer 2.

Kappa coefficients were also calculated for themes Teamwork/Support, Leadership, and Self-Doubt. Leadership had the highest Kappa coefficient in the study at 0.516 with an 88.33% agreement that reported a moderate agreement between coders. The marginal mean for Observer 1 was 0.43 and for Observer 2 was 0.45. The agreement due to randomness was (0.43 x 0.45) = 0.194 and the probability of chance was (1-0.43) x (1-0.45) = (0.57 x 0.55) = 0.314.

The total probability of chance and randomness was 0.508. The theme of Teamwork/Support

had a Kappa coefficient of 0.259 (fair agreement) and Self-Doubt had a score of -0.304 Kappa

Coefficient that indicated a fair disagreement between coders. Both themes reported with 76.67

% among coders percent agreement. The additional theme coefficients are reported in Table 32.

The differences could have included the initial coder interpreted the criteria for a theme to be

present differently than Observer 2.

Table 32

Kappa Coefficient Themes answering 7a.

Type of Observation	Observer 2	Observation 1		Total	% Agreement	Kappa Coefficient
		Absent	Present			
Teamwork	Absent	22	8	30	76.67%	.259
Support	Present	6	24	30	[(22 +24)/60]	(Fair
	Total	28	32	60	*100	Agreement)
Leadership	Absent	26	4	30	88.33 %	.516
	Present	3	27	30	[(26 + 27)/60]	(Moderate
	Total	29	31	60	*100	agreement)
Self-Doubt	Absent	23	7	30	76.67	-.304
	Present	7	23	30	[(23 +23)/60]	(Fair
	Total	30	30	60	*100	Disagreement)

Table 32. Leadership highest theme Kappa Coefficient.

Stress from Job Demands

Overall, teachers regardless of academic setting relayed the main stressors stemmed from

inconsistency and student behaviors. Regarding the academic setting, elementary teachers noted

the number of tasks to be completed and scheduling of tasks was most problematic. ES Teacher

7, a mid-career teacher stated the main cause "would be student behavior and just in the, the

amount of tasks that have to be done within a day that feel unrealistic to complete." ES Teacher

5, a veteran added when referencing behavior, "it can go sideways real fast even though you're

doing everything right" and "it literally can derail your whole class." Middle school teachers

found communication and leadership issues with a lack of time and multiple responsibilities to

be of the highest importance. Although, high school teachers noted all the stress that the other teachers referenced their addition of the concept of lack of time to complete the tasks and student apathy were a cause for concern. HS Teacher 8, a mid-career male, shared that most of the stress is related to "the disconnect between what students are wanting to learn and what I'm needing to teach them." Teachers noted stress inhibited their ability to do their job because of the feeling of being behind, not being clear-headed, and deadlines changing ultimately affecting instructional time during the day ultimately having them question their teaching ability. HS Teacher 2, a veteran shared the frustration of time restraints with:

> It is not possible to complete all of my duties, even on a base level, with the time that I'm given during my work hours. It is not even possible to complete my all of my duties with adding time that I am not when I'm not getting paid. I the time it's just not there.

Looking through the lens of experience level at the main causes of stress from daily job demands perceived by teachers, the researcher found that novice teachers cited stress factors to be related to inconsistency and poor communication in all three academic settings. Novice ES Teacher 3 shared "it's almost as if we are on different pages, different chapters of the same book" when describing the inconsistency of the school. Mid-career teachers agreed that inconsistency is a source of stress for them but add too many tasks, and student behavior to be the main sources of stress. ES Teacher 8, a mid-career male added "when they do and you've done everything you feel like you need to, and you find out, there's still more and it's hasn't been communicated properly. That's very frustrating." The overload of tasks, poor communication, and discipline were areas veteran teachers found to be the main sources of stress. HS Teacher 7 added, "it really affects my ability to complete my task and do it effectively and be confident that I have done it correctly."

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The Role of Self-efficacy

Teachers who had high levels of self-efficacy were mixed as to whether they can alleviate job-related stress. Out of the 30 teachers interviewed, 26.7% confidently (eight teachers) stated they could but 16.5% (five) stated definitely "no." Many teachers (56.7%) stated that they can but only to a certain extent and the mention of medication as a necessary component was observed. Veteran, ES Teacher 5 stated "It just makes you feel like you're not doing your job effectively, even though in the back of your mind you know you're doing everything you can." Those teachers able to cope with the stress cited they had increased communication, medicated themselves, prioritized work activities with set boundaries, and focused on having a good mindset. Positive changes from being able to cope with the stress allowed for a sense of accomplishment and less overwhelming feeling, felt more relaxed and slept better, and had increased energy, creativeness, and were more present for the students ultimately increasing student achievement.

Elementary and high school teachers mentioned medication as a means to alleviate stress. Elementary teachers cited teamwork as a means of coping whereas high school teachers set boundaries and take time off work. Middle school teachers offered the idea of increased communication and enjoying being with others as how they cope with stress.

Novice teachers who can manage stress stated understanding what is in their circle of control and have a positive mental attitude to cope with the stress. Novice, ES Teacher 3 described how dealing with the stress and behavior inconsistency mades her feel when she stated, "it feels like I'm drowning, and I feel like my room feels like I am playing Jumanji." MS Teacher 10, a novice stated, "I've learned how to manage my own stress, better but, certainly in my first year I experienced a lot of anxiety." Veteran teachers were able to talk with their team

to cope with the stress as well as use medication. Mid-career teachers cited the use of medication and therapy, in addition to decompression tactics.

The Role of Personality

Personality traits consisted of extroversion, agreeableness, neuroticism, openness, and conscientiousness. Interviewees answered 7 questions relating to these topics. A resounding "yes," when asked if they can vocalize their stress to colleagues, was witnessed except in one instance in the high school setting. However, when referencing a conversation with administration the amount lessened with four teachers stating "no", and many offering the notion that they may be perceived as complaining or whining and nothing would be done if vocalized. Many teachers stated they could speak with the administration but chose not to because of a negative connotation attached to the information being relayed. Elementary novice teachers felt they could vocalize their thoughts to administration, but have not seen any action, only one middle school novice teacher felt they could, and all high school novice teachers stated they could to colleagues only. All high school mid-career teachers felt they could vocalize to colleagues and administration except for one individual who stated they did not have any colleague to speak with, but all noted a disparaging idea that the administration would most likely not change anything, so they were leery. Only two veteran teachers felt they could speak with colleagues and administration freely. They, like so many others stated colleagues, were always yes, but administration; not so much. Therefore, extroverted teachers could vocalize their thoughts but were hesitant with whom they share information.

In relation to agreeableness, teachers were asked if they take on additional responsibilities to not let their principal or colleague down. Nine out of 10 elementary school teachers stated they were willing to take on additional responsibilities; however, 60 percent state that they do

not engage in additional responsibilities anymore. Mid-career ES Teacher 7 explained the devotion as far as "like I would go to every single like function that we had just so you know, like, I wasn't letting anybody down, even though I've had like, other things, I might have other things going on outside of work." Six out of 10 high school teachers answered "yes" while 40 percent answered "no" and added they do not take on additional responsibilities anymore. The Middle school setting only had 30 percent of teachers state they take on additional responsibilities as most stated "no", but that they used to in the past. MS Teacher 10, novice explained "I feel I'm already maxed out. I don't wanna push myself to burnout" to justify why they would not take on additional responsibilities. Concerning career experience the ratio of "yes", "no", and "I used to" were comparable to the initial results. The results are shown in Table 33.

Table 33

Agreeableness by academic setting

	Willing to take on additional responsibilities	Not Willing to take on additional responsibilities	Indicate prior willingness to take on additional responsibilities but not anymore
Elementary teachers	9	1	6
Middle School teachers	3	7	4
High School Teachers	6	4	1

The area of neuroticism had two questions. The first was whether teachers believed in constructive feedback from a principal or colleague to improve the quality of their work. The second was to describe a situation where the feedback was perceived more like criticism than support. Elementary teachers reported overwhelmingly that feedback was welcomed as they had a growth mindset and had one instance where the teacher felt disrespected by the feedback. MS

Teacher 3 acknowledged a growth mindset as a mid-career teacher stating, "even the best can become better." ES Teacher 4, a veteran referenced a "disheartening" occurrence when "I was told that I shouldn't be a teacher anymore" followed by being provided with a list of alternative careers. Middle school teachers welcomed feedback as well but found the majority of what is received lacks specificity and could attest to criticism accounts related to student behavior, and a lack of communication. High school teachers and novice teachers wanted feedback as they recognize the value of it for improvement purposes but mentioned the aspect of not receiving derogatory feedback and the desire for better communication. Veteran teachers expressed the need for more communication and discourage punitive feedback. All but one mid-career teacher could speak about a negative or passive-aggressive comment received from feedback.

When teachers were asked if they were able to produce multiple strategies addressing openness elementary teachers all agreed they could but one stated they may not put their ideas into practice. Similarly, middle and high school teachers had seven and eight, respectively out of 10 teachers stating they were capable. According to career experience, the teachers were similar to academic school settings in that many can, and a few cannot. However, veteran teachers all reported they could with only one teacher stating they do not implement their strategies when stressful situations arise.

The area of conscientiousness also had two questions. One teacher acknowledged stress occurred because of their actions and one where they encountered stress because rules and regulations were fully implemented. All teachers interviewed stated a scenario where they caused stress to arise from outside factors or self-induction. However, when asked the second question, the issues were born from poor communication and inconsistency. In addition, mid-

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career teachers cited inconsistency in policy enforcement and a lack of preparation because of the extra work they put on themselves. Poor communication was emphasized in both veteran and novice teachers when it came to encountering stress from rules and regulations within the school and/or district. MS Teacher 4, a mid-career teacher added modeling was effective in providing specific feedback because it "helps me to know exactly how to individualize it and how I can make that work for me and my teaching style."

Therefore, the personality traits of the teachers interviewed showed they were open, aware, willing to help others, vocalize their needs, and showed low levels of neuroticism. Many of the teachers were open to addressing their faults and aware of what triggers them which hindered their ability to always be willing to take on more work to ensure they were still effective in their role. Mid-career ES Teacher 6 added "I feel like that's kind of self-inflicted stress when you already have a ton of things to do and then you say yes to something that you really can't commit to doing or commit to doing with fidelity." The teachers were open to conversations to help them be more effective but may need additional training on how to implement strategies when stress enters their mindset. ES Teacher 7, mid-career recognized "I can make myself feel like a situation is going to be a lot worse than it is" but ES Teacher 4, a veteran emphasized, "because when it's overloaded and it's overwhelming, it's just I break down and it's too much."

The qualitative interviews sought to answer the following research question:

7a. What are the teacher's perspectives on the stress created by job demands and how this stress can be alleviated by individual-level and contextual-level factors?

The themes revealed relate to 1) teamwork and support 2) administrative leadership, and finally 3) teacher self-doubt. Teachers expressed the importance of the team mindset among their

departments or grade levels in addition to leadership also understanding the partnership. Leaders must remain mindful of all actions and interactions with staff.

The Role of Perceived Supervisory and Colleague Support

Perceived Supervisory and Colleague Support were broken down into their categories answering the same questions of what type of support was needed from each entity and how would having that support help to cope with the stress. All academic school settings reported a reduction in tasks/responsibilities was needed. Elementary teachers desired empathy, understanding, and availability from the administration, along with consistency. These support traits would help them to trust everyone is of a team mindset, and to improve their view on their effectiveness and overall instruction as consistency will be the norm. Middle school teachers desired the administration to handle discipline issues consistently and improve communication, citing it would result in their ability to focus more on instruction. Administrative behavioral support would afford them the ability to create and implement more engaging lessons and offer more specific feedback to students. High school teachers shared the desire for genuine concern, compassion, and connectedness from leadership. High school teachers noted the need for more time to complete the number of tasks if they are not able to be reduced. They reported these supports would result in them being more prepared for instruction, increase communication, and assist them in ensuring everyone is of the team mindset as opposed to fearful leadership leading to them second-guessing themselves.

Investigating support for novice teachers indicated they were in need of clear expectations and to feel safe to ask for assistance followed by support when it is requested. The openness and safety aspect would allow them to overcome the newness of the position and its responsibilities while building their confidence level. Mid-career teachers requested a simplified lesson plan, a

sense of togetherness, and teamwork to handle the numerous tasks and paperwork while noting small tokens of appreciation show leadership's care through clear communication. They feel the time spent creating the lesson plans was unnecessary and time-consuming. ES Teacher 4, mid-career emphasized, "I make the lesson plans for administrators not myself." They most desired solutions to problems free of fearing reprimand, an administrator to stop by their classrooms to check in with them and possibly provide a short break to clear their mind for a moment, and empathy to understand the pressure they feel as a classroom teacher. High school novice teacher 1, shared "sometimes I don't feel confident in bringing those concerns to administration because it does not feel important enough or I feel as though I'm being a bother." Veteran teachers needed support from the administration to maintain an orderly school and to handle discipline issues consistently. They desired administrators to have open-door availability policies and to be shown appreciation for the work that was being done daily. Additionally, veteran teachers reported the request of additional release time to complete the tasks or support in the form of offering a schedule showing how the tasks could be completed within the current time constraints.

Therefore, administrative support should evaluate the work required of teachers and possibly reduce the number of responsibilities being requested when it did not directly relate to instructional performance. ES Teacher 8, a mid-career, added when asked about administrative support "The best thing is understand what we're going through." MS Teacher 3, mid-career acknowledged, "I don't think that my current colleagues could help me with anything. I think they do everything that they are able to do."

Colleague support was overwhelmingly focused on teamwork and ensuring a trusting environment exists within all academic settings. Having a safe space allowed teachers to

maintain positive mindsets by communicating their successes and struggles with one another. The safe space provided the opportunity for all to be on the same page and possibly reduce the work of one person by disseminating the task to the entire team helping everyone to feel less pressure and improve overall with a collaborative discussion on instruction. MS Teacher 4, a mid-career individual, stated support from her team would "make me feel as though I'm doing something right, and now for me feeling as though I'm doing something good pushes me to do more of that and to try and do better." Veteran teachers cited teamwork and communication are needed to distribute the work. The team support allowed them to handle discipline issues together, thus staying more focused on instruction while lowering the levels of stress. Novice teachers desired teamwork and communication to build a level of support that provides a safe space to discuss struggles and ask for clarity and resources. Mid-career teachers required teachers to have a team mindset. The team mindset allowed them to create a positive work environment, share the load of responsibilities, and communicate with one another when issues arise. Mid-career, HS Teacher 4 stated, "when I don't have those connections, it feels really lonely." ES Teacher 4 referenced frustration when she added "I've been teaching 12 years and I've never had the same team twice." Therefore, having solid connections with your team knowing they will help when needed is important among mid-career teachers. Colleague support was simply focused on everyone acknowledging each other's struggles and realizing that everyone is working together towards the common goal of student achievement and success. When the team could recognize that they were all working together to win for the students as a team, trust was built and the teachers could focus on the best level of instruction being implemented with the students and become a true professional learning community (PLC) (Hallam et al., 2015).

Leaders showing the value of their employees was explained by the findings as it contained the element of thoughtfulness. Teachers desired the same values in their lives outside of work that they do of their work during contracted hours. ES Teacher 3, reported "Respect my time and that I am also a human being outside of here." Teachers would give their all during the day if they believed leadership was only asking what was necessary from them as opposed to frivolous work that takes time away from their family or personal life. ES Teacher 4, a veteran added "Lesson plans is unneeded paperwork, so I would have more free time with what personal time with my family and my friends because I make them and do nothing else with them."

When it came to work-family conflict, middle and high school teachers had similar desires. These groups of teachers felt work-family conflict could be alleviated when administration and colleagues used clear communication, were consistent with protocols and communication, and used connectedness with a team mindset to reduce responsibilities. The delegation of work amongst team members provided the opportunity to complete the necessary tasks within the school day and take less work home. They added the reduction of meetings and shortening meeting times would free up more time for personal use outside of work for families and hobbies to decompress from the day. Elementary teachers added the notion of being valued and respected. The subgroup, elementary teachers had begun to set boundaries on staying at work too late and believes protected planning time is essential to complete tasks during the day because they have responsibilities outside of work as well. ES Teacher 3, a novice, stated "Respect my time. Respect that I'm also a human being outside of here." All experience levels acknowledged the need for time within the workday to complete the tasks. They requested

leaders to review meeting times that extend past contracted hours to be reduced to provide more time to focus on outside work responsibilities. A district-wide focus on mental health activities to assist with decompressing from the day before leaving work was suggested by veteran teachers while novice teachers suggested a simple reminder that some things can wait until later would be beneficial for them. ES Teacher 10, a veteran, shared, "I do have that stress and it does follow me home and does impact, umm my relationship with my husband." HS Teacher 4, a mid-career teacher, affirmed "this year, more than anything, I've noticed that the career life is just destroying my home life." ES Teacher 8, a mid-career emphasized, "This job is this job is that there's life outside of it. And that, you know, we, we we work so that we can live, we don't live to work."

The Role of Organizational Justice

Organizational Justice is workplace fairness and was broken down into four categories: interpersonal, procedural, informational, and distributive so each aspect has a qualitative research question relating to its portion. Interpersonal justice is related to communication with others within the school (Colquitt, 2001). The role of interpersonal justice addressed interactions between leadership and employees within the structure of the school. Reviewing interpersonal justice was important because interviews showed some teachers received negative interactions with leadership leading to views of disrespect and creating the final theme found within interviews of teacher self-doubt.

Respondents were asked how they felt they were treated with respect when communicating with administration and colleagues. Elementary teachers reported it was conveyed with professionalism by consistency and communication with open doors. Middle school teachers encountered respect when they believed they are being heard and visible to the

administration. HS Teacher 1, a novice, added the treatment of respect was given when "I'm spoken to like a human being." ES Teacher 5, a veteran agreed, "I think as long as we're treated like professionals, and we're spoken to like we're professionals" then respect was expressed. High school teachers, similar to middle school teachers, wanted to be seen as a person with professionalism, with clear and timely communication. Novice teachers recognized respect through consistency and communication as well as civility, eye contact, and a positive corrective tone. Mid-career teachers recognized the importance of tone in showing respect as well. They added communication that was supportive and did not reflect punitive connotations was desired. Veteran teachers added constructive, professional, supportive tones with a friendly greeting showing togetherness or family atmosphere showing respect when communicating through emails and conversations.

Procedural justice accounted for how due process is fairly applied when following rules and regulations. Elementary and middle school teachers stated procedural justice was provided with clear expectations and consistency; however high school teachers stated that consistency is often found lacking with teachers when implementing the protocols. HS Teacher 10, a novice male, asserted, "I don't necessarily feel among the teachers that it's enforced." At the high school level 20 % of teachers surveyed affirmed due process was not followed at all, and 30% were unaware of whether due process was followed or even being implemented. Veteran teachers coveted more clarity and improved communication. MS Teacher 9, a veteran shared "I feel like some students are not given the same shot as others, I think some are given too many chances, and others are not given enough." Mid-career teachers stated that due process was consistently and fairly applied. ES Teacher 7, a mid-career added, "I think admin is very good about just kind of looking at what's in the school handbook and then like what the district, like what the district

has in place and they're very good about following those kinds of guidelines." Novice teachers acknowledged the presence of favoritism and desire consistency as the administration handles discipline issues. Novice teachers also desired for teachers to enforce the rules consistently. When the new teacher enforced a rule and veteran teachers did not, they were viewed in more of a negative light with the students making classroom management more of an issue.

Informational justice addressed the elements of communication being timely, fair, specific, and thorough so teachers were asked just that. Teachers at all academic levels cited consistency as the biggest problem with communication. High school teachers added timeliness to be an area of weakness as well. Novice teachers referenced information being misconstrued due to a lack of consistency within communication and offering support. HS Teacher 10, a novice male, shared "I will say I don't feel that I have had a lot of communication with admin as much as I feel like I should." ES Teacher 9, also a mid-career male added,

> We don't meet with the admin very much, so I don't really get much communication.
> Unless I seek after it and we don't really get it in a timely manner, you know there are times
> where, like even our TKES has to be redone and stuff.

Mid-career teachers desired timeliness and more transparency within the communication, so it is not perceived incorrectly. MS Teacher 4, a mid-career teacher added that she will "receive a lot of information and reminders through emails and in meetings, and when it's straightforward and straight to the point of what needs to be done and how it needs to be carried out, it is helpful." MS Teacher 9, a veteran stated, "the intent is there to be thorough and well explained, but it's not always as thorough as I would like for it to be." Veteran teachers noted they desire more specificity and timeliness to add clarity to the communication.

Distributive justice dealt with fairness of workload. Teachers were asked if they felt they

were fairly compensated in relation to their work-related responsibilities. One elementary teacher agreed they are fairly compensated now that they are no longer a homeroom teacher serving as a day tutor as the stresses are not as great. Elementary teachers in comparison to the amount of work and type of work of building the future, did not believe they are fairly compensated with nine out of 10 answering "No." High school teachers had three out of 10 teachers stated they were compensated fairly but recognize that other counties pay more, and acknowledged they were not paid overtime to work past contract hours. HS Teacher 8 asserted,

> "Umm so with this just being daily work-related activities with the exclusion of extracurriculars, I still umm don't feel like that we are compensated for all that we do. UM, because not only are we classroom educators, there's lots more that we have to deal with. Even being in class counselors and such, so there's extra duties that we have to deal with on a daily basis that I don't feel are taking into account as far as daily classroom duties. And I also feel like that that's one of the reasons that a lot of uh teachers don't stay, that there's a decline of teacher retention because once they step foot in the classroom and realize all that they have to do, they don't feel like they're equivalently compensated for such."

HS Teacher 5 expressed,

> When you look at any other career field that deals so closely with children and their bodies, and their future and spent so much time developing things. It's not equal or fair compensation. Because just like doctors and just like lawyers, they have to go through so much pedagogical training, so much psychological training, so much technological training, so much PL, so much development, continually. And when you become a doctor, that's it. You just you know, but as a teacher, you always have to be malleable. Middle school teachers also do not feel they are paid fairly with only two teachers

agreeing they were okay with their pay. MS Teacher 4, a mid-career shared,

> With everything daily that we have to do, I don't think we're compensated fairly. It's not bad, but I just don't think it's fair with the amount of duties and the task and the daily decisions that we have to go through.

MS Teacher 9, a veteran emphasized,

> I'm past 22 years and so now I don't. I get nothing for as long as I teach and I don't think that's fair at all and nice. Most definitely, if you want to retain people, especially these children coming in, they're not gonna put up with that. They just quit and walk out. They don't give two weeks' notice. They don't do any of that anymore.

Novice teachers were mixed in their ideas of fair pay. Those working at the elementary level stated resoundingly "No", middle school teachers believed the pay to be overall fair, and high school mostly stated "No" and then "Yes", stating they believe that mindset would change given they just started the position. ES Teacher 3, a novice added "Every day I say I'm not paid enough." Veteran teachers all agree they are not paid fairly with a "no", except the one individual who feels now they are fairly compensated since the position of homeroom teacher has changed to day tutor. Mid-career teachers had 13.3% (2 out of 15) said the pay was not fair versus the jobs they must complete. ES Teacher 7, mid-career added "We work 8 hours a day, and most of the time you either have to come in early or stay late to get everything you need done." ES Teacher 7 further added, "I mean we basically work overtime for free and but it's like impossible not to because we're supposed to be teaching all throughout the day." Therefore, an issue of fairness and pay exists amongst many teachers today.

Contextual Factor Ratings of Stress

The final question of the interview asked teachers to rank the following categories as

sources of stress for them with 1 being stressful, 2 moderately stressful, and 3 extremely stressful. In implementing the interviews, the final question had some ambiguity and some teachers gave some categories the same score. The researcher did their best to ensure the most stressful category was selected but offered the implementation as it provided insight into whether the respondent had multiple large sources of stress or not on the few occasions it was noted in the findings. The researcher took a mean and mode score for each academic setting and experience level. This was done to further explain the overall picture of respondents. For example, both elementary and high school veteran teachers scored organizational justice as a mode of 2 wheras veteran middle school teachers had a mode of 3. This explained that veteran middle school teachers believed organizational justice to be extremely stressful as opposed to the other academic settings. In addition, the construct of work-family conflict had a mean score of 2 but all elementary respondents scored this area as a 3 and middle school representatives scored it as a 1. Therefore, to each subgroup these areas were more impactful than others. The researcher believed adding the additional support to the data revealed a more complete picture to the insight gained from the interviewees. The findings are shown in Table 34.

Elementary school teachers reported work-family conflict was the biggest source of stress for them with a mean score of 2.0 and mode of 1 and 3. Organizational justice and perceived supervisory support were similar in scores with organizational justice being slightly more stressful with a mean score of 1.8 and mode of 2 and 1.7 mean score for perceived supervisory support and mode score of 1.

Middle school teachers found perceived supervisory support to be the highest source of stress with a mean score of 2.2 and mode of 2. It was important to note that organizational justice scored 2.1 and had a mode of 3 showing that both areas are significant sources of stress

for elementary teachers. The work-family conflict mean score was 1.7 with a mode of 1.

High school teachers reported perceived supervisory support to be the largest source of stress for them with a mean score of 2.2 and mode of 3. Organizational justice and work-family conflict both scored a mean of 1.9 but organizational justice had a mode of 2 and work-family conflict had a 1.

Table 34

Ratings of Contextual Sources of Stress Ranked

	Extremely Stressful		Moderately Stressful		Stressful	
Elementary teachers	Work-family Conflict		Organizational Justice		Perceived Supervisory/Colleague Support	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.0	3,1	1.8	2	1.7	1
Middle School Teachers	Perceived Supervisory/Colleague Support		Organizational Justice		Work-family Conflict	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.2	2	2.1	3	1.7	1
High school Teachers	Perceived Supervisory/Colleague support		Organizational Iustice		Work-family conflict	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.2	3	1.9	2	1.9	1
Novice teachers	Perceived Supervisory/Colleague support		Organizational Justice		Work-family conflict	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.57	3	1.43	1	1.4	2
Mid-career teachers	Organizational Justice		Perceived Supervisory/Colleague support		Work-family conflict	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.07	2	1.93	2	1.73	3
Veteran teachers	Organizational Justice		Work-Family Conflict		Perceived Supervisory Support	
	Mean	Mode	Mean	Mode	Mean	Mode
	2.13	2	2	3, 1	1.88	2
	All Elementary and high school teachers scored 2 Middle school 3		All Elementary scored-3 Middle school-1			

Novice teachers stated that perceived supervisory support was the biggest source of stress with a mean score of 2.57 and mode of 3, followed by work-family conflict mean score of 2 and mode of 2. Organizational justice had a mean score of 1.43 and a mode of 1.

Mid-career teachers found organizational justice to be the greatest source of stress for them with a mean score of 2.07 and mode of 2, followed by perceived supervisory support at a mean score of 1.93 and mode of 1. Therefore, while organizational justice had the highest mean score it is important to note that perceived supervisory support is very high as well. Work-family conflict had a mean score of 1.73 and a mode of 1.

Veteran teachers scored organizational justice as the highest source of stress for them with a mean score of 2.13 and mode of 2. It was important to note that elementary and high school teachers had a mode of 2 for the category and middle school teachers had it as a 3. Following close with a mean score of 2 and mode of elementary teachers saying 3 and middle and high school stating 1 was work-family conflict. Perceived supervisory support had a mean score of 1.88 and a mode of 2 as well.

Qualitative Summary

The findings of the qualitative portion of the study showed that elementary teachers had different thoughts from their secondary colleagues. Elementary teachers found work-family conflict to be extremely stressful whereas both middle and high school teachers stated perceived supervisory support was most stressful for them. Middle school teachers stated that support was needed for student behavior and all teachers encouraged consistency and clarity when feedback was provided from administration. Novice teachers differed from mid-career and veteran teachers. Novice teachers found perceived supervisory support to be the most stressful as opposed to organizational justice from the other groups. Therefore, reviewing secondary schools

as one entity could prove to be beneficial as their overall rankings were identical from extremely stressful to stressful contextual factors. A review of the occurrences at the elementary level was necessary as the work-family conflict was high and closely followed by organizational justice. The results led to the conclusion that there may be processes and protocols that could be revamped to help in the organizational justice area. Educational leaders should thoroughly investigate to figure out which types of responsibilities caused the work-family conflict to be higher for these individuals and possible duties that could be alleviated to help reduce stress. Novice teachers showed the highest level of stress at 2.57 mean for perceived supervisory support. The results further proved the importance of supporting new teachers, above all if educational leaders want to retain them in the profession. Mid-career and veteran teachers stated organizational justice was extremely stressful. The results may be due to working in multiple schools over their career and having different opinions on how each school was operated in conjunction with their current school.

Mixed Methods Participants

The explanatory sequential research method results incorporated three levels of integration: the design, methods, and interpretation and reporting. The integration through design was used to build upon the quantitative results with the qualitative information (Creswell et al., 2011; Guetterman et al., 2015). The next level of integration used was through connecting, as the qualitative sample was linked to the quantitative sample demographics (Fetters et al., 2013). Next, integration through building (one database informing data collection), occurred with the qualitative interview questions being directly aligned to the quantitative constructs and helped to inform the wording of the responses (Fetters et al., 2013).

The ideas were merged to integrate the sources of data. The final layer of integration was

through the interpretation and reporting procedures. The integrated information showed in a side-by-side joint display table to visually display information to indicate further meaning by the analysis of the data concurrently (Fetters et al., 2013). Therefore, the information displayed within the joint display table included the construct name, the quantitative results, and the qualitative phrases used within the survey providing a comprehensive picture of the level of the person's stress and statements confirming its existence and degree of impact.

Mixed Methods Findings

The composite scores for each construct were calculated within SPSS. The scores are reported in Table 35. These findings showed that Perceived Supervisory and Colleague Support along with Work-family conflict were the greatest among all respondents within the survey. The table also provided the mean, standard error of the mean, standard deviation, skewness, standard error of skewness, kurtosis, standard error of kurtosis, minimum and maximum, in additional to percentiles of 25, 50, and 75. The results showed all areas are moderately stressful with Perceived Colleague Support the greatest at 4.9453.

Table 35

Composite Scores by Construct

Statistic		Stress Composite	Self-Efficacy Composite	Personality Composite	Perceived Supervisory Support Composite	Perceived Colleague Support Composite	Organizational Justice Composite	Work-Family Conflict Composite
N	Valid	250	250	250	250	250	250	250
	Missing	0	0	0	0	0	0	0
Mean		3.2440	3.1289	3.2940	4.5964	4.9453	3.7702	4.2576
Std. Error of Mean		0.4974	.03331	.02121	.05807	.03650	.04873	.08769
Std. Deviation		.78652	.52672	.33534	.91809	.57707	.77050	1.38653
Skewness		-.274	-.509	.116	-1.006	-1.381	-.771	-.453
Std. Error of Skewness		.154	.154	.154	.154	.154	.154	.154
Kurtosis		.029	1.217	.019	.308	3.375	.905	-.333
Std. Error of Kurtosis		.307	.307	.307	.307	.307	.307	.307
Minimum		1.00	1.00	2.40	2.09	2.33	1.11	1.00
Maximum		5.00	4.00	4.30	5.82	5.67	5.00	7.00
Percentiles	25	2.7143	2.8889	3.0000	4.0909	4.6667	3.2222	3.4000
	50	3.2857	3.0000	3.3000	4.9091	5.1111	3.8889	4.4000
	75	3.8571	3.4444	3.5000	5.1818	5.3333	4.3333	5.4000

The following tables included descriptive statistics data based on each construct with support from the qualitative interviews. The interview data did not request demographic data therefore, the researcher inserted qualitative support when information was freely provided by the respondent or determinable from the camera-recorded interview meetings. The researcher used inferencing as needed and because the researcher is employed within the district being studied a level of familiarity was utilized offer some insight to qualitative information.

The stress construct was shown in joint display table by gender in Table 36. The researcher ran explorations on descriptive statistics within SPSS and determined that all teachers were moderately stressed. However, the results showed that female teachers (3.2893) were

slightly more stressed than male teachers (3.0577). Male respondents spoke of stress caused by altering plans whereas one female explained stress was caused by the amount of work without time to complete it and additional documentation requirements.

Table 36

Stress by Gender Joint Display Table

Gender	Stress Composite Score	Qualitative Support
Male	3.0577	"And then those hiccups constantly cause me to, you know, have to Plan B, plan C and and do it quick through my head, and it just adds stress." ES Teacher 9
Female	3.2893	"Um the main causes would be related to the amount of work without time to work on it without students present. You know, like where you can be mindfully present. And then not only are you supposed to do the work, but then you also have to document it and enter it into infinite campus and other documentation methods." HS Teacher 7

The results by age showed the stress levels increased as the participants get older with the youngest group of 18- to 25-year-olds reporting the least amount of stress with a composite score of 3.0971. The next group was slightly higher with 3.1224 and 36 to 45 years old with a score of 3.2880. The steady increase capped with the age group 46 to 55 years old at 3.3505. The decline in stress levels began in the 56 to 65 years old category. The age ranges of 26 to 35 years old and 56 to 65 years old were similar in lower levels of stress scores reported. The results could be due to the first group having settled into teaching by this time in their career and the latter beginning to think about exiting the field because of retirement. The greatest level of stress was reported with the oldest age group with a score of 3.4286. The results were most likely due to education being more focused on technology enhancements within instruction and the many changes within

education that have fluctuated over the teacher's tenure. The results are shown in Table 37.

Stress by age showed that younger groups were focused on meeting the needs of others in

conjunction with their own tasks. Whereas the older age groups contended "There is a lot of

stress in knowing what all I have to do and getting it done" according to ES Teacher 10.

Table 37

Stress by Age Joint Display Table

Age Range	Stress Composite Score	Qualitative Support
18 to 25 years old	3.0971	"Certain administrative requirements of the job are in immediate demand and it can be stressful trying to accommodate those demands while also meeting the needs of just being a normal classroom teacher." HS Teacher 1
26 to 35 years old	3.1224	"I wouldn't feel stressed out because I know that they would be able to handle their job on their own." ES Teacher 4
36 to 45 years old	3.2880	
46 to 55 years old	3.3505	"There is a lot of stress in knowing what all I have to do and getting it done." ES Teacher 10
56 to 65 years old	3.1918	
Over 65 years old	3.4286	

The stress construct showed that teachers were moderately stressed but there were

differences of degree based on ethnicity. Minority groups were more stressed than their

counterparts. The Other category including Hispanics and mixed races reported a score of 3.6735

with the Asian community reporting close behind with 3.5918. The least stressful group

according to ethnicity was the African American group with a score of 3.1683. The results are

shown in Table 38. A resounding mention of time in comparison to the number of tasks by all ethnicity groups was witnessed.

Table 38

Stress by Ethnicity Joint Display Table

Ethnicity	Stress Composite Score	Qualitative Support
White	3.2674	"Main causes would be Student behavior and just in the, the amount of tasks that have to be done within a day that feel unrealistic to complete." ES Teacher 7
Black	3.1683	"Normally it is just the tasks that I have to get completed within that day's amount of time." ES Teacher 6
Asian	3.5918	No data to report
Other	3.6735	"The time factor, that's what stresses me where I have to complete certain things." HS Teacher 6

When reviewing the construct of stress against educational background, all teachers reported being at least moderately stressed. The teachers who held a bachelor's degree were the least stressed with a score of 3.1412 and the most stressed group was those who had earned a doctorate with a score of 3.9810 almost reaching the level of much stress. The results showed that the education level increased so did the stress level although teachers with master's and education specialist degrees slightly differed with the latter increasing by hundredths of a point. The results are shown in Table 39. The doctorate-holding respondent HS Teacher 7 stated "It's just it's also overwhelming. I have so much to do, I feel really stretched thin and scattered."

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Table 39

Stress by Education Level Joint Display Table

Education Level	Stress Composite Score	Qualitative Support
Bachelor's	3.1412	"Certainly in my first year I experienced a lot of anxiety about the chaos. I remember it was just wake me up out of my sleep in the morning. My brain circling over events that had happened and how to manage it." MS Teacher 10
Master's	3.2214	"Just making sure and overseeing the other teachers would be a stress or stress factor because some of them are novice teachers and so I have to put in a little bit more work and effort with them." ES Teacher 4
Education Specialist	3.2491	No data to report
Doctorate	3.9810	"It's just it's also overwhelming. I have so much to do, I feel really stretched thin and scattered." HS Teacher 7

Reviewing the results of stress according to teaching experience showed that teachers were moderately stressed. However, the results further indicated that novice teachers were less stressed than their counterparts with a score of 3.1166. Veteran teachers and mid-career teachers were similar with 3.2754 and 3.2747 respectively, with the most stress being reported with Veteran teachers by .007 of a point difference. The results are shown in Table 40. Both mid-career and veteran teachers referenced not having enough time to complete tasks and the struggle of not bringing work home. Veteran elementary teacher 10 stated "I do have that stress and it does follow me home and does impact, umm my relationship with my husband."

Table 40

Stress by Teaching Experience Joint Display Table

Teaching Experience Level	Stress Composite Score	Qualitative Support
Novice	3.1166	"I think sometimes teachers can come on like particularly lead teachers, they can come on very strong and they can just throw a lot at you and it becomes very stressful if you've never taught it before." ES Teacher 2
Mid-Career	3.2747	"Umm, the main causes of stress is not enough time during the day to just where I can just sit down and focus on getting things prepared so that I don't have to take it home and try to fit it in along with trying to care for my family as well." MS Teacher 3
Veteran	3.2754	"I do have that stress and it does follow me home and does impact umm my relationship with my husband." ES Teacher 10

The researcher reviewed the construct of stress based upon academic setting and the results are shown in Table 41 indicating all teachers were moderately stressed. The results concluded that elementary teachers were more stressed than the other academic settings. As the academic setting housed older students, the stress levels with the teaching staff decreased. Middle school teachers (3.2408) reported stress levels lower than elementary and high school teachers reported the least amount of stress with a score of 3.1885. Elementary Teacher 10 also stated medication was used to decrease the stress experienced from work in the statement "I do take medication every day for my stress prescribed by my doctor. I'm not able to alleviate it, but I can sometimes decrease it."

Table 41

Stress by Academic Setting Joint Display Table

Academic Setting	Stress Composite Score	Qualitative Support
Elementary school teachers	3.3115	"I do take medication every day for my stress prescribed by my doctor. I'm not able to alleviate it, but I can sometimes decrease it." ES Teacher 10
Middle School teachers	3.2408	"The main causes of the stress is Administrative Response to the decisions that I make or the things that I'm doing," MS Teacher 4
High school teachers	3.1885	"Most of the stress that I experience is the disconnect between what students are wanting to learn and what I'm needing to teach them." HS Teacher 9

Teachers who have End-of-Grade or End-of-course assessments mandated by the state of Georgia were also reviewed. Although all teachers reported moderate stress levels. The results were similar with "Yes" reported a slightly higher score of 3.3004 as opposed to the "No" with a score of 3.2082. The results are shown in Table 42. Elementary teacher 10 further added additional stress occurred during testing last year. They further explain it was concerning the misplacement of a label but referenced the event as "incredibly stressful and very upsetting." This further provided a picture of how stressful teaching a testable grade or course can be for teachers if a label became a source of so much distress.

Table 42

Stress by Testable Content Joint Display Table

Testable Grade or Course	Stress Composite Score	Qualitative Support
Yes	3.3004	"Our state standardized test is called access for ells and I had a testing issue last year that I realized after it happened something that I didn't do that was incredibly stressful and very upsetting." ES 10 Teacher
No	3.2082	"So when you're trying to implement what you need to do, and you already kind of have a plan in order with prioritizing and then more is added to your plate, it's kind of hard to umm, to then reprioritize and change your flexibility." HS Teacher 8

The researcher reviewed the stress levels of those teachers who were in a supervisory role. The participants included grade level chairpersons, content chairpersons, TSC mentors, academic coaches, and team leaders. The results are shown in Table 43. The results showed slight increases in teachers who selected they served in a supervisory role to their counterparts. Teachers in the supervisory role reported scores of 3.2704 and those not in supervisory roles results indicated a score of 3.2407. The results suggested teachers within a supervisory role were slightly more stressed because of their responsibilities with the position than those who do not have a supervisory role. This could be attributed to the teachers' concerns related in how the administration handles situations and consistency that they must relay to other team members or enforce.

Table 43

Stress by Supervisory Role Joint Display Table

Supervisory Role	Stress Composite Score	Qualitative Support
Yes	3.2704	"Probably my leadership role would be the main because I'm the team lead would be the main cause of stress." ES Teacher 4
No	3.2407	"I would say at this point it would be lack of consistency with discipline in regards to how administration approaches discipline here." MS Teacher 5

Therefore, solely based on the construct of stress, the following subgroups should be of utmost concern for educational leaders as these groups were reporting the most stress among their peers. The subgroups were females, teachers over 65 years of age, those individuals considered as other in terms of ethnicity, had a doctorate degree, were veteran teachers, working at elementary schools, and working in testable content areas. It is important to note, that many subgroups had similar results so reviewing the top two or three groups may be of more interest when decision making ways to lessen the stress of these individuals.

The next construct was the individual factor of self-efficacy. Females reported higher levels of self-efficacy than their male counterparts with 3.1850 and 2.9295 respectively. ES Teacher 9 provided a male perspective wherein he felt like going through the motions was the way to ease stress when he stated a mentality of "check the boxes and get through it" when and if a stressful situation arises. However, MS Teacher 8 emphasized "breaks are well needed" even with some coping strategies being utilized. The results are shown in Table 44.

Table 44

Self-Efficacy by Gender Joint Display Table

Gender	Self-Efficacy Composite Score	Qualitative Support
Male	2.9295	"I'd say usually I just kind of get through it and kind of a military mentality like just, you know, check the boxes and get through it." ES Teacher 9
Female	3.1850	"I think I've developed some coping strategies for it, but the breaks are well needed when they happen." MS Teacher 8

Self-efficacy was reviewed by age ranges and the results are shown in Table 45. Teachers in the age range of 56 to 65 years old reported the highest levels of self-efficacy. These results could be reasoned as they are the most experienced and nearing the retirement phase of their career. The lowest level were teachers in the over 65 years old category. The results could be explained by many of the changes within education from the time these teachers left education as many are returning to the classroom even as part-time teachers. Especially, with the advancements in technology and the traditional classrooms they were familiar with has changed to environments of utilizing computers to enhance instruction and the increased reliance on data management systems to hold virtual classrooms. All teachers reported a sense of ineffectiveness, a decline in confidence, and ES Teacher 3 added "Today, I didn't feel like I earned my part of my salary."

Table 45

Self-Efficacy by Age Joint Display Table

Age Range	Self-efficacy Composite Score	Qualitative Support
18 to 25 years old	3.0311	"Today I didn't feel like I earned my part of my salary." ES Teacher 3
26 to 35 years old	2.9841	"I think it throws me my emotions off and then it it also makes me feel less confident in what I do." HS Teacher 4
36 to 45 years old	3.2384	
46 to 55 years old	3.1156	"I just like I haven't done my job effectively." MS Teacher 5
56 to 65 years old	3.2730	
Over 65 years old	2.8056	

When reviewing the construct of self-efficacy according to ethnicity, all teachers scores fell in the important range. Although, the scores were similar, African American teachers reported higher scores of 3.2298. The White teachers reported the lowest levels of self-efficacy with a score of 3.0351, with Other close behind with 3.0476. HS Teacher 5 stated a lack of clarity with poor communication caused self-efficacy to be hindered, "Poor communication, because if I don't know what's going on then I'm confused and I don't wanna be frustrated for something I didn't understand or didn't want, like have proper time to understand." The results are provided in Table 46.

Table 46

Self-Efficacy by Ethnicity Joint Display Table

Ethnicity	Self-Efficacy Composite Score	Qualitative Support
White	3.0351	"I've learned how to manage my own stress, better. Uh, which is to turn my brain off of school mode when I leave school." MS Teacher 10
Black	3.2298	"Poor communication, because if I don't know what's going on then I'm confused and I don't wanna be frustrated for something I didn't understand or didn't want, like have proper time to understand."HS Teacher 5
Asian	3.1746	
Other	3.0476	"Sometimes I feel I'm not doing enough for the kids because of lack of time, when I have to, I have deadlines to keep up, so I feel I'm not doing enough for the kids." HS Teacher 6

A review of educational levels and the construct of self-efficacy were as follows. The category of teachers who held a doctorate reported the lowest levels of self-efficacy with 2.9852. Teachers with a master's degree had the highest levels of self-efficacy with a score of 3.1952, with those with an education specialist closing in with a score of 3.1396. The results could be explained as those who are highly educated would typically hold leadership type roles within education. With more knowledge, these individuals tended to question their decision making as multiple possibilities to address problems exist leading to whether or not positive impacts occurred from their decisions. The results could also be explained that only 15 individuals responding to the survey fell into the category of holding a doctoral degree because of the limitations of respondents. Teachers holding a master's degree could have the highest score solely based on the mean in the category being 111 respondents compared to the other categories

in the double digits. The results are provided in Table 47.

Table 47

Self-Efficacy by Education Level Joint Display Table

Education Level	Self-Efficacy Composite Score	Qualitative Support
Bachelor's	3.0627	"I think it's taken me this long to realize that that I cannot do this job and I feel like I will never be able to do this job to 100% and that bothers me because so many ratings, so many things, so many reputations and things like that. And I know I'm a good worker, but I want to feel satisfied." HS Teacher 4
Master's	3.1952	No data to report
Education Specialist	3.1396	No data to report
Doctorate	2.9852	"It really effects my ability to complete my task and do it effectively and be confident that I have done it correctly." HS Teacher 7

When the researcher calculated Self-Efficacy scores by teacher experience level, the results are shown in Table 48. Novice teachers reported the lowest scores (3.0635) and mid-career teachers reported 3.1239. The self-efficacy levels continued to increase with veteran teachers with a score of 3.1672, the highest score indicated. The results could be explained by the increase in teaching experience supporting the teacher's mindset and their ability to make a change occur. A teacher could see successes and failures and over time began to alter strategies to receive more positive results increasing their perspective of ability levels. ES Teacher 7, a novice reported, "As a beginning teacher it like, it felt, and it did feel impossible and I felt like I couldn't do it."

Table 48

Self-Efficacy by Teaching Experience Joint Display Table

Teaching Experience Level	Self-Efficacy Composite Score	Qualitative Support
Novice	3.0635	"As a beginning teacher it like, it felt, and it did feel impossible and I felt like I couldn't do it." ES Teacher 7
Mid-Career	3.1239	"I decompress. I know now that I've been teaching for about five years. I used to bring my work home, but now I don't. Got it to a method where I kind of leave my work at home, leave my work at school so I can decompress at home." MS Teacher 7
Veteran	3.1672	"I've completed a task that gives me, a that gives me, a satisfaction. I said check my tasks, those gives me satisfaction." HS Teacher 6

Self-efficacy was reviewed based on academic setting and the results are shown in Table 49 indicated all academic settings report important levels of self-efficacy. The results showed middle school teachers and elementary teachers were almost identical with their scores. Middle school teachers reported 3.1651, the highest level above elementary teachers by 0.0029 as elementary teachers reported a score of 3.1620. High school teachers indicated the lowest levels of self-efficacy with a score of 3.0745. The results could be reasoned in that although high school level teachers are often considered experts in their content, they are not always as knowledgeable about pedagogy. Juggling six content classes a day, often teaching two or three different courses could report a decline in their mindset of how effective they are within the classroom. MS Teacher 10 explained, "learning to accept what I can't change" puts them back in control of situations.

Table 49

Self-Efficacy by Academic Setting Joint Display Table

Academic Setting	Self-Efficacy Composite Score	Qualitative Support
Elementary school teachers	3.1620	"I'm still trying to figure out how to alleviate stress." ES Teacher 3
Middle School teachers	3.1651	"One thing was learning to accept what I can't change, which is that there's not a systematic approach to managing student behavior. So you know, now I accept that all of these things are going to happen and I accept that I can't individually, you know, fix these problems. So I kind of just have to roll with it and keep it as controlled as I as I can on my own." MS Teacher 10
High school teachers	3.0745	"I was able to regroup and realize what was important. Prioritize better, umm, and use my time to focus on the kids again instead of what the adult expectations are." HS Teacher 3

The results of self-efficacy for teachers who teach testable grades or courses are explained in Table 50. As predicted, teachers who do not teach testable content areas had a slightly higher self-efficacy composite score of 3.1387. The results could be due to their only evaluations of being effective being from leadership evaluations and attributed by student success on the state mandated assessments. Teachers who do teach testable content or grade levels reported self-efficacy with a composite score of 3.1134. Both subgroups indicated important levels of self-efficacy with teachers looking to vent to others and other decompressing activities.

Table 50

Self-Efficacy by Testable Content Joint Display Table

Testable Grade or Course	Self-Efficacy Composite Score	Qualitative Support
Yes	3.1134	"When my kids are gone for the day from dismissal, I literally just like sit here and just reflect on the day. I'll just sit in my car. I'll talk with my mom, like, hey, mom. I just need a vent for a quick second and make sure that I wasn't going crazy." ES Teacher 3
No	3.1387	"Prayer helps. Meditation helps exercise helps. And just to see myself from the situation helps." MS Teacher 6

Self-efficacy levels reported by teachers within a supervisory or lead role were slightly higher than teachers not in that role with scores of 3.1825 and 3.1221, respectively. The result was most likely do the subgroup can include many different experienced teachers regardless of a supervisory role. Many teachers as they reach a certain part in their career began to give away leadership roles and focus mainly on teaching and nothing else. In addition, only 222 respondents answered no, in comparison to those in a supervisory role with a mean of 28. The results are shown in Table 51. ES Teacher 1 explained a distribution of the workload benefited the team while ES Teacher 5 not in a supervisory role stated medication assisted them and others.

Table 51

Self-Efficacy by Supervisory Role Joint Display Table

Supervisory Role	Self-Efficacy Composite Score	Qualitative Support
Yes	3.1825	"I was able to talk to my team players and distribute the overload of work, and we work together efficiently, whereas I didn't try to do it all by myself." ES Teacher 1
No	3.1221	"I'm medicated as well as pretty much all of my teaching friends. So that helps, better living through chemistry" ES Teacher 5

Therefore, the subgroups of self-efficacy with the highest scores were teachers serving in a supervisory role, not teaching testable content, and working at the middle school setting. These subgroups included veteran teachers who held an Education Specialist degree who fell into the 56 to 65 age group, were of Black ethnicity, and were females.

The final individual factor in the research study was the construct of personality. Both gender types reported neutral response levels. The male respondents were slightly higher at 3.3231 than females are 3.2878. Elementary male teacher 9 acknowledged small victories and added it supported the feeling of being "accomplished" whereas ES female teacher 3 reports the opposing view where they shared "I feel like I'm drowning." The results are shown in Table 52.

Table 52

Personality by Gender Joint Display Table

Gender	Personality Composite Score	Qualitative Support
Male	3.3231	"I feel accomplished and I you know, kind of like feel like I should get a badge of honor. Like, you know, like the little, little battles and little stories that we have that don't get told. And so I just feel accomplished and feel like a little since of, I don't know, enlightenment." ES Teacher 9
Female	3.2878	"Because I'm I feel like I'm drowning." ES Teacher 3

Personality by age groups reported neutral responses as shown in Table 53. The greatest affected age group by personality were the 26 to 35-year-olds (3.3857). The results indicated the comparison by age had younger age groups scoring much higher scores (18 to 25-year-old = 3.3720) than the older subgroups (56 to 65-year-old = 3.1200). MS Teacher 4 reported "I'll say I encountered stress when the rules and procedures were implemented and everything was followed accordingly, but the students didn't perform well." This was attributed to the teacher internalizing the outcomes of students and the desire they have for them to succeed aligning with the higher composite scores being reported.

Table 53

Personality by Age Joint Display Table

Age Range	Personality Composite Score	Qualitative Support
18 to 25 years old	3.3720	"In the event that a stressful situation occurs. Personally, I am focused on maintaining an emotional balance so that I don't get out of sorts. Professionally speaking, it's more of like a list of, you know, what needs to get done first, what needs to get focused on now, and what can I give some more time to a little bit later, kind of just categorizing what needs to be addressed first and then what can be addressed later. I tend to do that when any stressful situation or arises." HS Teacher 1
26 to 35 years old	3.3857	"I'll say I encountered stress when the rules and procedures were implemented and everything was followed accordingly, but the students didn't perform well." MS Teacher 4
36 to 45 years old	3.3581	
46 to 55 years old	3.2427	"Being a coach that's definitely added a lot of stress and I thought I understood the expectations of being a coach before I started, like I knew it was going to be a lot of time. Umm, but then when I umm, they changed the criteria and they changed the expectations." HS Teacher 2
56 to 65 years old	3.1200	
Over 65 years old	3.1750	

Reviewing the construct of personality, all ethnicity subgroups scores were similar. The lowest score was with the category of White respondents with 3.2316 and the highest score was the Asian ethnicity with a score of 3.3857. Ethnicity differences showed a variety of strategies when handling stress as the White subgroup referenced multitasking and the other group took on the sole role of completing tasks. The Black subgroup acknowledged procrastination as a source of stress because of the number of tasks assigned and sometimes shutting down. The results are shown in Table 54.

Table 54

Personality by Ethnicity Joint Display Table

Ethnicity	Personality Composite Score	Qualitative Support
White	3.2316	"Multitasking it comes, kind of comes naturally in stressful situations." ES Teacher 7
Black	3.3559	"I didn't get my lesson plan in on time because I was procrastinating, and one of the reasons why I procrastinate because I had a million other things that I had to get done and I just forgot to turn it in on time." MS Teacher 7
Asian	3.3857	
Other	3.2429	"I try to do everything myself, so that's it increases my stress." HS Teacher 6

Personality based on education levels showed similar results with respondents ranging within 0.09 points. Teachers who held a bachelor's degree reported the highest scores of 3.3412 and the lowest level indicated teachers with a doctorate degree of 3.2533. Both subgroups showed qualitative data acknowledging the personal strategy to attacking tasks. The bachelor degree holders took it upon themselves to learn what was expected and ways to implement new strategies causing stress. Whereas teachers holding doctoral degrees perceived situations to be stressful because of a lack of preparedness on their part looking more internally and placing the blame on themselves. The results are shown in Table 55.

Table 55

Personality by Education Level Joint Display Table

Education Level	Personality Composite Score	Qualitative Support
Bachelor's	3.3412	"Like nobody really guided me how to really navigate a lesson plan, how to really navigate a classroom classroom management. I actually had learned all those on my own, so I felt like it was more stress." MS Teacher 7
Master's	3.2649	No data to report
Education Specialist	3.2897	No data to report
Doctorate	3.2533	"Stress was because usually it's because of something that like. I didn't think ahead enough or foresee something coming, so I feel like it's my fault. Umm, because I didn't think ahead or I didn't have the foresight to." HS Teacher 7

Reviewing the construct of personality based on teaching experience novice teachers had the greatest score of 3.3694. As the teachers experience level increased the personality composite scores decreased. The lowest score was reported with veteran teachers of 3.2082. Novice HS teacher 1 explained some stress was self-induced,

I tend to bring stress on myself in two different instances. Either I I feel I'm not prepared enough even though I am, and so that creates a little bit of stress um or if. I will admit I tend to be a procrastinator, a little bit so professionally that causes some stress as well.

However, it was important to note that mid-career teachers who were only 0.03 points less than the novice group, explained stress was not always expressed with others. The results of the subgroup are shown in Table 56.

Table 56

Personality by Teaching Experience Joint Display Table

Teaching Experience Level	Personality Composite Score	Qualitative Support
Novice	3.3694	"I would say planning and organization. I tend to bring stress on myself in two different instances. Either I I feel I'm not prepared enough even though I am, and so that creates a little bit of stress um or if. I will admit I tend to be a procrastinator, a little bit so professionally that causes some stress as well. If I leave things to the last minute." HS Teacher 1
Mid-Career	3.3385	"I mainly keep the stress to myself, which is probably not healthy." ES Teacher 9
Veteran	3.2082	"Had you asked me this prior to retiring, I probably could have given you all kind of examples, but now I'm just in that mode of do the job, making sure students are producing good results and going home." MS Teacher 5

Reviewing personality based on academic setting showed the lowest scores were indicated at the elementary level. As the students move through academic settings, the teachers composite scores increased with middle school teachers reporting 3.2871 and then high school teachers scored the highest with 3.3206. All scores were in the neutral range. Elementary and middle school teachers referenced behavior and policies being stressful, whereas the highest group, high school teachers referenced teacher behavior and the needs of students. The results are shown in Table 57.

Table 57

Personality by Academic Setting Joint Display Table

Academic Setting	Personality Composite Score	Qualitative Support
Elementary school teachers	3.2687	"You know when you deescalating students, you know, assuming it's like behavior based because that's when it gets stressful." ES Teacher 8
Middle School teachers	3.2871	"I would love it if rules were fully implemented. Uh, I think that would alleviate stress." MS Teacher 10
High school teachers	3.3206	"If all teachers asked important questions and gave students what they needed every day and all along. Then we could have prevented some of the learning problems, which results in more stress that we have." HS Teacher 7

Personality by testable grade or course taught scores indicated the neutral range. Personality was affected with scores of teachers teaching testable content of 3.3258 while those not teaching testable content of 3.2739. The results are shown in Table 58. Teachers of testable content further cited a lack of time to prepare for the test along with continued teaching of the regular curriculum in addition to the extra additional activities taking precedence prior to the test administration. Teachers whose personality does not lend themselves to organization and multi-tasking could have be affected more than others because of these changes.

Table 58

Personality by Testable Content Joint Display Table

Testable Grade or Course	Personality Composite Score	Qualitative Support
Yes	3.3258	"And it's just very stressful because as I said earlier, I already barely don't even have enough time to plan for a regular class, let alone trying to plan for a whole extra part of review for everyday." MS Teacher 3
No	3.2739	"I got thrown into something and I had the rules, but I felt like it wasn't implemented the right way. Like nobody really guided me how to really navigate a lesson plan, how to really navigate a classroom classroom management." MS Teacher 7

Reported scores of Personality based on whether the teacher worked in a supervisory role indicated there was no difference. Teachers within the supervisory role had slightly lower scores of 3.2929. Teachers in non-supervisory roles were slightly higher with 3.2941, a mere 0.0012 points difference. Both groups acknowledged taking mental control when stressful situations arise to determine the best route of management. The results are shown in Table 59.

Table 59

Personality by Supervisory Role Joint Display Table

Supervisory Role	Personality Composite Score	Qualitative Support
Yes	3.2929	"I have to calm down to navigate through all the stress to come up with different strategies, because when it's overloaded and it's overwhelming, it's just, I break down and it's too much." ES Teacher 4
No	3.2941	"I like to talk in my brain to myself and hear me state what my options are in a difficult situation." MS Teacher 10

The subgroups with the highest scores for personality were Black males who were 26 to 35 years old who held a bachelor's degree. They were novice high school teachers of testable content not serving in a supervisory role.

The researcher reviewed contextual factors as well. The first was Perceived Supervisory Support. Reviewing the construct of perceived supervisory support by gender, the results are reported in Table 60. There was no difference indicated as the scores were in the neutral range and nearing the agree somewhat level. Male respondents indicated a slightly higher score of 4.6241 as opposed to their counterparts with a score of 4.6008. In addition to the similar composite scores reported, the qualitative responses were aligned with both groups citing the ability to meet with their administrators about concerns.

Table 60

Perceived Supervisory Support by Gender Joint Display Table

Gender	Perceived Supervisory Support Composite Score	Qualitative Support
Male	4.6241	"Yes, I I feel like I could talk to my the colleagues and the administration about stress." MS Teacher 2
Female	4.6008	"I think I have a pretty good relationship with our principal and I could go in and tell her anything." ES Teacher 5

When reviewing the perceived supervisory support construct based on age, all scores were in the neutral range. The highest scores were with teachers in the 18 to 25-years-old age group with a score of 4.7164 which neared the agree somewhat level. All scores were similar to the 18 to 25-years-old range score except for the subgroup of over 65 year olds. The over 65-year-old group reported a score of 4.0682. The results could be due to this age group only having

four respondents in comparison with the other age groups that had double digit respondents represented. The composite scores showed the greatest difference among the groups was in the over 65 years which is supported by the qualitative response in that good relationships were established with administration but sometimes, we "agree to disagree and follow what my boss says do" (MS Teacher 9). The results are reported in Table 61.

Table 61

Perceived Supervisory Support by Age Joint Display Table

Age Range	Perceived Supervisory Support Composite Score	Qualitative Support
18 to 25 years old	4.7164	"Yes, I feel like I could talk to them when it comes to my principal. It's a, I guess it's more so like a hit or miss." ES Teacher 3
26 to 35 years old	4.5844	"I do feel administrators are usually open to listening. Umm now whether they actually take into account what we have to say," HS Teacher 8
36 to 45 years old	4.6217	
46 to 55 years old	4.5430	"I have a pretty good relationship with all of my administrators. And so, I can ask, you know, point blank questions or agree to disagree and follow what my boss says do." MS Teacher 9
56 to 65 years old	4.6571	
Over 65 years old	4.0682	

The construct perceived supervisory support based on ethnicity respondents reported as low as neutral to agree somewhat. The lowest score was reported with the other subgroup of 4.2727 and the highest score was within the Asian subgroup of 5.2338. The results could be explained by a language or cultural barrier as most qualitative respondents chose not to bring concerns to administration to not be seen in a negative light or deemed combative. The results are shown in Table 62.

Table 62

Perceived Supervisory Support by Ethnicity Joint Display Table

Ethnicity	Perceived Supervisory Support Composite Score	Qualitative Support
White	4.4755	"I guess everybody has teacher friends so you do definitely vent to them, but my principal is fantastic. I do talk to her about behaviors and we do set up a game plan and follow the game plan." ES Teacher 2
Black	4.7173	"I feel like I can, but I feel like sometimes when you do vocalize it, I think they think you're complaining and you know, maybe you're not, what's the word for it? Or, you're not a good multitasker. Maybe, but you really are. But you're not complaining. You just trying to get your thoughts out." MS Teacher 7
Asian	5.2338	No data to report
Other	4.2727	"Not really. To my boss. To my superiors because I feel they'll think that I'm being inefficient." HS Teacher 6

Reviewing the educational level based on the construct perceived supervisory support, all subgroups were similar reporting high neutral scores. The highest score being teachers with a masters degree and score of 4.6527. The lowest scores were found in the subgroup of teachers who hold a doctorate degree and score of 4.0121 which barely falls in the neutral range. The results could be explained because the mean population of the subgroup was 15 respondents. The results are shown in Table 63. Teachers having less education felt as though they could vocalize their stress to administrators but leaned more on not sharing their feelings. However, those with higher levels of education expressed their inability to vocalize their stress with administration as the response could be considered more of an appeasement.

Table 63

Perceived Supervisory Support by Education Level Joint Display Table

Education Level	Perceived Supervisory Support Composite Score	Qualitative Support
Bachelor's	4.6193	"I feel like like I can, but I feel like maybe it's more like I'm complaining or like I'm incompetent." HS Teacher 4
Master's	4.6527	"I do feel like I can vocalize some stress to my you know my principals. I wouldn't, I mean, I wouldn't want to like not necessarily want to vocalize the stress for me, but I know that I could if I, if I wanted to, or if they asked me." ES Teacher 7
Education Specialist	4.6107	No data to report
Doctorate	4.0121	"I do not feel like I can vocalize it to principals or administrative staff. I don't feel valued by my current administrative staff. I feel as if they'll agree just to Get Me Out of their faces instead of agreeing to empathize." HS Teacher 3

Perceived Supervisory Support by teaching experience level indicated there was no real difference among the subgroups all scoring in the high neutral range. The highest range with novice teachers composite scores of 4.6605 and the lowest being mid-career teachers composite scores of 4.5577. The results are shown in Table 64. The qualitative results proved the focus of all teachers was with professionalism and the perception of competence. However, the novice group felt more allowed to voice concerns potentially due to the newness of the position and understanding of expectations and lack of experience.

Table 64

Perceived Supervisory Support by Teaching Experience Joint Display Table

Teaching Experience Level	Perceived Supervisory Support Composite Score	Qualitative Support
Novice	4.6605	"I think that and I speak for, I think most first year teachers. Feeling like it is safe to go and speak to your administration, whether that be principal, AP, someone of that, of that regard, feeling feeling safe, like you can go discuss those things with them without it, umm, affecting how you are perceived professionally if that makes sense." HS Teacher 1
Mid-Career	4.5577	"I do feel like sometimes with administration, it's difficult to vocalize it in a way that's professional, simply because a lot of the issues, you know every teacher thinks it's the principal's fault. Just like every kid thinks, it's the teacher's fault. Umm, so it it feels like whining." MS Teacher 8
Veteran	4.6054	"I generally try refrain itself for those I trust very, very closely. Umm, because I don't wanna be viewed as someone who can't handle it or cry baby or whiner. So I learned that not to be honest or be vocal anymore." HS Teacher 7

The construct perceived supervisory support based on academic setting indicated that all scores reported neutral responses. High school teachers reported the lowest score of 4.3683. The highest score of 4.9080 nearing agree somewhat was reported by elementary school teachers. The results are shown in Table 65. Qualitative results revealed that elementary school teachers were more relaxed and willing to express concerns with their administrators and administrators are willing to hear them with open door policies in place. However, as the increase in school aged children increased within an academic setting, the willingness to express concerns declined. HS teacher 2 reported, "if I did voice it, it would just be brushed off or that the response would be very negative and would increase being seen in a negative light" aligning with the composite

scores.

Table 65

Perceived Supervisory Support by Academic Setting Joint Display Table

Academic Setting	Perceived Supervisory Support Composite Score	Qualitative Support
Elementary school teachers	4.9080	"I could easily go to my administration and they have open doors." ES Teacher 1
Middle School teachers	4.5429	"As an administrator, I feel like he has not forgotten what it was like to be in the classroom and he has not forgotten the struggles of teachers or the strife, you know, are complaints and so coming to him feels like you're being heard."MS Teacher 1
High school teachers	4.3683	"Umm to the principal no umm that if I did voice it, it would just be brushed off or that the response would be very negative and would increase being seen in a negative light." HS Teacher 2

       Teachers who taught in a tested subjects or grades reported perceived supervisory support as neutral. There was no difference between teachers who taught in testable grades versus those who did not. The highest score was reported with teachers who did not teach testable content with a score of 4.6049. The lowest score of 4.5829 was reported in teachers who taught in tested subjects or grades. The results are shown in Table 66. Whereas teachers of testable content have stress related to questioning their competency, teachers of untestable content were stressed due to other documentation policies at the school level as noted by the qualitative responses.

Table 66

Perceived Supervisory Support by Testable Content Joint Display Table

Testable Grade or Course	Perceived Supervisory Support Composite Score	Qualitative Support
Yes	4.5829	"I think to is a first year teacher. I still feel kind of like the bottom of the totem pole, so sometimes I don't feel confident in bringing those concerns to administration because it does not feel important enough or I feel as though I'm being a bother." HS Teacher 1
No	4.6049	"I as the teacher have to keep track of all 130 students, look at how many tardies they have in a given class in my class, and when they hit the magic number, it's on me to get that put in and get that settled." HS Teacher 9

Perceived Supervisory Support by supervisory roles indicated no real difference between scores with both falling in the neutral range. Teachers who work in the supervisory role had the greatest score of 4.6169 and those not working in a supervisory role reported a score of 4.5938. The results are shown in Table 67. The qualitative results showed that teachers regardless of having a leadership role within the school reported administrators should provide supervisory support that was inspiring and empathetic as opposed to criticism. This type of support could lead to improved teacher effectiveness.

Table 67

Perceived Supervisory Support by Supervisory Role Joint Display Table

Supervisory Role	Perceived Supervisory Support Composite Score	Qualitative Support
Yes	4.6169	"I think we should get more positive feedback that we're doing something right, so that motivates us, something which is motivation." HS Teacher 6
No	4.5938	"I feel as if if administrators provided empathetic support or ways that address or different workshops that address specific needs and particular instead of just criticizing on a consistent basis, that could make things happen more effectively." HS Teacher 3

The subgroups with the highest composite scores for perceived supervisory support were teachers serving in supervisory roles, teachers not teaching testable content, and males who were in the 18 to 25-years-old range. These teachers were elementary and novice teachers who held a Master's degree, and were of Asian ethnicity.

In addition, the researcher reviewed perceived colleague support based on gender. There were no real differences reported between gender types. Both scores were at the high end of the neutral scale near agree somewhat range with females having the highest score of 4.9639 and males are 4.8846. The results are shown in Table 68. Qualitative respondents stated colleague support is desired. They further contend that when collaboration did not occur within teacher groups, it could cause more stress under an environment of not working together.

Table 68

Perceived Colleague Support by Gender Joint Display Table

Gender	Percevied Colleague Support Composite Score	Qualitative Support
Male	4.8846	"That's very frustrating, but when I feel or not getting a lot of cooperation from colleagues, but that doesn't happen a lot." ES teacher 8
Female	4.9639	"I don't feel comfortable telling them about this different stress areas because it involves them." ES Teacher 4

The results of the construct perceived colleague support by age showed the age group 18 to 25-year-olds were most affected with a score of 5.0933. The age group 56 to 65-year-olds were close behind with a score of 5.0794. These scores reflect the agree somewhat category. The lowest scores reported similarly were in the neutral range were found with the age groups of over 65 years old (4.8056) and teachers of 46 to 55-year-olds (4.8074). The results are shown in Table 69. While teachers reported being able to seek assistance from administrators because of open-door policies, they referenced the ease of conversing with colleagues over those in leadership. They cited the team aspect and the others teaching understanding what they were going through as the reason.

Table 69

Perceived Colleague Support by Age Joint Display Table

Age Range	Perceived Colleague Support Composite Score	Qualitative Support
18 to 25 years old	5.0933	"Yeah, I think so. I wouldn't say that I have done that so much, but I would feel comfortable with doing that." HS Teacher 10
26 to 35 years old	4.9955	"I can express their stress ohm, but for those who may be newer to my team, I don't feel as comfortable telling them about my stress because they may take it the wrong way." ES Teacher 4
36 to 45 years old	4.9462	
46 to 55 years old	4.8074	"So I feel I would feel comfortable being able to go to the boss, but it's easier to go next door to your friend and just have a moan and groan session because they're gonna moan and groan too." ES Teacher 5
56 to 65 years old	5.0794	
Over 65 years old	4.8056	

A review of perceived colleague support by ethnicity revealed neutral to somewhat agree responses. Although, scores were extremely high neutral scores with the White group was 4.9240 and the Black group was 4.9746. The highest group was Asian with a composite score of 5.2222 and the lowest score was found in the other group with 4.6032. The other group explained that colleague support was needed to reduce stress levels as HS Teacher 6 stated, "If they can be responsible and do their duty, maybe I will be less stressful." However, ES Teacher 7 and ES Teacher 6 shared colleagues were a source of advice and friendship to share concerns when stress becomes an issue that needs to be addressed. The results are shown in Table 70.

Table 70

Perceived Colleague Support by Ethnicity Joint Display Table

Ethnicity	Perceived Colleague Support Composite Score	Qualitative Support
White	4.9240	"Your colleagues know what you're going through and they, they've been there and they. And you know you can get advice from colleagues." ES Teacher 7
Black	4.9746	"You form more of a friendship with your colleagues, and so you can talk to them more about some of the stresses that go on." ES Teacher 6
Asian	5.2222	No data to report
Other	4.6032	"If they can be responsible and do their duty, maybe I will be less stressful." HS Teacher 6

A review of perceived colleague support by education level revealed similar findings. However, teachers that held a bachelor's degree fell into the category of Agree Somewhat (5.0052). However, the rest of the categories reported high neutral composite scores. The results were supported by MS Teacher 10 citing "communication and team wide procedures being implemented consistently" whereas HS teacher 7 reported communication as well by following procedures. The results are shown in Table 71.

Table 71

Perceived Colleague Support by Education Level Joint Display Table

Education Level	Perceived Colleague Support Composite Score	Qualitative Support
Bachelor's	5.0052	"I would say Communication. So within the team, umm, it goes back to, you know, having team wide procedures that are implemented consistently." MS Teacher 10
Master's	4.9660	No data to report
Education Specialist	4.8348	No data to report
Doctorate	4.7407	"If everyone read their emails and followed procedure as best to their abilities. And took time to complete task and honor deadlines that would make everyone's job better." HS Teacher 7

Perceived Colleague Support results were found to be similar with mid-career and veteran teachers having high neutral composite scores of 4.8579 and 4.9611, respectively. Novice teachers agreed somewhat with a score of 5.0998 reporting the highest composite score. Novice teachers reported the usage of colleagues to discuss stress according to MS Teacher 6 in contrast to mid-career MS Teacher 4 who acknowledged the lack of being able to "openly vent" at school. Veteran teacher MS 9 suggested the need for all teachers to obtain someone at work to be "a work best friend." The results are shown in Table 72.

Table 72

Perceived Colleague Support by Teaching Experience Joint Display Table

Teaching Experience Level	Perceived Colleague Support Composite Score	Qualitative Support
Novice	5.0998	"More so to my colleagues than to my principal. Um, because that's where a lot of stress comes from." MS Teacher 6
Mid-Career	4.8579	"No, because I didn't have anyone that I work with that I felt like I could openly vent to." MS Teacher 4
Veteran	4.9611	"I also have a work best friend, which is something that I think all teachers need." MS Teacher 9

Perceived colleague support by academic setting results were similar in that all scores fell in the high neutral range suggesting the importance of colleague support for teachers. The support was not just for stress but for educational practices as well. Elementary teachers reported the highest composite scores of 4.9946, followed by high school teachers with a score of 4.9611 and middle school with 4.8651. Teachers reported collaborative colleagues to share responsibility tasks and use constructive critism and feedback conversations to improve teaching practices were desired. Team support from peers was witnessed as needed for all academic settings. The results are shown in Table 73.

Table 73

Perceived Colleague Support by Academic Setting Joint Display Table

Academic Setting	Perceived Colleague Support Composite Score	Qualitative Support
Elementary school teachers	4.9946	"From my colleagues, I believe in the constructive criticism because they're with me, especially when it's like the fellow 3rd grade teachers, because they know what they hear and see is everyday." ES Teacher 3
Middle School teachers	4.8651	"Feedback helps me do my job more effectively. I like to engage in conversation about, you know, teaching content areas, student performance, data disciplines." MS Teacher 5
High school teachers	4.9611	"If it is a collaboration colleague willingness to help out and do share more of the responsibility with the content area, it would be more equal, more equal in responsibilities." HS Teacher 2

Perceived colleague support by testable content revealed a slim difference of 0.005 between respondents. Teachers with testable content was 4.9485 which was slightly higher than those teachers who did not teach testable content or grades with a score of 4.9434. Both teacher groups referenced the need and ability to converse with a peer to state their stress and potentially receive strategies to handle the issues that arise. This further added evidence to the aspect of teacher colleague support systems being in place for all teachers. The results are shown in Table 74.

Table 74

Perceived Colleague Support by Testable Content Joint Display Table

Testable Grade or Course	Perceived Colleague Support Composite Score	Qualitative Support
Yes	4.9485	"I just think just being able to go to a colleague with any kind of like just supports with the teaching and just with being able to talk about the stress, because sometimes you just need to kind of get it off your get off your chest and talk it out." ES Teacher 7
No	4.9434	"Especially like if it's in relation to those two things, with the plate being overfilled and then the Communication. You know, there's always somebody that's willing to lend a helping hand, or at least an open ear to give ideas on how to handle or balance what was, what was added." HS Teacher 8

Perceived colleague support by supervisory role revealed high neutral results. Teachers not serving in a supervisory role reported composite scores of 4.9530 in contrast to teachers who served in a leadership setting with a reported score of 4.8849. MS Teacher 8 explained the need teamwork when all colleagues could "be on the same page about what policies are being enforced." They further added when one teacher was consistently implementing policies and others on the team did not, the information being relayed to the students was confusing. The enforced undesirable policy could bring upon undue backlash from students to the enforced teacher creating increased stress situations. The results are provided in Table 75.

Table 75

Perceived Colleague Support by Supervisory Role Joint Display Table

Supervisory Role	Perceived Colleague Support Composite Score	Qualitative Support
Yes	4.8849	"We need to distribute the duties among us so that one person's not feeling overloaded." ES Teacher 1
No	4.9530	"I think being on the same page about what policies are being enforced." MS Teacher 8

The highest composite scores reported for the construct perceived colleague support by subgroup were with teachers who were not serving in a supervisory role. The teachers were most likely elementary teachers that were novice teaching a testable course or grade. The teachers were female, of Asian ethnicity, were 18 to 25 years of age, and held a bachelor's degree.

The next construct researched was Organizational Justice. There were four different types of organizational justice so the measure of the subdimensions on the overall justice perceptions existed so there was variation among the teacher's responses. The results are provided in Table 76. Both male and female subgroups report similar neutral findings with males (3.7201) being slightly less than their female counterparts 3.7851. The male respondent ES Teacher 8 reported perceptions of fairness as important. ES Teacher 8 reported,

I think like with anything else, some people perceive that it's been fair, but I, you know my experience has been when people get what they want, they feel like the due process was great and if they don't, they feel like they were screwed by the process.

ES Teacher 2 stated clarity and communication was important to ensure that everyone is aware of what is occurring within the school. ES Teacher 2 added,

We get a smores newsletter sent out every Sunday night or Monday morning. It explains

everything we need to know for the week. It also puts down who's gonna be absent on

what days. They do a shout out every month for like certified staff member of the month

and classified which is awesome. But anything you can know about that week, unless it's

put on our principal t the last minute, you know, in that newsletter. So there's really no

surprises.

Table 76

Organizational Justice by Gender Joint Display Table

Gender	Organizational Justice Composite Score	Qualitative Support
Male	3.7201	"I think like with anything else, some people perceive that it's been fair, but I, you know my experience has been when people get what they want, they feel like the due process was great and if they don't, they feel like they were screwed by the process." ES Teacher 8
Female	3.7851	"We get a smores newsletter sent out every Sunday night or Monday morning. It explains everything we need to know for the week... So there's really no surprises." ES Teacher 2

A review of organizational justice perceptions by age found younger teachers neared the

somewhat agree range of neutrality with the highest score of 3.9644. The oldest age group of 65

or older teachers reported the lowest composite score at 3.3333 toward the low end of neutrality.

The age group of 18- to 25-year-olds reported respect is shown when "eye contact is made. You

know I'm, I'm spoken to like a human being" according to HS Teacher 1. Middle age groups

reported communication was the way respect is provided and the oldest age group according to

MS Teacher 5 occurred when they are truly heard in the statement, "When I speak, they listen."

The results are shown in Table 77.

Table 77

Organizational Justice by Age Joint Display Table

Age Range	Organizational Justice Composite Score	Qualitative Support
18 to 25 years old	3.9644	"It is respectful in the sense that eye contact is made. You know I'm, I'm spoken to like a human being. I don't feel umm, I don't always feel that I'm spoken down." HS Teacher 1
26 to 35 years old	3.6349	"I feel I'm treated with respect if the communication is, not like an attack. So if it is just clear directives or clear information without bringing up mistakes or errors that have been made before. Or errors that somebody else did and it doesn't apply to everybody." MS Teacher 4
36 to 45 years old	3.7993	
46 to 55 years old	3.7674	"I feel like I'm respected. When I speak, they listen. I get asked my opinion about a lot of things because of the experiences I had." MS Teacher 5
56 to 65 years old	3.8254	
Over 65 years old	3.3333	

Organizational justice by ethnicity perspectives showed the Asian population had the highest composite score at 4.0635 reported results in the somewhat agree range. The results were followed by the other groups in the neutral range. The Black population of 3.8992 according to MS Teacher 5 reported qualitative results focused on pay in comparison to professionalism amongst other careers aligning with the White group's focus of equivalent compensation from HS Teacher 8. The lowest composite score was found in the other population at 3.2698 which reported organizational justice perceptions were solely based on administrative responsiveness according to HS Teacher 6. Table 78 presents the findings.

Table 78

Organizational Justice by Ethnicity Joint Display Table

Ethnicity	Organizational Justice Composite Score	Qualitative Support
White	3.6553	"And I also feel like that that's one of the reasons that a lot of uh teachers don't stay, that there's a decline of teacher retention because once they step foot in the classroom and realize all that they have to do, they don't feel like they're equivalently compensated for such." MS Teacher 8
Black	3.8992	"I really feel like educators, we do a lot. We do a lot and we're considered. We fall in the professional umbrella, but our pay is nowhere near, you know where it needs to be with regards to other professionals that may do less, I feel sometimes and may not have the stressful situations that we have going on a daily continual basis." MS Teacher 5
Asian	4.0635	
Other	3.2698	"My admin, yes, they have been very responsive to my emails. If I have some problem, they do respond immediately and they do give me support." HS Teacher 6

Educational level perspectives on organizational justice report findings were within the neutral range. The results showed lower levels of education have perceptions of organizational justice that increased until the doctoral level was reached. Organizational justice perceptions from the doctoral category had a composite score of 3.1333. According to HS Teacher 3, the perception of due process was not being followed at the school level. The greatest composite score was found with the Educational Specialist group. The results are provided Table 79.

Table 79

Organizational Justice by Education Level Joint Display Table

Education Level	Organizational Justice Composite Score	Qualitative Support
Bachelor's	3.7856	"Every day I say I am not paid enough. Because without teachers, you wouldn't have your lawyers. You wouldn't have your doctors. You wouldn't have any of these people that make 6 figures. You wouldn't have none of them without someone in the in the classroom to teach them to inspire them. You wouldn't have that." ES Teacher 3
Master's	3.8198	"I think communication with administration is fair. As for my administration, as long as the door their door is open, you know you can come on in, ask questions and get immediate feedback."
Education Specialist	3.8405	No data to report
Doctorate	3.1333	"I do not feel like due process is implemented or followed by or applied by administration." HS Teacher 3

Reviewing organizational justice by teaching experience the results showed all scores fell in the neutral range and were similar. The novice level group were slightly in more agreement with a score of 3.8617 citing compensation in conjunction with work were not aligned. All teacher groups referenced fair compensation with mid-career HS Teacher 4 reported the perception was based against the compensation of their parents. The findings are reported in Table 80.

Table 80

Organizational Justice by Teaching Experience Joint Display Table

Teaching Experience Level	Organizational Justice Composite Score	Qualitative Support
Novice	3.8617	"Its not equal or fair compensation. because just like doctors and just like lawyers they have to go through so much. Pedelogical training. So much Psychological training. So much technological training. So much PL, so much Development, continually. And when you become a doctor, that's it. You just you know. But as teacher, you always have to be malleable." HS Teacher 5
Mid-Career	3.7105	"I feel like I'm kind of new money though, like I came from very poor and humble beginnings. So this is double, triple what my parents ever made. If I was compared that way, but umm when I talked to like somebody from another county, then I kind of realized how big that gap is. And I was like, wow, like am I am I doing myself a disservice." HS Teacher 4
Veteran	3.7881	"I'm past 22 years and so now I don't, I get nothing for as long as I teach and I don't think that's fair at all and nice. Most definitely, If you want to retain people, especially these children, coming in, they're gonna put up with that. They just quit and walk out. They don't give two weeks notice. They don't do any of that anymore." MS Teacher 9

When reviewing organizational justice by academic setting the results showed elementary teachers agreed somewhat 4.000 and middle and high school teachers' results were in the neutral range. ES Teacher 3 stated "They try to treat everyone with fairness." Both middle and high school teachers reported qualitative findings regarding the communication aspect of organizational justice. The results are shown in Table 81.

Table 81

Organizational Justice by Academic Setting Joint Display Table

Academic Setting	Organizational Justice Composite Score	Qualitative Support
Elementary school teachers	4.0000	"They try to treat everyone with fairness, but I can also sense there is some some favoritism when it comes to admin, especially for those that have been here a while or they start off the bat, you know, doing great and then you have those that you know have been here for a minute. You know, they do what they can, and they even go above and beyond, but it still feels like it's being overlooked because of something else, something that can't be, you know, something that can't be helped or hindered." ES Teacher 3
Middle School teachers	3.7000	"We receive a lot of information and reminders through emails and in meetings, and when it's straightforward and straight to the point of what needs to be done and how it needs to be carried out, it is helpful." MS Teacher 4
High school teachers	3.6243	"Not always the response that you want, but they're usually pretty progressive versus being regressive." HS Teacher 8

Organizational justice by testable content was no different than teachers who did not teach tested grades or courses having both reporting neutrality in their perceptions. Teachers who do not teach testable content had a composite score of 3.7988 compared to those who did with a score of 3.7251. Teachers not teaching testable content such as ES Teacher 8 recognized the perception of fairness was a difficult task for administrators and ES Teacher 7 referenced administrators adhering to policies and procedures all facets of organizational justice. The results are shown in Table 82.

Table 82

Organizational Justice by Testable Content Joint Display Table

Testable Grade or Course	Organizational Justice Composite Score	Qualitative Support
Yes	3.7251	"I think admin is very good about just kind of looking at what's in the school handbook and then like what the district like what the district has in place and they're very good about following those kind of guidelines." ES Teacher 7
No	3.7988	"I think it administrators really have to work overtime to make sure that there's no appearance of somebody being treated better than someone else, and that's you, you can never fully eliminate that." ES Teacher 8

The results of organizational justice by supervisory roles reported no real difference among teachers as both categories fell in the neutral range. Teachers within a supervisory role had a composite score of 3.8492 in comparison to those who did not have a supervisory role score of 3.7603. The perception of teachers in a supervisory role referenced the focus on the need to complete tasks for others according to HS Teacher 7 whereas the perception of those not in a supervisory role was on overall fairness and the enforcement of policies schoolwide being consistent. The results are shown in Table 83.

Table 83

Organizational Justice by Supervisory Role Joint Display Table

Supervisory Role	Organizational Justice Composite Score	Qualitative Support
Yes	3.8492	"I wouldn't have to carry the mental load or the worry of other people not doing their job completely that I would have to pick it up and do it." HS Teacher 7
No	3.7603	"I think that it is applied fairly as among the administration. Umm. I don't necessarily feel among the teachers that it's enforced. I mean, I just because I don't think teachers enforce it differently." HS Teacher 10

The highest composite scores for the construct of organizational justice by subgroup included novice females who were in the 18- to 25-year-olds age range. The ethnicity was reported as Asian and Education Specialist degree was the level of education. These teachers served in supervisory roles, did not teach testable content, and were working at the elementary academic setting.

The final contextual factor researched was work-family conflict. When reviewing the work-family construct by gender, females reported higher levels at 4.3360 falling into the neutral range. Similarly, male respondents had a composite score of 3.9654 falling in the somewhat disagree nearing the neutral range. ES Teacher 8 stated "We work so that we can live, we don't live to work, and a good administrator will understand that if every you know if you need the time to be with family" supporting the somewhat disagreement composite score. ES Teacher 10 reported, "I do have that stress and it does follow me home and does impact umm my relationship with my husband" further explaining the high score for the female population. The results are provided Table 84.

Table 84

Work-Family Conflict by Gender Joint Display Table

Gender	Work-Family Conflict Composite Score	Qualitative Support
Male	3.9654	"We work so that we can live, we don't live to work, and a good administrator will understand that if every you know if you need the time to be with family." ES Teacher 8
Female	4.3360	"I do have that stress and it does follow me home and does impact umm my relationship with my husband." ES Teacher 10

Reviewing results of work-family conflict by age, there were similar scores being reported with slight increases until the age group of 46 and over. The age group of 18- to 25-year-olds had a composite score of 4.3920 which was supported by HS Teacher 10 acknowledging the work-life balance struggle, "I feel like when I first started this job, it feels like my personal life went away." The largest composite score was found in the 36- to 45-year-old category with 4.4613. MS Teacher 3 explained the struggle of work-life balance citing "It conflicts with my home life because most days I'm just so bogged down and so tired and so overstimulated and so draining that I really don't have time for my newborn or my, um partner." Age ranges of 50 or greater reported slightly lower scores falling in the slightly disagree range. The results could be explained as most teachers in the age group have children who were more grown, independent, and possibly left the nest. The results are provided in Table 85.

Table 85

Work-Family Conflict by Age Joint Display Table

Age Range	Work-Family Conflict Composite Score	Qualitative Support
18 to 25 years old	4.3920	"I feel like when I first started this job, it feels like my personal life went away and now as I've started working, I've slowly started to get it back as I've just gotten better at everything and gotten more used to it." HS Teacher 10
26 to 35 years old	4.3633	"It conflicts with my home life because most days I'm just so bogged down and so tired and so
36 to 45 years old	4.4613	overstimulated and so draining that I really don't have time for my newborn or my, um partner. So sometimes I found myself on being very short, short tempered, tempered when I've gotten home or just I'm just not ready to deal with anything else, but I can't really shut that down." MS Teacher 3
46 to 55 years old	4.1440	"I think that the middle school and high school level demanding that teachers be at a huge
56 to 65 years old	3.9943	exorbitant amount of events is ridiculous." MS Teacher 9
Over 65 years old	3.4000	

A review of work-family conflict by ethnicity showed all subgroups were in the neutral range. The Black subgroup reported the lowest composite score of 4.1881 and Asian and Other subgroups had the greatest scores of 4.7429 and 4.6571. The results were supported with MS Teacher 7 offering compliance in meetings, but requesting the time be limited. ES Teacher 1, the White subgroup, acknowledged "I never have had any work related stress that I carried on to the family." The results are shown in Table 86.

Table 86

Work-Family Conflict by Ethnicity Joint Display Table

Ethnicity	Work-Family Conflict Composite Score	Qualitative Support
White	4.2769	"I never have had any work related stress that I carried on to the family." ES Teacher 1
Black	4.1881	"Just you mainly not having so many late meetings. It's ok to have one once a month or once every two weeks or something. That's fine, but don't make it a habit of doing it every day or every other day cause you know some of us have little ones that we have to attend to." MS Teacher 7
Asian	4.7429	No data to report
Other	4.6571	No data to report

The work-family conflict by education level all found scores within the neutral range with scores reported from 4.0 to 4.5. The lowest reported score was in teachers who held an Education Specialist degree of 4.0359 and the highest score being those who hold a doctoral degree 4.5867. HS Teacher 7 reported ensuring teachers feel good about themselves prior to leaving for home so that negative aspects of the job do not enter the home. This could be explained by the majority of higher educational degrees are obtained by older individuals who have had time to marry and possibly have children at home that includes additional responsibilities. The results are provided in Table 87.

Table 87

Work-Family Conflict by Education Level Joint Display Table

Education Level	Work-Family Conflict Composite Score	Qualitative Support
Bachelor's	4.1718	"If you need me after school, cool but you all say that you value my time and you know you need to value me as a, as a teacher, then admin should respect that as well." ES Teacher 3
Master's	4.3568	"It's like teaching is the only job where it's like you have to prepare before then do, you have your get your things, teach during the day and then you like have, and then sometimes you still have more to do after it's over and you're not getting paid past your contract time, but you're there long, that you could be there." ES Teacher 7
Education Specialist	4.0359	No data to report
Doctorate	4.5867	"Let us feel good about the job we're doing, you know, making it possible for us to be our best selves here. And then that will carry home and having less to take home." HS Teacher 7

A review of work family conflict by teaching experience concluded the results found all composite scores were in the neutral range. Veteran teachers reported the lowest level of work-family conflict which can be supported by those teachers have worked out the problems over time as their experience with the position increased. MS Teacher 5 reported, "I wouldn't say that I have family conflict related to, work related stress." The greatest work-family conflict existed with mid-career teachers. HS Teacher 8 referenced the conclusion with the statement, "I took work home with me and I finally came to a point where I realized that that wasn't the answer, cause that stressed me out even more." The complete results are shown in Table 88.

Table 88

Work-Family Conflict by Teaching Experience Joint Display Table

Teaching Experience Level	Work-Family Conflict Composite Score	Qualitative Support
Novice	4.1224	"I guess being more understanding that. Work is not all we have to do. We have other relationships and, umm, duties that we have to perform." MS Teacher 6
Mid-Career	4.4500	"I took work home with me and I finally came to a point where I realized that that wasn't the answer, cause that stressed me out even more." HS Teacher 8
Veteran	4.1196	"I wouldn't say that I have family conflict related to, work related stress." MS Teacher 5

Work-family conflict by academic setting resulted with all scores falling within the neutral range. Elementary school teachers had the greatest amount of work-family conflict with a score of 4.4000. ES Teacher 2 reported through experience they have set boundaries to ensure they are in control of how work-family conflict affects them. Middle school teachers composite scores were 4.0971 and was further supported by MS Teacher 1 as they stated administration has provided time in the statement, "I feel like here at least I've been given opportunities to not have to take my work home with me." The findings are reported in Table 89.

Table 89

Work-Family Conflict by Academic Setting Joint Display Table

Academic Setting	Work-Family Conflict Composite Score	Qualitative Support
Elementary school teachers	4.4000	I've been teaching long enough that at this point I have very clear and defined boundaries and so I have office hours set on Remind and my parents know that if it's outside of office hours you may not get a response until the following morning. And I don't I'm not gonna say I don't take work home because I do take work home, but It's I don't wanna say like it's enjoyable for me, because obviously I'd rather be at the mountains or the beach, but it's not the end of the world for me and it's stuff just as a teacher, you know, like this is what has to be done." ES Teacher 2
Middle School teachers	4.0971	"I feel like here at least I've been given opportunities to not have to take my work home with me." MS Teacher 1
High school teachers	4.2515	"I would say scheduling and announcing meetings well ahead. Um. They've been a number of times when I've had to call my wife at the last moment and say hey, apparently we have a faculty meeting today. I need you to pick up the kids. I need you to do XYZ because I can't do what I normally would do because of this meeting that has been scheduled within the past 24 hours." HS Teacher 9

Work-family conflict by testable content teachers fell in the neutral range. Teachers who taught testable content reported slightly higher composite scores with 4.3464 and those who did not teach testable content had a composite score of 4.2013. Teachers who taught testable content suggested faculty meetings being lessened and the elimination of paperwork (lesson plans) would be contributing factors that could decrease their work-family conflict according to ES Teacher 4. Teachers not in testable content reported work-family conflict to not be a big concern for them according to HS Teacher 6 because they still lived at home with their parents and did

not have a family of their own to take care of. The complete results are provided in Table 90.

Table 90

Work-Family Conflict by Testable Content Joint Display Table

Testable Grade or Course	Work-Family Conflict Composite Score	Qualitative Support
Yes	4.3464	"Faculty meetings make it, you know, make them a little bit shorter and make our paperwork load a little bit lighter, especially again with the lesson plans. Unnecessary paperwork." ES Teacher 4
No	4.2013	"I really don't have work related stress which I carry home." HS Teacher 6

Work-family conflict by supervisory role reported scores within the neutral range. Those teachers in a supervisory role reported higher levels of work-family conflict with a score of 4.4643. Teachers not in a supervisory role have a composite score of 4.2315. HS Teacher 2 reported the additional responsibilities outside of contract hours needs communication and consistency as that was a source of work-family conflict. The complete results are provided in Table 91. ES Teacher 9 reported working alongside his wife and how they openly communicate about the day's events together to lessen the stress from work-family conflict.

Table 91

Work-Family Conflict by Supervisory Role Joint Display Table

Supervisory Role	Work-Family Conflict Composite Score	Qualitative Support
Yes	4.4643	"Communication and consistency. Uh, recently, this year we had a parent meeting scheduled with sports, with coaching and the date that we were given and we were told it was mandatory. I drove home and then drove back and nobody was here. And when I called, the day had been changed. Umm, I'd had a family dinner that I was supposed to be at and I had cancelled that to be at that event. Umm. And so that was frustrating. And then when they rescheduled the event, I was given one day notice of the reschedule and it happened to be on the rescheduling date of that family event, so that was very frustrating." HS Teacher 2
No	4.2315	"My wife works with me. So whatever conflicts you know, we have an all you know, we usually open in conversation about what's going on in both of our lives and what's going on at work. So there's not as much stress there." ES Teacher 9

The highest composite scores for the construct of work-family conflict were with the following subgroups. The teachers were females, age 36 to 45 years old who were of Asian ethnicity working at the elementary school setting. The subgroups of teachers were in the mid-career phase of their teaching experience level and possibly held a doctorate degree. These teachers were those who teach a testable grade or content and serve in a leadership role at the school.

The findings from the mixed methods are summarized in Table 92. Perceived supervisory and colleague support were found in agree somewhat ranges whereas all other areas were in the neutral range. Perceived colleague support was the highest composite score of 4.9453, was 0.05 points from the agree range. The results were further supported by HS Teacher 1, "I just knowing

that your colleagues are there for you and a sense that they act as a support system when you

need to stress out those people offer a safe space for you to do that."

Teachers within the district surveyed reported a moderate level of stress with a composite

score of 3.2440. In addition, the lowest score was reported by the construct of important levels of

self-efficacy with a composite score of 3.1289. The results were further supported by MS

Teacher 5, "I just feel like I haven't done my job effectively." Personality had a composite score

of 3.2940 which fell in the neither agree nor disagree range. Organizational justice had a

composite score of 3.7702. ES Teacher 8 reported workplace fairness was defined by perceptions

of agreement. Work-family conflict had a composite score of 4.2576 falling in the neutral range.

The complete results are provided in Table 92.

Table 92

Mixed Methods Summary Joint Display Table

Construct Name	Quantitative Composite Results	Qualitative Results
Teacher Stress	3.2440 Moderate Level	"I think when we have resources and we know what is expected, uh, we'll be less stressful because you're more prepared. You have a plan. You plan according to what is expected and you feel you feel your organized." HS Teacher 6
Self-Efficacy	3.1289 Important Level	"I just feel like I haven't done my job effectively." MS Teacher 5
Personality	3.2940 Neither Agree/Disagree	"I like to talk in my brain to myself and hear me state what my options are in a difficult situation." MS Teacher 10
Perceived Supervisory Support	4.5964 Agree Somewhat	"It would allow me the opportunity to feel like that can open up and say what's wrong with me instead of worrying about whether or not what I say is wrong, is gonna be used on my TKES evaluation." HS Teacher 3
Perceived Colleague Support	4.9453 Agree Somewhat	"I just knowing that your colleagues are there for you and a sense that they act as a support system when you need to stress out those people offer a safe space for you to do that." HS Teacher 1
Organizational Justice	3.7702 Neither Agree/Disagree	"I think like with anything else, some people perceive that it's been fair, but I, you know my experience has been when people get what they want, they feel like the due process was great and if they don't, they feel like they were screwed by the process." ES Teacher 8
Work-Family Conflict	4.2576 Neither Agree/Disagree	"I took work home with me and I finally came to a point where I realized that that wasn't the answer, cause that stressed me out even more." HS Teacher 8

Mixed Methods Summary

Using the study insight, educational leaders should offer support for teachers within

their building and potentially use the newfound knowledge within the district and state.

Understanding the relationship between these factors and stress could create more opportunities for students to excel by providing teacher support to prevent stressful antecedents from arising. Herman et al. (2021) contended teacher support was critical and necessary for job demands to be completely fulfilled. With the educational trend of active Professional Learning Communities (PLC), the examination of coworker support would particularly prove beneficial. It was clear that teachers from all levels of experience and academic setting had varied responses to the survey and interview questions. Even with the variation, teachers reported moderate levels of stress exist. Teachers agreed that perceived colleague support was needed and agree somewhat that supervisory support was needed. In the areas of self-efficacy, the levels reported were important. Personality, organizational justice, and work-family conflict constructs teachers reported with neutral scores. Although, one must be mindful of the different facets of each of those constructs and reason the variation that existed within. The interviews revealed supporting evidence of the responses found within the survey.

Summary

The results suggested a relationship existed between the factors studied and teacher stress. People handled stress factors differently (Clement 2017; Shakeel et al., 2021) and how they cope with the stress affected how they manage stress (Shoulders et al., 2021). Coping was a process that was key to managing stress (Gustems-Carnice et al., 2019). Stewart and Rice (2022) suggested mindfulness (awareness, attention, and acceptance) as a technique to reduce stress, anxiety, and depression while enhancing the learning environment. The qualitative information brought further insight into the depth of the interaction among constructs. Therefore, each construct showed was a valid source of stress for the educators surveyed and interviewed. These

constructs should be areas of focus for educational leaders to begin reducing stress levels for

their employees and offering support in these areas.

Chapter V: Conclusions

One major issue within the field of Education today was that of teacher retention (Hanks et al., 2020). The role stress played on teacher's abilities to effectively complete their job was one that all stakeholders in education should be concerned with to ensure high quality teaching is prominent within today's classrooms (Hanks et al., 2020). The issue was not contained within the United States but affects many other nations as well (Betoret, 2006; Brady & Wilson, 2021; Celik & Kalkan, 2022; Chaplain, 2008; Howard & Johnson, 2004). The study sought to uncover the impact of individual and contextual factors on teacher stress within K-12 schools and identify prominent sources of stress perceived by teachers. The study was carried out by researching a school district within Georgia specifically looking at each school level as its own entity to solicit information regarding each school setting. The study reviewed teachers from experience level as well to acquire information from all stakeholders of teachers with goal of acquiring a complete picture of how stress affects teachers and gain insight into what they believe would alleviate some of the sources.

The initial phase was conducted by gathering information from participants through a 66-question quantitative survey. Participants were offered participation in a follow-up interview. There were 30 interviews having representation from each school setting and career level. There were eight females and two males from each group and a mixture of experience levels within. Previous literature combined middle and high school settings into one by referencing them as 'secondary'. Previous research provided little insight into reviewing contextual factors attributing stress in conjunction with internal factors. Moreover, these specific factors have not been investigated before. The study's mixed methods design added to the literature by seeking to acquire a more thorough review of teacher stress.

Limitations of the Study

The study, while comprehensive, had limitations. Initially, the number of quantitative survey responses only accounted for 11.4 % of the teaching population of the district. There was also an unfair representation of new teachers at the elementary level represented in the interview portion of the study. The researcher was required to go through principals at the schools to contact all teachers within the district, which could have explained the lower response rate. The survey window was extended to yield again a low response rate.

Reviewing the Kappa Coefficient scores amongst observers, there was a fair disagreement of interrater reliability found with one theme. While the interrater reliability was acceptable, the measure was based on the coder and their difference in findings were evident. The results were most likely due to the difference in experience with coding and clarity of the constructs.

The length of the initial survey was vast, and many participants did not complete the survey in its entirety. Therefore, many responses were unable to be used in data analysis. The survey being provided from leadership versus the researcher may have swayed some teachers to not complete the survey in fear of whether it was truly anonymous. Because of that fear, some teachers may not have been as truthful for fear of reprimand with the questions pertaining to leadership.

The low correlations existing in the Personality construct were an additional delimitation. These results could have occurred because the scale survey items could have been misinterpreted in context by the teachers. For example, the first question asked, "I see myself as someone who is reserved." Teachers could have interpreted that to mean reserved situationally interacting with students, colleagues, or principals and the response could be

altered based on which setting the teacher chose to respond. Again, with the question "I see myself as someone who has few artistic interests" should be answered on a level of creativity but teachers who view themselves as mathematicians or scientists may not categorize themselves under the umbrella of artistry. In the area of agreeableness, the question was "I see myself as generally trusting," but the context upon which a participant interprets the question can change a respondents answer to this scaled question as trusting can be in general, with adults, with students, and within the workplace. Therefore, the personality questions were very generalized and not in the context of teacher's complex work responsibilities. The results were further supported with high standard deviations for each survey question as the scale was a Likert-item scale and teachers have a wide range of responses reporting four for each item.

Organizational justice and work-family conflict constructs reported high standard deviations on individual survey items meaning a wide range of responses exist among teacher responses helping to explain the neutral reported scores. Work-family conflict scores could be reflected because teachers did not want to truly answer questions regarding their home life because of questioning the anonymity of the survey. Also, the questions were vague in determining what is considered "sufficient" and spending time with family could also be commitments outside of the work setting. Again, "working often makes me irritable or short-tempered at home", based on a person's personality that could be perceived differently because what irrates one person was not bothersome and acceptable for another. Therefore, the survey question wording may have confused teachers to respond differently based on their perception of what the question was asking. So, the scales which were showing neutral contribution of the construct is because first they were measuring different things. The scales which were showing neutral contribution of the construct was because first they were

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measuring different things, secondly, it was not specific and lastly it was not contextualized to the complex job responsibilities of the teachers. Therefore, the generalized nature of the survey items was another limitation.

The interviews were not fairly representing all demographic groups of the quantitative survey making qualitative support not evidenced within the mixed-methods joint display table in areas showing the highest composite scores.

Recommendations for Future Research

Teacher stress has many sources and the current study only researched one county within the state of Georgia. Further research should include different types of schools (rural, suburban, urban, Title 1, charter, and private). With both secondary levels acknowledging perceived supervisory support to be a main source of stress in addition to new teachers, the construct should be further investigated to learn specifically what the sources are that need to be improved. The interviews uncovered the many roles of the teacher. Further investigation could review the impact of the roles on teacher stress. The study should be re-run on social platforms to not only acquire in-state and out-of-state responses from teachers but to lessen the fear of participation being linked to their current employment status. Future research should also include viewing those teachers who did recently leave the profession against the study results to investigate possible correlations. Much research has involved traditional PK-12 teachers, it may be useful to compare those scores to teachers at higher educational settings. While the study offered SEM results, future research should include more than 1 dependent variable to develop a model where the paths of the constructs were complete. Future research should ensure interviews are complete representations of the demographic populations used within the quantitative portion of the study to become a more comprehensive picture of the responses. Another aspect of future research

could be to take apart the effects of the stress with separate SEM models for elementary, middle, and high school settings. Another suggestion is to review the constructs with context specific items as opposed to the generalized scale survey items to determine the specific source of stress. Lastly, additional research could include a review of a longitudinal study to see how these variables change and impact stress.

Implications of the Study

Shakeel et al. (2021, p. 21) asserted teaching was "an emotionally demanding profession" and teachers devote their entire being, both heart and mind, to facilitate student learning. Stoeber and Rennert (2008) contended that the role of a teacher is stressful and Shakeel et al. (2021) characterized it as complex and diverse.

The qualitative portion of the study revealed that Perceived Supervisory and Colleague Support were essential areas causing the most stress to middle and high school teachers in addition to novice educators. Toprak et al. (2022) proposed educational leaders employ "empathetic leadership coupled with teacher friendly policies" to improve the school's environment. In the current study, veteran teachers were not close behind novice teachers in this construct reporting the highest composite scores. Therefore, educational leaders must remain cognizant and vigilant to ensure all teachers, regardless of setting or years of experience, receive increased support to alleviate their stress.

New teachers needed support from colleagues in how to effectively instruct their students in addition to managing classroom issues and stress-coping strategies. Richards and Sinelnikov (2019) addressed the concern of mentor-protégé pairing and the challenges concerning personality that are potential hazards. Other issues included the availability of quality mentors to provide support to novice teachers and a difference in the instructional style which created a

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pairing mismatch. As teachers coped with the daily challenges, they need additional support

from colleagues in how to effectively instruct their students as well as assistance with managing

the issues that come with working in a classroom.

Mid-career and veteran teachers found the most stress came from organizational justice

while elementary teachers asserted most stress comes from work-family conflict. Erdamar and

Demeril (2014) asserted female teachers under the age of 30 report more WFC than male peers

aligning with the qualitative findings of the current study of females within the age range of 35-

46 had the highest composite scores. While the current findings aligned with Erdamar and

Demeril (2014) reporting no differences exist amongst academic settings, the findings indicated

a greater difference between elementary and secondary settings as the composite score was a half

a point higher. Educational leaders at all levels could use the study results to make the available

and necessary changes within their districts to seek an increase in teacher retention due to work-

related stress. The research specifically indicated areas of improvement that the Yellow County

School District can use to incorporate with the teachers they employ.

Further qualitative findings showed stress stemmed from inconsistencies at the school

level and student behavior. Only 26.7% of the teachers in the district studied have high levels of

self-efficacy. The personality trait of agreeableness showed nine out of 10 teachers reported a

willingness to take on additional responsibilities currently or in the past; however, only 60%

shared they actually did take those responsibilities on because they were not actively doing this

as they could not add anything additional anymore which is consistent with (Timms et al., 2007).

Timms et al. (2007) aligned with teacher perspectives found in the qualitative results as they

referenced pressure to volunteer or attend school functions (ES Teacher 6). Perceived

Supervisory and Colleague Support showed similar results with elementary teachers desiring

empathy, understanding, availability, and consistency; middle school desiring discipline to be implemented and communication; and high school desiring concern, compassion, and connectedness while at work. Organizational Justice had four subgroups. For interpersonal justice novice teachers wanted eye contact and the use of a positive tone, mid-career desired supportive tones and nonpunitive connotations while veteran teachers desired constructive communication. Procedural Justice showed consistency, clarity, and communication were most desired by all teachers. Informational Justice had all areas suggest consistency in addition to both high school and middle schools report timeliness issues. Distributive justice showed elementary and high school teachers believe they were not adequately paid whereas middle school teachers report mixed emotions. The work-family conflict showed elementary and novice teachers desired respect, middle and high school desired communication and consistency above all else. These areas are specific ways in which educational leaders can begin to address teacher concerns and provide support. As schools within the same district have different organizational policies, these are simple ways to address the element of respect within organizational justice.

WFC and Personality were the only constructs found to predict stress within the quantitative portion of the study. In addition, WFC was found to not only predict stress but when added to personality increase a teachers' stress level. This could be due to the research not having good validity scores as to why the other constructs were not statistically significant such as perceived supervisory or colleague support.

Shakeel et al. (2021) asserted stress was something each person could succumb to in the workplace as the pressure stems from multiple sources such as coworkers, leaders, and the organizational structure of the business. Stress in the current study was the dependent variable which in turn did not report well as a good factor. The composite reliability if 0.814 was good

but whenever the variance extracted estimate is less than .05, it shows that the construct does not have good validity (0.402). Stress can come from various factors therefore the specific source of stress was not ascertained by survey items. It was difficult to understand which specific source of stress it stemmed from. The determination that the stress came from the principal, coworkers, the classroom, etc. was not investigated with the survey items. The survey items were also generalized measures of stress. The teacher's interpretation of the survey items may have not been responded to appropriately creating bias because the stress may have stemmed from multiple aspects of stress.

Self-efficacy had low validity and low correlations and did not report statistical significance to predict stress. One of the reasons why self-efficacy was not a good construct to predict teacher stress was due its ability to prevent and reduce occupational stress (Braun et al., 2019; Shakeel et al., 2021) although their findings are based on a different self-efficacy scale. The complex role of a teacher included many different areas such as behavior management, lesson planning, and teaching itself. A teacher could have responded to the survey questions in relation to one or more aspects of self-efficacy which would skew the results.

There was also the factor of the teacher not understanding the construct of self-efficacy. Shakeel et al. (2021) found self-efficacy to not be a skill one had but the confidence in the ability of a skill. Therefore, the respondent's interpretation would sway results because the survey question could have been misinterpreted. The confusion could be based on the scale selected for this study. The questions of the scale used were general in nature versus the specific aspect of self-efficacy. The survey questions were worded "How much can you" and "to what extent" which can be interpreted differently among respondents based on their individual definition of those terms.

The construct of Personality acted as an anomaly. Although the construct's validity was the lowest measurement, it was a significant predictor of stress. The reason why that might have happened was because the teachers resonated with the personality items. Personality traits were more stable, or more fixed construct (Toprak et al., 2022) as a person can assess themselves more clearly. When the correlations were analyzed between the individual personality items and stress scores, we found that teachers with the neuroticism trait was statistically significant aspect. Therefore, teachers with the neurotic trait they would report higher stress levels than others. Teachers who are neurotic would have fewer coping strategies to manage stress than their peers.

The other personality factors had very small nonsignificant correlations with stress. In alignment to the study findings, Shakeel et al. (2021) further by asserting people respond in different manners given what was viewed to be a stressful situation. In contrast, Stoeber and Rennert (2008) found the aspect of personality involving perfectionism to positively correlate with a teacher's perceived stress.

Perceived Supervisory and Colleague Support did not have a significant impact with the survey results in contrast to Ong and Sulaiman (2022) who found PCS significantly related to teacher stress and turnover. A review of the impact of the correlations, the composites had a very low, negative correlation amongst the other constructs. This could be due to the fact that these factors were secondary and dependent on the individual's perspective. The construct was transient as the basis of the perception is made on leaders and colleagues the teacher interacts with; however, those individuals are ever-changing. ES Teacher 4 acknowledged this when referencing over the course of their 12 years within education never working alongside the same team members once. This construct was targeted to a specific person or group that the teacher identified with when responding to the survey items statements which could be different from a

colleague on the same team. Therefore, if an employee felt supported by their colleagues and administrators because they receive positive feedback, the view can change quickly when negative feedback is presented and overshadowed by an altercation among their peers. In addition, changes within leadership affected how employees believe they are treated so the view of organizational justice can differ. Therefore, over time an employee's views can change with this construct. This construct also had generalized questions that a respondent could view differently based on what they perceive to be a distinct level of concern or value.

Organizational justice was another construct in which the perception was wavering and was developed over time by a respondent. For example, if an employee received positive feedback today from their supervisor, then the view of organizational justice will be good. However, if a few months pass and situations arise that did not align with the teacher's view, the teacher would view the organizational justice as not as supportive and fair as they initially perceived it to be. Zhou et al. (2020) found organizational justice to be a preventive measure used to protect employees from negative views of the workplace. This could answer how this construct was not found to be a predictor of stress with the quantitative results. This construct was based on individual perception and with the four different aspects of organizational justice, the facets could have different views. One facet not being perceived positively, could have persuaded the respondent to view the entire organizational justice construct solely off one aspect. Johnson et al. (2020) supported employee awareness to supervisory behavior to improve organizational justice along with clear and consistent guidelines of anticipated behaviors within the workplace which aligned to the qualitative findings of many teachers. The organizational justice survey items were worded in a very generalized manner even though there are differences that exist among the four types of justice that were scored. Should an employee put in much

effort and receive a reward, then later when the same effort is put forth and potentially not receive the same reward due to the lack of resources, the teacher may view it to be satisfactory because the teacher understood it was solely due to the lack of resources and not view the organizational justice negatively.

WFC was a stable construct as family structure does not change as often as other constructs. The statistical significance finding of the study that WFC was a predictor of stress was supported early on with Allen et al. (2000) and was still relevant with positive correlations found between WFC and stress (Toprak et al., 2022). Toprak et el. (2022) found a teacher's inability to balance work and family roles equally with time and attention could make them more susceptible to stress from work-family conflict.

This construct was important as Lu et al. (2017) found WFC caused by stress increased an employee's desire to leave the workplace. In an effort to increase teacher retention, WFC should be of utmost importance in educational leader decision-making. Educational leaders should work to alleviate this area especially for elementary teachers as the qualitative findings showed this was the most stressful area for them.

Dissemination of the Findings

The researcher will share the publication with the school district being researched and present the findings to the senior cabinet. The findings being shared can better prepare educational leaders with information regarding the attributions to stress and help guide decision-making that would potentially increase teacher stress. Specifically, the Yellow County School District could refer to the information when offering support to school-level leaders and teachers. Additionally, the dissertation would be published to provide further insight into the subject of

teacher stress to help other educational leaders make decisions in the best interest of their teachers.

Conclusion

In conclusion, the quantitative data concluded that stress, work-family conflict, and organizational justice were found to be statistically significant. However, when viewing the constructs in relation to one another only work-family conflict and personality were found to be statistically significant. Further review found the interaction between WFC and personality to also be statistically significant. In reference to stress, the highest composite scores were for females who were over 65 who fell into the veteran teaching experience category. These teachers work at the elementary level and were of Other ethnicity. The scores were also for those who held a doctorate degree, working in testable grades/content, and were in supervisory roles.

The qualitative data revealed middle and high schools while separate, ultimately responded similarly aligning with research that combines them as secondary schools. All constructs observed reported moderate to high areas of stress stemming from them with Perceived Supervisory and Colleague support being the most essential. Work-family conflict was not far behind. Therefore, educational leaders should ensure that these constructs were supported within their districts to support all teachers regardless of teaching experience or academic setting. Teachers reported sources of stress stemmed from job demands with the following themes: 1) an overload of tasks and responsibilities (with a lack of time to complete them), 2) poor communication, 3) lack of consistency, and 4) involve student behaviors of management and apathy. Educational leaders could support teachers in managing stress and perceptions by the themes found of 1) Teamwork/Support, 2) Leadership, and 3) Self-Doubt. Being aware of these themes can lead leadership to begin to offer the needed support suggested within the study

subgroups.

Even though causal pathways were not determined within this study, it affirmed that these constructs are important factors to be reviewed and how each affects the different subgroups of teachers. Educational leaders could use this as a resource to begin building a foundation of support for teachers in these areas. Teacher stress was an ongoing issue that must be resolved. Possible positive changes at the school level could branch out to the district, making headway within the state, and across the United States to around the world as all teachers continue to struggle with the management of the stress-related factors as a result of these findings.

References

Abdel-Khalek, A. M., & Lester, D. (2017). The association between religiosity, generalized self-efficacy, mental health, and happiness in Arab college students. *Personality and Individual Differences*, *109*, 12-16. https://doi.org/10.1016/j.paid.2016.12.010

Abirami, V. (2012). Levels of stress among college teachers with reference to Coimbatore district. *Researchers World, 3*(4), 93-104. https://www.proquest.com/scholarly-journals/levels-stress-among-college-teachers-with/docview/1284725616/se-2

Aboagye, M. O., Qin, J., Qayyum, A., Antwi, C. O., Jababu, Y., & Affum-Osei, E. (2018). Teacher burnout in pre-schools: A cross-cultural factorial validity, measurement invariance and latent mean comparison of the Maslach Burnout Inventory, educators survey (MBI-ES). *Children and Youth Services Review, 94*, 186-197. https://doi.org/10.1016/j.childyouth.2018.09.041

Adu, E. O., Tadu, R., & Eze, I. (2012). Teachers' self-efficacy as correlates of secondary school students' academic achievement in southwestern Nigeria. *Discovery*, *2*(4), 8-16. http://www.discoveryjournals.org/discovery/current_issue/v2/n4/A3.pdf

Alanoglu, M. & Demirtas, Z. (2021). The effect of bureaucratic school structure on teachers' job satisfaction: The mediator role of the organizational justice. (2021). *Research in Educational Administration and Leadership*, *6*(2). https://doi.org/10.30828/real/2021.2.3

Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*(2), 278–308. https://doi.org/10.1037/1076-8998.5.2.278

Amstad, F.T., Meier, L.L., Fasel, U., Elfering, A. and Semmer, N.K. (2011), "A meta-analysis of work family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations", *Journal of Occupational Health Psychology*, *16*(2)151-169, https://doi.org/10.1037/a0022170

Anderson, J. C. and Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*, 411–423.

Arnolds, C.A., & Boshoff, C. (2002) Compensation, esteem valence and job performance: an empirical assessment of Alderfer's ERG theory, *The International Journal of Human Resource Management*, *13*(4), 697-719. https://doi.org/10.1080/09585190210125868

Azman, H. & Mahadhir, M. (2017). Application of the vignette technique in a qualitative paradigm. *GEMA Online Journal of Language Studies*, *17*(4), 27-44. https://doi.org/10.17576/gema-2017-1704-03

Babic, A., Stinglhamber, F., & Hansez, I. (2015). Organizational justice and perceived organizational support: Impact on negative work-home interference and well-being outcomes. *Psychologica Belgica*, *55*(3), 134-158. https://doi.org/10.5334/pb.bk

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*(2), 170-180. https://doi.org/10.1037/1076-8998.10.2.170

Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, *99*(2), 274-284. https://doi.org/10.1037/0022-0663.99.2.274

Bakker, A. B., & de Vries, J. D. (2021). Job demands–resources theory and self-regulation: new explanations and remedies for job burnout. *Anxiety, Stress & Coping*, *34*(1), 1–21.

Bakker, A.B. and Demerouti, E. (2007), "The Job Demands-Resources model: state of the art",

    Journal of Managerial Psychology, Vol. 22 No. 3, pp. 309-328.

    https://doi.org/10.1108/02683940710733115

Bakker, A. B., Hetland, J., Olsen, O. K., & Espevik, R. (2018). Daily strengths use and employee

    well-being: The moderating role of personality. *Journal of Occupational and*

    Organizational Psychology, *92*(1), 144-168. https://doi.org/10.1111/joop.12243

Bakker, A. B., Sanz-Vergel, A. I., Rodríguez-Muñoz, A., & Antino, M. (2019). Ripple effects of

    surface acting: A diary study among dual-earner couples. *The Spanish Journal of*

    Psychology, *22*. https://doi.org/10.1017/sjp.2019.6

Ball, A., Knobloch, N., & Hoop, S. (2007). The instructional planning experiences of beginning

    teachers. *Journal of Agricultural Education*, *48*(2), 56-65.

    https://doi.org/10.5032/jae.2007.02056

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*.

    Prentice-Hall. http://dx.doi.org/10.4135/9781446221129.n6

Bartels, A. L., Lennard, A. C., Scott, B. A., & Peterson, S. J. (2022). Stopping surface-acting

    spillover: A transactional theory of stress perspective. *Journal of Applied*

    Psychology. https://doi.org/10.1037/apl0001031

Bartholomew, K. J., Ntoumanis, N., Cuevas, R., & Lonsdale, C. (2014). Job pressure and ill-

    health in physical education teachers: The mediating role of psychological need

    thwarting. *Teaching and Teacher Education*, *37*, 101-107.

    https://doi.org/10.1016/j.tate.2013.10.006

Bentler, P. M. (1989). EQS structural equations program manual. *Los Angeles: BMDP Statistical*

    Software

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of

    covariance structures. *Psychological Bulletin, 88*, 588−606.

Bentler, P. M., and Chou, C. (1987). Practical Issues in structural modeling. *Sociological*

    Methods and Research, 16, 78–117.

Berg, A., & Mensah, F. M. (2014). De-marginalizing science in the elementary classroom by

    coaching teachers to address perceived dilemmas. *Education Policy Analysis*

    Archives, *22*(57). http://dx.doi.org/10.14507/epaa.v22n57.2014

Betoret, F. D. (2006). Stressors, self-efficacy, coping resources, and burnout among secondary

    school teachers in Spain. *Educational Psychology*, *26*(4), 519-

    539. https://doi.org/10.1080/01443410500342492

Bellingtier, J. A., Mund, M., & Wrzus, C. (2021). The role of extraversion and neuroticism for

    experiencing stress during the third wave of the COVID-19 pandemic. *Current*

    Psychology, *42*(14), 12202-12212. https://doi.org/10.1007/s12144-021-02600-y

Bhatia, S., & Deogun, J. (1998). Conceptual clustering in information retrieval. *IEEE*

    Transactions on Systems, Man and Cybernetics, Part B (Cybernetics), *28*(3), 427-

    436. https://doi.org/10.1109/3477.678640

Blase, J. J. (1986). A qualitative analysis of sources of teacher stress: Consequences for

    performance. *American Educational Research Journal*, *23*(1), 13–40.

    https://doi.org/10.2307/1163040

Bottiani, J. H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout

    in urban middle schools: Associations with job demands, resources, and effective

    classroom practices. *Journal of school psychology*, *77*, 36–51.

    https://doi.org/10.1016/j.jsp.2019.10.002

Boyle, G. J. (1979). Delimitation of state-trait curiosity in relation to state anxiety and learning task performance. Australian Journal of Education, 23(1), 70-82. https://doi.org/10.1177/000494417902300109

Boyle, G. J., Borg, M. G., Falzon, J. M., & Baglioni, A. J. (1995). A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology*, *65*(1), 49-67. https://doi.org/10.1111/j.2044-8279.1995.tb01130.x

Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, 47, 406-417. https://doi.org/10.1002/pits.20478

Brady, J., & Wilson, E. (2021). Comparing sources of stress for state and private school teachers in England. *Improving Schools*, *25*(2), 205-220. https://doi.org/10.1177/13654802211024758

Braun, A., Weiss, S., & Kiel, E. (2019). How to cope with stress? The stress-inducing cognitions of teacher trainees and resulting implications for teacher education. *European Journal of Teacher Education*, *43*(2), 191-209. https://doi.org/10.1080/02619768.2019.1686479

Brophy J. & Good, T. (1984). Teacher behavior and student achievement. In Wittrock, M. (Ed.). *Handbook of research on teaching*. (3rd ed.) (pp. 328-375.) New York: Macmillan.

Calhoun, C. (2002). Expecting Common Decency. Philosophy of Education Archive, 25-35.

Callahan, J. (2016). Encouraging retention of new teachers through mentoring strategies. *Delta Kappa Gamma Bulletin*, *83*(1), 6–11.

Carnevale, T. (2005). The coming labor and skills shortage. *Training & Development*, *59*(1), 37-41

Carr, M. L., Holmes, W., & Flynn, K. (2017). Using mentoring, coaching, and self-mentoring to support public school educators. *Clearing House*, *90*(4), 116–124. https://doi.org/10.1080/00098655.2017.1316624

Carton, A., & Fruchart, E. (2013). Sources of stress, coping strategies, emotional experience: Effects of the level of experience in primary school teachers in France. *Educational Review*, *66*(2), 245-262. https://doi.org/10.1080/00131911.2013.769937

Carver-Thomas, D. & Darling-Hammond, L. (2017). Teacher turnover: Why it matters and what we can do about it. Palo Alto, CA: *Learning Policy Institute*. https://doi.org/10.54300/454.278

Cawte, K. (2020). Teacher crisis: Critical events in the mid-career stage. *Australian Journal of Teacher Education*, *45*(8), 75-92. https://doi.org/10.14221/ajte.2020v45n8.5

Çelik, H. R., & Kalkan, Ö. K. (2022). Organizational justice, perceived stress and leader support as predictors of teachers' job satisfaction. *Acta Educationis Generalis*, *12*(1), 127-145. https://doi.org/10.2478/atd-2022-0007

Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, *21*(3), 193–218.

Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. Educational Psychology, *28*(2), 195-209. https://doi.org/10.1080/01443410701491858

Chen, L., Qu, L., & Hong, R. Y. (2022). Pathways linking the Big Five to psychological distress: Exploring the mediating roles of stress mindset and coping flexibility. *Journal of Clinical Medicine*, *11*(9), 2272. https://doi.org/10.3390/jcm11092272

Chu, X., Ma, Z., Li, Y., & Han, J. (2015). Agreeableness, extraversion, stressor and

> physiological stress response. *International Journal of Social Science*
>
> *Studies*, *3*(4). https://doi.org/10.11114/ijsss.v3i4.857

Cineas, F. (2022, August 18). *Are teachers leaving the classroom en*

> *masse?* Vox. https://www.vox.com/policy-and-politics/2022/8/18/23298916/teacher-
>
> shortages-debate-local-national

Clement, M. (2017). Why combatting teachers' stress is everyone's job. *The Clearing House: A*

> *Journal of Educational Strategies, Issues, and Ideas*, *90*(4), 135-
>
> 138. https://doi.org/10.1080/00098655.2017.1323519

Cochran-Smith, M., Cannady, M., McEachern, K., Piazza, P., Power, C., & Ryan, A. (2011).

> Teachers' education, teaching practice, and retention: A cross-genre review of recent
>
> research. *Journal of Education*, *191*(2), 19-31.
>
> https://doi.org/10.1177/002205741119100205

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological*

> *Measurement,* 20(1), 37–46. https://doi.org/10.1177/001316446002000104

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived

> stress. *Journal of Health and Social Behavior*, *24*(4),
>
> 385. https://doi.org/10.2307/2136404

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of

> a measure. *Journal of Applied Psychology*, *86*(3), 386-400. https://doi.org/10.1037/0021-
>
> 9010.86.3.386

Creswell, J. W. (2013). Qualitative inquiry & research design: Choosing among five approaches

> (3rd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W., Klassen, A. C., Clark, V. L., & Smith, K. C. (2011). Best practices for mixed

    methods research in health sciences. *PsycEXTRA*

    Dataset. https://doi.org/10.1037/e566732013-001

Creswell, J. W., & Clark, V. L. (2017). Designing and conducting mixed methods research.

    SAGE Publications.

Crum, A., & Phillips, D. J. (2015). Self-fulfilling prophesies, placebo effects, and the social–

    psychological creation of reality. *Emerging Trends in the Social and Behavioral*

    Sciences, 1-14. https://doi.org/10.1002/9781118900772.etrds0296

Cudeck, R., & Browne, M. W. (1983). Cross-validation of covariance structures. Multivariate

    Behavioral Research, 18, 147–167.

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, *49*(1), 91-96.

Darling-Hammond, L. (2001). The challenge of staffing our schools. *Educational Leadership*,

    58(8), 12–17.

Dawley, D., Houghton, J. D., & Bucklew, N. S. (2010). Perceived organizational support and

    turnover intention: The mediating effects of personal sacrifice and job fit. *The Journal of*

    Social Psychology, *150*(3), 238-257. https://doi.org/10.1080/00224540903365463

Day, C. & Gu, Q. (2009) Veteran teachers: commitment, resilience and quality

    retention, *Teachers and Teaching*, *15*(4), 441-457, DOI: 10.1080/13540600903057211

DeBell, M., Maisel, N., Brader, T., Wilson, C., & Jackman, S. (2022). Improving the

    measurement of "Big Five" personality traits in a brief survey instrument. *European*

    Journal of Psychological Assessment, *38*(2), 150-161. https://doi.org/10.1027/1015-

    5759/a000653

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Department of Psych EDI Committee. (2018). *Structured vs. Unstructured Interview: Improving Accuracy & Objectivity*. McGill University. https://www.mcgill.ca/psychology/files/psychology/structuredinterviews.pdf

Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, *106*(2), 569–583. https://doi.org/10.1037/a0035504.supp (Supplemental)

Digman, J.M. (1990) Personality structure: Emergence of the five-factor model. Annual review of Psychology, *41,* 417-440. http://dx.doi.org/10.1146/annurev.ps.41.020190.002221

Dipboye, R.L. (1994) Structured and Unstructured Selection Interview: Beyond the Job-Fit Model. *Research in Personnel and Uman Resources Management*, *12*, 79-123.

Van Droogenbroeck, F., Spruyt, B., & Vanroelen, C. (2014). Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. *Teaching and Teacher Education*, *43*, 99-109. https://doi.org/10.1016/j.tate.2014.07.005

Dunaetz, D. (2020). Four types of organizational justice. [Powerpoint slides]. Azusa Pacific University. https://www.researchgate.net/publication/341412802_Four_Types_of_Organizational_Justice

Edwards, J. R., & Rothbard, N. P. (1999). Work and family stress and well-being: An examination of person-environment fit in the work and family domains. Organizational

Behavior and Human Decision Processes, 77(2), 85-129.

https://doi.org/10.1006/obhd.1998.2813

Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the

relationship between work and family constructs. *The Academy of Management*

Review, *25*(1), 178. https://doi.org/10.2307/259269

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational

support. *Journal of Applied Psychology, 71*(3), 500–507. https://doi.org/10.1037/0021-

9010.71.3.500

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002).

Perceived supervisor support: Contributions to perceived organizational support and

employee retention. *Journal of Applied Psychology*, *87*(3), 565-

573. https://doi.org/10.1037/0021-9010.87.3.565

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. Journal of Advanced

Nursing, 62(1), 107-115.

Erdamar, G., & Demirel, H. (2014). Investigation of work-family, family-work conflict of the

teachers. *Procedia - Social and Behavioral Sciences*, *116*, 4919-

4924. https://doi.org/10.1016/j.sbspro.2014.01.1050

ERG Theory of Motivation. (n.d.). Management Study Guide - Courses for Students,

Professionals & Faculty Members. https://www.managementstudyguide.com/erg-theory-

motivation.htm

Ervasti, M., Kallio, J., Määttänen, I., Mäntyjärvi, J., & Jokela, M. (2019). Influence of

personality and differences in stress processing among Finnish students on interest to use

a mobile stress management app: Survey study. *JMIR Mental Health*, *6*(5), e10039. https://doi.org/10.2196/10039

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, *5*(1), 80-92. https://doi.org/10.1177/160940690600500107

Fernández-Batanero, J., Román-Graván, P., Reyes-Rebollo, M., & Montenegro-Rueda, M. (2021). Impact of educational technology on teacher stress and anxiety: A literature review. *International Journal of Environmental Research and Public Health*, *18*(2), 548. https://doi.org/10.3390/ijerph18020548

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Services Research*, *48*(6pt2), 2134-2156. https://doi.org/10.1111/1475-6773.12117

Fisher, G. G., Matthews, R. A., & Gibbons, A. M. (2016). Developing and investigating the use of single-item measures in organizational research. *Journal of Occupational Health Psychology*, *21*(1), 3-23. https://doi.org/10.1037/a0039139

Fitchett, P. G., McCarthy, C. J., Lambert, R. G., Eyal, M., Playfair, E. C., & Dillard, J. B. (2019). Examining teacher stress-vulnerability in the US secondary school context. *Educational Review*, *73*(2), 170-193. https://doi.org/10.1080/00131911.2019.1619521

Flamini, M., & Steed, H. (2022, February). *Georgia K-12 teacher and leader workforce report*. The Governor's Office of Student Achievement. https://gosa.georgia.gov/georgia-k-12-teacher-and-leader-workforce-report

Frances K. Stage , Hasani C. Carter & Amaury Nora (2004) Path Analysis: An Introduction and

    Analysis of a Decade of Research, *The Journal of Educational Research*, *98*(1), 5-13,

    DOI: 10.3200/JOER.98.1.5-13

Flores, M. (2005). Teachers' views on recent curriculum changes: Tensions and

    challenges. *Curriculum Journal*, *16*(3), 401–413.

    https://doi.org/10.1080/09585170500256479

Fornell, C. and Larcker, D. (1981). Evaluating structural equation models with unobservable

    variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50.

    https://doi.org/10.2307/3151312

Friedman, I. A. (1999). Turning our schools into a healthier workplace: Bridging between

    professional self-efficacy and professional demands. In R. Vandenberghe & A. M.

    Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of*

    international research and practice. (pp. 166–175). Cambridge University Press.

    https://doi.org/10.1017/CBO9780511527784.010

GADOE. (n.d.). *GADOE CCRPI reporting*

    system. https://ccrpi.gadoe.org/Reports/Views/Shared/_Layout.html

Galton, M. (2008). Teachers under pressure: the impact of government policies on teachers'

    working lives. *Education Review*, *21*(1), 39–48.

George, T., & Merkus, J. (2022, August 18). *Structured interview | Definition, guide &*

    examples. Scribbr. https://www.scribbr.com/methodology/structured-interview/

George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS

    patients as a source of work-related distress: Effects of organizational and social

support. *Academy of Management Journal*, *36*(1), 157-

171. https://doi.org/10.5465/256516

Georgia Insights (n.d.) Educator pipeline – Teachers. Georgia Insights.

https://georgiainsights.gadoe.org/Dashboards/Pages/EducatorPipeline-Teachers.aspx

Ghavifekr, S., Husain, H., Rosden, N., & Hamat, Z. (2019). Clinical supervision: towards

effective classroom teaching. *Malaysian Online Journal of Educational Sciences*, *7*(4),

30–42.

Gibson, N. (2022, February 24). *Middle Georgia school districts see teacher shortages during*

pandemic. WGXA. https://wgxa.tv/news/local/middle-georgia-school-districts-see-

teacher-shortages-during-pandemic

 Glickman C., Gordon S. & Gordon J. (1995). *Supervision of instruction: A developmental*

approach. (3rd ed.). Boston: Allyn & Bacon.

Gok, S., Karatuna, I., & Karaca, P. O. (2015). The role of perceived supervisor support and

organizational identification in job satisfaction. *Procedia - Social and Behavioral*

Sciences, *177*, 38-42. https://doi.org/10.1016/j.sbspro.2015.02.328

Granziera, H., Collie, R., Martin, A. (2021). Understanding teacher well-being through job

demands-resources theory. In: Mansfield, C.F. (eds) Cultivating Teacher Resilience.

Springer, Singapore. https://doi.org/10.1007/978-981-15-5963-1_14

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family

roles. *The Academy of Management Review*, *10*(1), 76. https://doi.org/10.2307/258214

Greenhaus, J. H., Collins, K. M., Singh, R., & Parasuraman, S. (1997). Work and family

influences departure from public accounting. Journal of Vocational Behavior, 50(2), 249-

270. https://doi.org/10.1006/jvbe.1996.1578

Veloso Gouveia, V., De Carvalho Rodrigues Araújo, R., Vasconcelos de Oliveira, I. C., Pereira
Gonçalves, M., Milfont, T., Lins de Holanda Coelho, G., Santos, W., De Medeiros, E. D.,
Silva Soares, A. K., Pereira Monteiro, R., Moura de Andrade, J., Medeiros Cavalcanti, T.,
Da Silva Nascimento, B., & Gouveia, R. (2021). A short version of the Big Five
Inventory (BFI-20): Evidence on construct validity. *Revista Interamericana de
Psicología/Interamerican Journal of Psychology*, *55*(1),
e1312. https://doi.org/10.30849/ripijp.v55i1.1312

Grove, K., Strudler, N., & Odell, S. (2014). Mentoring toward technology use: Cooperating
teacher practice in supporting student teachers. *Journal of Research on Technology in
Education*, *37*(1), 85–109. https://doi.org/10.1080/15391523.2004.10782427

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and
qualitative results in health science mixed methods research through joint displays. The
Annals of Family Medicine, 13(6), 554-561. https://doi.org/10.1370/afm.1865

Gustems-Carnice, J., Calderón, C., & Calderón-Garrido, D. (2019). Stress, coping strategies and
academic achievement in teacher education students. *European Journal of Teacher
Education*, *42*(3), 375-390. https://doi.org/10.1080/02619768.2019.1576629

Haines, V. A., Hurlbert, J. S., Zimmer, C., Haines, V. A., Hurlbert, J. S., & Zimmer, C. (1991).
Occupational Stress, Social Support, and Strain Measure. *Work and Occupations*, *18*(2),
212–235.

Hallam, P. R., Smith, H. R., Hite, J. M., Hite, S. J., & Wilcox, B. R. (2015). Trust and
collaboration in PLC teams. NASSP Bulletin, 99(3), 193-216.
https://doi.org/10.1177/0192636515602330

Hallgren, K. A. (2012). Computing Inter-Rater Reliability for Observational Data: An Overview

and Tutorial. Tutorials in Quantitative Methods for Psychology, 8(1), 22-34.

https://doi.org/10.20982/tqmp.08.1.p023

Halvorsen, C. J., Saran, I., & Pitt-Catsouphes, M. (2020). Assessments of fit and usability of

work-life supports in the context of diversity and perceptions of fairness. *Community,*

Work & Family, *23*(5), 556-575. https://doi.org/10.1080/13668803.2020.1809996

Han, E. S., & García, E. (2022). The effect of teachers' unions on teacher stress: Evidence from

district-teacher matched data. *Labor Studies Journal*,

0160449X2211345. https://doi.org/10.1177/0160449x221134549

Hanks, J. H., Ferrin, S. E., Davies, R. S., Christensen, S. S., Harris, S. P., & Bowles, W. B.

(2020). Law and policy impacts on teacher attrition in public education: Data suggesting

a new focus beyond silver bullets of targeted stem and other salary increases. *Brigham*

Young University Education & Law Journal, *2020*(2), 115–146.

Hapsari, N. A., Agusdin, & Suryatni, M. (2022). International Journal of Innovative Science,

Engineering, and Technology. *The effect of Big Five Personality and Organizational*

Justice on Counterproductive work behavior and work stress as intervening variables

(study of civil servants in central Lombok

district), *9*(7). http://eprints.unram.ac.id/33090/1/%28Turnitin%20B-

39%29%20The%20Effect%20Of%20Big%20Five%20Personality%20And%20Organizat

ional%20Justice.pdf

Harmsen, R., Helms-Lorenz, M., Maulana, R., & Veen, K. (2018). The longitudinal effects of

induction on beginning teachers' stress. *British Journal of Educational*

Psychology, *89*(2), 259-287. https://doi.org/10.1111/bjep.12238

Harris, Donald, "Perceived principal servant leadership and teacher stress" (2018). Dissertations. 195. https://commons.lib.jmu.edu/diss201019/195

Haslam, D., Filus, A., Morawska, A., Sanders, M. R., & Fletcher, R. (2014). The work–family conflict scale (WAFCS): Development and initial validation of a self-report measure of work–family conflict for use with parents. *Child Psychiatry & Human Development*, *46*(3), 346-357. https://doi.org/10.1007/s10578-014-0476-0

Hattie, J. (2017). *Visible learning for teachers: Maximizing impact on learning*. Routledge.

Haynes, C. E., Wall, T. D., Bolden, R. I., Stride, C., & Rick, J. E. (1999). Measures of perceived work characteristics for health services research: Test of a measurement model and normative data. *British Journal of Health Psychology*, *4*(3), 257-275. https://doi.org/10.1348/135910799168614

Heard Elementary. (2021). Continuous improvement plan team.

Hepburn, S., Carroll, A., & McCuaig-Holcroft, L. (2021). A complementary intervention to promote well-being and stress management for early career teachers. *International Journal of Environmental Research and Public Health*, *18*(12), 6320. https://doi.org/10.3390/ijerph18126320

Herman, K. C., Sebastian, J., Reinke, W. M., & Huang, F. L. (2021). Individual and school predictors of teacher stress, coping, and wellness during the COVID-19 pandemic. *School Psychology*, *36*(6), 483-493. https://doi.org/10.1037/spq0000456

Herrera, C., Torres-Vallejos, J., Martínez-Líbano, J., Rubio, A., Céspedes, C., Oyanedel, J. C., Acuña, E., & Pedraza, D. (2022). Perceived collective school efficacy mediates the organizational justice effect in teachers' subjective well-being. *International Journal of*

Environmental Research and Public Health, *19*(17),

    10963. https://doi.org/10.3390/ijerph191710963

Howard, S., & Johnson, B. (2004). Resilient teachers: resisting stress and burnout. *Social*

    Psychology of Education, 7, 399–420. https://doi.org/10.1007/s11218-004-0975-0

Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of

    teaching: A comparison of four measures. *Teaching and Teacher Education*, *21*(4), 343-

    356. https://doi.org/10.1016/j.tate.2005.01.007

Hoy, W. K., & Tarter, C. J. (2004). Organizational justice in schools: No justice without

    trust. *International Journal of Educational Management*, *18*(4), 250-

    259. https://doi.org/10.1108/09513540410538831

Hoyle E. (2001). Teaching: prestige, status and esteem. *Educational Management,*

    Administration and Leadership. *29*(2), 139-152.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis:

    Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1−55.

Huberman, M. (1989). The Professional Life Cycle of Teachers. Teacher College Records, *91*,

    31-57. http://hub.mspnet.org/index.cfm/9327

Hwang, S. (2022). Profiles of mathematics teachers' job satisfaction and stress and their

    association with dialogic instruction. *Sustainability*, *14*(11), 6925.

    https://doi.org/10.3390/su14116925

Idris, D. M., Khan, D. I., & Khan, A. (2021). Induction program of teacher training of Khyber

    Pakhtunkhwa in the light of standards for elementary teachers in Pakistan. *Journal of Arts*

    and Social Sciences, *8*(1). https://doi.org/10.46662/jass-vol8-iss1-2021(109-117)

Ismail, F., Ashfaq, M., Aisyah Panatik, S., Jaes, L., & Mee Yan, W. (2018). The relationship

between Big Five personality traits and counterproductive work behaviour. *International*

Journal of Engineering & Technology, *7*(3.30), 63.

https://doi.org/10.14419/ijet.v7i3.30.18156

Jaoul, G., & Kovess, V. (2004). Le burnout dans la profession enseignante. *Annales Médico-*

Psychologiques, *162*(1), 26–35. https://doi.org/10.1016/j.amp.2003.03.002

Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher

efficacy, and burnout among teachers of children with autism. *Journal of Autism and*

Developmental Disorders, *33*(6), 583–593.

https://doi.org/10.1023/b:jadd.0000005996.19417.57

Johnson, A. (2000). It's time for Madeline Hunter to go: A new look at lesson plan design.

Action in Teacher Education, *22*(1), 72-28.

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The

experience of work-related stress across occupations. *Journal of Managerial Psychology,*

20(2), 178–187. https://doi.org/10.1108/02683940510579803

Johnson, M. A., Priesemuth, M., & Bigelow, B. (2020). Making sense of "Good" and "Bad": A

Deonance and fairness approach to abusive supervision and prosocial impact. *Business*

Ethics Quarterly, 31(3), 386-420. https://doi.org/10.1017/beq.2020.31

Jones, K., Jones, J., & Vermette, P. (2011). Six common lesson planning pitfalls -

recommendations for novice educators. *Education*, *131*(4), 845–864.

Jones, N. D., Camburn, E. M., Kelcey, B., & Quintero, E. (2022). Teachers' time use and affect

before and after COVID-19 school closures. *AERA Open*, *8*,

233285842110680. https://doi.org/10.1177/23328584211068068

Jöreskog, K. G., & Sörbom, D. (1981). LISREL V: analysis of linear structural relationships by maximum likelihood and least squares methods. Uppsala: Chicago: University of Uppsala, Department. of Statistics; distributed by *International Educational Services*.

Kaden, U. (2020). COVID-19 school closure-related changes to the professional life of a K–12 teacher. *Education Sciences*, *10*(6), 165. https://doi.org/10.3390/educsci10060165

Kahn, R. L., & Byosiere, P. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 571–650). Consulting Psychologists Press.

Kaihoi, C. A., Bottiani, J. H., & Bradshaw, C. P. (2022). Teachers supporting teachers: A social network perspective on collegial stress support and emotional well-being among elementary and middle school educators. *School Mental Health*, *14*(4), 1070-1085. https://doi.org/10.1007/s12310-022-09529-y

Kan, D., & Soman, U. (2018). Exploring feedback mechanisms for preservice teachers' lesson plans. *Odyssey: New Directions in Deaf Education*, *19*, 26–29.

Kang, S., & Kang, S. (2016). High-commitment human resource management and job stress: Supervisor support as a moderator. *Social Behavior and Personality: an international journal*, *44*(10), 1719-1731. https://doi.org/10.2224/sbp.2016.44.10.1719

Karakaya, Y. & Hacicaferoglu, S. & Kilinc, H. H. (2014). Professional social support levels that physical education teachers perceive in educational institutions in Turkey. *Journal of Physical Education and Sport*, *14,* 285-292. http://dx.doi.org/10.7752/jpes.2014.02043

Karanfil, F., & Atay, D. (2020). The well-being of novice state schoolteachers in the mentoring program in Turkey: A narrative inquiry. *Shanlax International Journal of Education*, *9*(1), 56–67. http://dx.doi.org/10.34293/education.v9i1.3438

Kenny, D. A. (n.d.). Structural equation modeling (David A. Kenny). Homepage of David A.

    Kenny. https://davidakenny.net/cm/causalm.htm

Khosbayar, A., Andrade, M., & Miller, R. (2022). The Relationship Between Psychological

    Resilience and the Big Five Personality Traits. *International Management Review*, *18*(1),

    5-11. http://www.americanscholarspress.us/journals/IMR/pdf/IMR-1-2022/IMRv8n1-

    art1.pdf

King, N., & Bunce, L. (2019). Academics' perceptions of students' motivation for learning and

    their own motivation for teaching in a marketized higher education context. *British*

    Journal of Educational Psychology, *90*(3), 790-808. https://doi.org/10.1111/bjep.12332

Kiska, K. (2022). *Identified Stressors in Novice and Veteran Teachers* (Order No. 29213954).

    Available from Publicly Available Content Database. (2670020104).

    https://proxy.openathens.net/login?entityID=https://idp.wa.galileo.usg.edu/entity&qurl=h

    ttps://www.proquest.com/dissertations-theses/identified-stressors-novice-veteran-

    teachers/docview/2670020104/se-2

Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction:

    Teacher gender, years of experience, and job stress. *Journal of Educational*

    Psychology, *102*(3), 741-756. https://doi.org/10.1037/a0019237

Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Teachers'

    occupational well-being and quality of instruction: The important role of self-regulatory

    patterns. *Journal of Educational Psychology*, *100*(3), 702-

    715. https://doi.org/10.1037/0022-0663.100.3.702

Kongcharoen, J., Onmek, N., Jandang, P., & Wangyisen, S. (2019). Stress and work motivation of primary and secondary school teachers. *Journal of Applied Research in Higher Education*, *12*(4), 709-723. https://doi.org/10.1108/jarhe-04-2019-0088

Kossek, E. E., & Ozeki, C. (1999). Bridging the work-family policy and productivity gap: A literature review. *Community, Work & Family*, *2*(1), 7-32. https://doi.org/10.1080/13668809908414247

Kossek, E. E., Perrigino, M., & Rock, A. G. (2021). From ideal workers to ideal work for all: A 50-year review integrating careers and work-family research with a future research agenda. *Journal of Vocational Behavior*, *126*, 103504. https://doi.org/10.1016/j.jvb.2020.103504

Kroonenberg, P. M., & Lewis, C. (1982). Methodological issues in the search for a factor model: Exploration through confirmation. Journal of Educational Statistics, 7, 69–89.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2015). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, *43*(6), 1854-1884. https://doi.org/10.1177/0149206315575554

Kyriacou, C., & Sutcliffe, J. (1978). Teacher stress: Prevalence, sources, and symptoms. *British Journal of Educational Psychology*, 48(2), 159-167. https://doi.org/10.1111/j.2044-8279.1978.tb02381.x

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, *53*(1), 27–35. https://doi.org/10.1080/00131910120033628

Lambersky, J. (2016). Understanding the human side of school leadership: Principals' impact on

   teachers' morale, self-efficacy, stress, and commitment. Leadership and Policy in

   Schools, 15(4), 379-405. https://doi.org/10.1080/15700763.2016.1181188

Latkin, C. A., Edwards, C., Davey-Rothwell, M. A., & Tobin, K. E. (2017). The relationship

   between social desirability bias and self-reports of health, substance use, and social

   network factors among urban substance users in Baltimore, Maryland. Addictive

   Behaviors, 73, 133-136. https://doi.org/10.1016/j.addbeh.2017.05.005

Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing

   outlooks. *Annual Review of Psychology*, *44*(1), 1-22.

   https://doi.org/10.1146/annurev.ps.44.020193.000245

Lee, E. O., Lacey, H. M., Van Valkenburg, S., McGinnis, E., Huber, B. J., Benner, G. J., &

   Strycker, L. A. (2023). What about me? The importance of teacher social and emotional

   learning and well-being in the classroom. *Beyond Behavior*, 0(0).

   https://doi.org/10.1177/10742956221145942

Leger, K. A., Lee, S., Chandler, K. D., & Almeida, D. M. (2022). Effects of a workplace

   intervention on daily stressor reactivity. *Journal of Occupational Health

   Psychology*, *27*(1), 152-163. https://doi.org/10.1037/ocp0000297

Levinson, H. (1965). Reciprocation: The relationship between man and

   organization. *Administrative Science Quarterly*, *9*(4),

   370. https://doi.org/10.2307/2391032

Liao, J., Wang, X., & Wang, X. (2023). The effect of work stress on the well-being of primary

   and secondary school teachers in China. *International Journal of Environmental

   Research and Public Health*, *20*(2), 1154. https://doi.org/10.3390/ijerph20021154

Litt, M.D. & Turk, D. C. (1985) Sources of stress and dissatisfaction in experienced high school

    teachers, *The Journal of Educational Research*, *78*(3), 178-

    185, DOI: 10.1080/00220671.1985.10885596

Liu, Z., Li, Y., Zhu, W., He, Y., & Li, D. (2022). A meta-analysis of teachers' job burnout and

    Big Five personality traits. *Frontiers in*

    Education, *7*. https://doi.org/10.3389/feduc.2022.822659

Lobel, M., & Dunkel-Schetter, C. (1990). Conceptualizing stress to study effects on health:

    Environmental, perceptual, and emotional components. *Anxiety Research*, *3*(3), 213-

    230. https://doi.org/10.1080/08917779008248754

Lu, Y., Hu, X., Huang, X., Zhuang, X., Guo, P., Feng, L., Hu, W., Chen, L., Zou, H., & Hao, Y.

    (2017). The relationship between job satisfaction, work stress, work–family conflict, and

    turnover intention among physicians in Guangdong, China: A cross-sectional study. *BMJ

    Open, 7*(5), e014894. https://doi.org/10.1136/bmjopen-2016-014894

MacCallum, R. C., Browne, M. W., and Sugawara, H.M. (1996). Power analysis and

    determination of sample size for covariance structure modeling. *Psychological Methods,

    2*, 130–149

MacIntyre, P. D., Ross, J., Talbot, K., Mercer, S., Gregersen, T., & Banga, C. A. (2019).

    Stressors, personality and well-being among language teachers. *System*, *82*, 26-

    38. https://doi.org/10.1016/j.system.2019.02.013

Mackenzie, N. (2007). Teacher morale: More complex than we think? *Australian Educational

    Researcher (Australian Association for Research in Education)*, *34*(1), 89–104.

    https://doi.org/10.1007/BF03216852

Malinen, O., & Savolainen, H. (2016). The effect of perceived school climate and teacher

efficacy in behavior management on job satisfaction and burnout: A longitudinal study. *Teaching and Teacher Education*, *60*, 144-152. https://doi.org/10.1016/j.tate.2016.08.012

Mansfield, C. F. (2020). *Cultivating teacher resilience: International approaches, applications and impact*. Springer Nature.

Marschall, G. (2022) The role of teacher identity in teacher self-efficacy development: The case of katie. *Journal of Mathematics Teacher Education, 25*, 725–747. https://doi.org/10.1007/s10857-021-09515-2

Martin, G. (n.d.). A picture is worth a thousand words - the meaning and origin of this phrase. *Phrasefinder*. https://www.phrases.org.uk/meanings/a-picture-is-worth-a-thousand-words.html

Maxwell, J. A. (2004). Causal Explanation, Qualitative Research, and Scientific Inquiry in Education. Educational Researcher, 33(2), 3-11. https://doi.org/10.3102/0013189X033002003

McDonald, D. (2019). *Facing Challenges and Complexities in Retention of Novice Teachers*. Information Age Publishing.

McHugh M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia medica*, 22(3), 276–282.

McKillip, M., & Farrie, D. (2019, December). *Invest in Georgia teachers: The need to attract and retain a high-quality workforce*. Education Law Center. https://edlawcenter.org/assets/Georgia/Report%202/Georgia%20Teachers%20Report

Melnic, A.-S., & Botez, N. (2014). Academic Learning Motivation. *Economy Transdisciplinarity Cognition*, *17*(2), 56–62.

Merriam-Webster (2024, May 28). Definition of variable. Merriam-Webster: America's Most Trusted Dictionary. https://www.merriam-webster.com/dictionary/variable#dictionary-entry-2

Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Convergence between measures of work-to family and family-to-work conflict: A meta-analytic examination. *Journal of Vocational Behavior, 67*(2), 215-232.

Meyer, N., Niemand, T., Davila, A., & Kraus, S. (2022). Correction: Biting the bullet: When self-efficacy mediates the stressful effects of COVID-19 beliefs. *PLOS ONE*, *17*(3), e0265330. https://doi.org/10.1371/journal.pone.0265330

Montoya, N., Glaz, L., Abad, C., Pereira, L. & Loturco, I. (2020). What teachers need to know and be able to do: A view from teachers, students, and principals in the Brazilian context. *PLoS ONE*, *15*(9), 1.

Morgan, K. (2021, April 13). Why we define ourselves by our jobs. *BBCpage.* https://www.bbc.com/worklife/article/20210409-why-we-define-ourselves-by-our-jobs

Mori, T., Nagata, T., Nagata, M., Odagami, K., & Mori, K. (2022). Perceived supervisor support for health affects Presenteeism: A cross-sectional study. *International Journal of Environmental Research and Public Health*, *19*(7), 4340. https://doi.org/10.3390/ijerph19074340

(n.d.). Sage Publications Inc. https://www.sagepub.com/sites/default/files/upm-binaries/57732_Chapter_8.pdf

Na'imah, T., Tjahjono, H. K., & Madjid, A. (2022). Validity and Reliability Testing of

Organizational Justice Scale in Educational Organizations. *Journal of Positive School Psychology*, *6*(5), 33–41.

Naeem, R. M., Weng, Q. (Derek), Hameed, Z., & Rasheed, M. I. (2020). Ethical leadership and work engagement: A moderated mediation model. *Ethics & Behavior*, *30*(1), 63–82. https://doi.org/10.1080/10508422.2019.1604232

National Center for Education Statistics. (n.d.). Search for public school districts - District detail for Bibb County. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?ID2=1300420

Ng, T. W., & Sorensen, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes. *Group & Organization Management*, *33*(3), 243-268. https://doi.org/10.1177/1059601107313307

Noddings, N. (2014). High morale in a good cause. *Educational Leadership*, *71*(5), 14–18.

Nojani, M. I., Arjmandnia, A. A., Afrooz, G. A., & Rajabi, M. (2012). The study on relationship between organizational justice and job satisfaction in teachers working in general, special and gifted education systems. *Procedia - Social and Behavioral Sciences*, *46*, 2900-2905. https://doi.org/10.1016/j.sbspro.2012.05.586

Noreen, S., Ali, A., & Munawar, U. (2019). The impact of teachers' personality on students' academic achievement in Pakistan. *Global Regional Review*, *IV*(III), 92-102. https://doi.org/10.31703/grr.2019(iv-iii).11

Oberg, G., Carroll, A., & Macmahon, S. (2023). Compassion fatigue and secondary traumatic stress in teachers: How they contribute to burnout and how they are related to trauma-awareness. *Frontiers in Education*, *8*. https://doi.org/10.3389/feduc.2023.1128618

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and practical guidelines. International Journal of Qualitative Methods, 19, 160940691989922.

https://doi.org/10.1177/1609406919899220

O'Keefe, D. F., Howell, G. T., & Squires, E. C. (2019). Ethical leadership begets ethical leadership: Exploring situational moderators of the trickle-down effect. *Ethics & Behavior*, *30*(8), 581-600. https://doi.org/10.1080/10508422.2019.1649676

Okoro, A. U., Nwagbo, C. R., Ugwuanyi, C. S., & Ugwu, B. E. (2022). Evaluating the impact of teachers' self-efficacy on students' academic achievement in biology in Enugu State, Nigeria. *Webology*, *19*(3), 161-176. https://www.webology.org/data-cms/articles/20220503122003pmwebology%2019%20(3)%20-%2011%20pdf.pdf

Ong, L. D., & Sulaiman Khan, F. A. (2022). The impact of coworker and supervisor support on stress among Malaysian school teachers during the COVID-19 pandemic. *International Journal of Learning, Teaching and Educational Research*, *21*(1), 127-139. https://doi.org/10.26803/ijlter.21.1.8

Oren, L., Tziner, A., Nahshon, Y., Sharoni, G. (2013). Relations between OCBs, organizational justice, work motivation and self-efficacy, *The Bucharest University of Economic Studies*, *Bucharest*, *15*(34), 505-517. http://hdl.handle.net/10419/168796

O'Rourke, N. & Hatcher, L. (2013). A step-by-step approach to using SAS for factor analysis and structural equation modeling (2nd ed.). *SAS Institute*.

O'Rourke, T., Catrett, J., & Houchins, D. (2008). Teacher retention in the Georgia DJJ: A plan that works. *Corrections Today*, *70*(1), 40–43.

Otto, R. (1986). Teachers under stress: Health Hazards in a Work Role and Modes of Response. Melbourne: *Hill of Content*.

Ozbozkurt, O. B., Yesilkus, F., & Korkmazyurek, H. (2021). Analyzing the relationship between

    structural empowerment and perceived supervisor support*. *Journal of Transnational*

    Management, *26*(1), 4-17. https://doi.org/10.1080/15475778.2021.1885900

Palmer, L. K., Economou, P., Cruz, D., Abraham-Cook, S., Huntington, J. S., Maris, M.,

    Makhija, N., Welsh, T., & Maley, L. (2014). The relationship between stress, fatigue, and

    cognitive functioning. *College Student Journal*, *48*(1), 198–211.

Panasuk, R., & Todd, J. (2005). Effectiveness of lesson planning: factor analysis. *Journal of*

    Instructional Psychology, *32*(3), 215–232.

Panatik, S. A., O'Driscoll, M. P., & Anderson, M. H. (2011). Job demands and work-related

    psychological responses among Malaysian technical workers: The moderating effects of

    self-efficacy. Work & Stress, 25(4), 355-370.

    https://doi.org/10.1080/02678373.2011.634282

Pearman, C., Bowles, F., & Polka, W. (2021). Teacher Educator Perceptions of Characteristics of

    Self-Efficacy. *Critical Questions in Education*, *12*(1), 81–99.

Pew Research Center. (2015, November 4). Raising kids and running a household: How working

    parents share the load. *Pew Research Center*, 1-23. https://www.pewresearch.org/social-

    trends/2015/11/04/raising-kids-and-running-a-household-how-working-parents-share-the-

    load/

Pinder, C. C. (2014). *Work motivation in organizational behavior*. Psychology Press.

Plavsic, M., & Dikovic, M. (2022). What is most difficult in a teacher's job from the perspective

    of teachers, students, and parents? *Revija Za Elementarno Izobrazevanje, 15*(1), 31-50.

    https://doi.org/10.18690/rei.15.l.31-50.2022

Pluut, H., Ilies, R., Su, R., Weng, Q., & Liang, A. X. (2022). How social stressors at work

      influence marital behaviors at home: An interpersonal model of work–family

      spillover. *Journal of Occupational Health Psychology*, *27*(1), 74-

      88. https://doi.org/10.1037/ocp0000298

Pressley, T., Ha, C., & Learn, E. (2021). Teacher stress and anxiety during COVID-19: An

      empirical study. *School Psychology*, *36*(5), 367–376. https://doi.org/10.1037/spq0000468

Pretorius, T. B., & Padmanabhanunni, A. (2022). The beneficial effects of professional identity:

      The mediating role of teaching identification in the relationship between role stress and

      psychological distress during the COVID-19 pandemic. *International Journal of*

      Environmental Research and Public Health, *19*(18),

      11339. https://doi.org/10.3390/ijerph191811339

Protheroe, N. (2008, May/June). Teacher efficacy: What is it and does it matter? *Principal-*

      NAESP, 42-45.

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item

      short version of the Big Five Inventory in English and German. *Journal of Research in*

      Personality, *41*(1), 203-212. https://doi.org/10.1016/j.jrp.2006.02.001

Renbarger, R., & Davis, B. K. (2019). Mentors, self-efficacy, or professional development:

      Which mediate job satisfaction for new teachers? A regression examination. *Journal of*

      Teacher Education and Educators, *8*(1), 21–34.

Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*.

      Economic Policy Inst.

Richards, K. A. R., & Sinelnikov, O. A. (2019). An interdivision mentoring program: Doctoral

students as mentors for preservice teachers. *Physical Educator*, *76*(1), 156–181.

https://doi.org/10.18666/TPE-2019-V76-I1-8726

Rogers, W. (1992). Supporting teachers in the workplace. Milton, Qld., *Jacaranda Press*,

Jacarda, Australia. https://nla.gov.au/nla.cat-vn48590

Rose, A. L., & Sughrue, J. A. (2020). Promoting retention of alternative certified teachers

through professional development. *NASSP Bulletin*, *104*(1), 34-

54. https://doi.org/10.1177/0192636520913624

Rubie-Davies, C. (2014). *Becoming a high expectation teacher: Raising the bar*. Routledge.

Rubie-Davies, C., Meissel, K., Alansari, M., Watson, P., Flint, A., & McDonald, L. (2020).

Achievement and beliefs outcomes of students with high and low expectation teachers.

Social Psychology of Education, *23*(5), 1173-1201. https://doi.org/10.1007/s11218-020-

09574-y

Ruggieri, R. A., Crescenzo, P., Iervolino, A., Mossi, P. G., & Boccia, G. (2022). Predictability of

Big Five traits in high school teacher burnout. Detailed study through the disillusionment

dimension. *Epidemiology, Biostatistics, and Public

Health*, *15*(3). https://doi.org/10.2427/12923

Sachs, J. (2003). Learning to be a teacher: professionalism and activism, in F. Crowther, ed.,

Teachers as leaders in a knowledge society. College Year Book, Australian College of

Educators, ACT, Australia, pp. 83-94.

Sahin-Taskin, C. (2017). Exploring pre-service teachers' perceptions of lesson planning in

primary education. *Journal of Education and Practice*, *8*(12), 57–63.

Sahlberg, P. (2010). Rethinking accountability in a knowledge society. *Journal of Educational

Change 11, 45–61. https://doi.org/10.1007/s10833-008-9098-2

Salami, S. O. (2011). Job stress and burnout among lecturers: Personality and social support as
moderators. *Asian Social Science*, *7*(5). https://doi.org/10.5539/ass.v7n5p110

Saldana, J. (2009). The coding manual for qualitative researchers. SAGE.

Sari, T., Atik, S., & Çelik, O. T. (2021). Do the personality traits of teacher candidates predict
the perception of self-efficacy and alienation from school? *Participatory Educational
Research*, *8*(4), 439–453. http://dx.doi.org/10.17275/per.21.99.8.4

Santoro, D. (2011) Good teaching in difficult times: Demoralization in the pursuit of good work.
American Journal of Education. 118(1) https://doi.org/10.1086/662010

Schaap, H., Louws, M., Meirink, J., Oolbekkink-Marchand, H., Van Der Want, A., Zuiker, I.,
Zwart, R., & Meijer, P. (2018). Tensions experienced by teachers when participating in a
professional learning community. *Professional Development in Education*, *45*(5), 814-
831. https://doi.org/10.1080/19415257.2018.1547781

Schaufeli, W. B. (2017). Applying the job demands-resources model: A 'how to' guide to
measuring and tackling work engagement and burnout. *Organizational Dynamics, 46*(2),
120–132. https://doi.org/10.1016/j.orgdyn.2017.04.008

Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the Fit of Structural
Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures.
Methods of Psychological Research Online. 8. 23–74.

Schmoker, M. (2011). Focus: Elevating the essentials to radically improve student learning.
Association for Supervision and Curriculum Development.

Schneider, T. R., Rench, T. A., Lyons, J. B., & Riffle, R. R. (2011). The influence of
neuroticism, extraversion and openness on stress responses. *Stress and Health*, *28*(2),

102-110. https://doi.org/10.1002/smi.1409

Schonert-Reichl, K. A. (2019). Advancements in the landscape of social and emotional learning

and emerging topics on the horizon. *Educational Psychologist*, *54*(3), 222–232.

https://doi.org/10.1080/00461520.2019.1633925

Schumacker, R. E., & Lomax, R. G. (2010). A beginner's guide to structural equation modeling.

Routledge.

Schutz, R. W., & Long, B. C. (1988). Confirmatory factor analysis, validation and revision of a

teacher stress inventory. *Educational and Psychological Measurement*, *48*(2), 497–

511. https://doi.org/10.1177/0013164488482025

Schwan, A., Wold, C., Moon, A., Neville, A., & Outka, J. (2020). Mentor and new teacher self-

perceptions regarding the effectiveness of a statewide mentoring program. *Critical

Questions in Education*, *11*(3), 190–207.

Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004).

The measurement of effort–reward imbalance at work: European comparisons. *Social

Science & Medicine*, *58*(8), 1483-1499. https://doi.org/10.1016/s0277-9536(03)00351-4

Shakeel, S., Khan, M. M., Khan, R. A., & Mujtaba, B. G. (2021). Linking personality traits, self-

efficacy and burnout of teachers in public schools: Does school climate play a

moderating role? *Public Organization Review*, *22*(1), 19-

39. https://doi.org/10.1007/s11115-021-00514-8

Shaw, J., & Newton, J. (2014). Teacher retention and satisfaction with a servant leader as

principal. *Education*, *135*(1), 101–106.

Shimahara, N. (2002). *Teaching in Japan: A cultural perspective*. New York. Routledge.

(Reference books in international education; 54).

Sharma, D. (2018). When fairness is not enough: Impact of corporate ethical values on

    organizational citizenship behaviors and worker alienation. *Journal of Business*

    Ethics, *150*(1), 57-68. https://doi.org/10.1007/s10551-016-3107-9

Shenaar-Golan, V., Walter, O., Greenberg, Z., & Zibenberg, A. (2020). Emotional intelligence in

    higher education: Exploring its effects on academic self-efficacy and coping with

    stress. *College Student Journal*, *54*(4), 443–459.

Skaalvik, E.M. & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with

    strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of*

    Educational Psychology. *99*, 611-625. https://doi.org/10.1037/0022-0663.99.3.611

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the

    teaching profession: Relations with school context, feeling of belonging, and emotional

    exhaustion. *Teaching and Teacher Education*, *27*(6), 1029–1038.

    https://doi.org/10.1016/j.tate.2011.04.001

Skaalvik, E.M., Skaalvik, S. (2018). Job demands and job resources as predictors of teacher

    motivation and well-being. *Soc Psychol Educ* 21, 1251–1275.

    https://doi.org/10.1007/s11218-018-9464-8

Skaalvik, E.M. & Skaalvik, S. (2015). Job satisfaction, stress and coping strategies in the

    teaching profession—What do teachers say? *International Education Studies*. *8*(3).

    http://dx.doi.org/10.5539/ies.v8n3p181

Shoulders, C. W., Estepp, C. M., & Johnson, D. M. (2021). Teachers' stress, coping strategies,

    and job satisfaction in COVID-19-induced teaching environments. *Journal of*

    Agricultural Education, *62*(4), 67–80. https://doi.org/10.5032/jae.2021.04067

Sofos, A., & Darra, M. (2014). Utilization of learning planning in the educational process:

exploring the perceptions of teachers in the templates of experimental schools. *Proceedings of 1st Congress of DEPPS.*

Spilt, J. L., Koomen, H. M., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, *23*(4), 457-477. https://doi.org/10.1007/s10648-011-9170-y

Ssenyonga, J., & Hecker, T. (2021). Job Perceptions Contribute to Stress among Secondary School Teachers in Southwestern Uganda. *International Journal of Environmental Research and Public Health*, *18*(5). https://doi.org/10.3390/ijerph18052315

Steinke, L. J., & Putnam, A. R. (2011). Mentoring teachers in technology education: Analyzing the need. *Journal of Technology Studies*, *37*(1), 41–49. https://doi.org/10.21061/jots.v37i1.a.5

Stewart, J. E., & Rice, S. (2022). In challenging times: Mindfulness for students and teachers. *TAHPERD Journal*, *90*(1), 8–12.

Stoeber, J., & Rennert, D. (2008). Perfectionism in school teachers: Relations with stress appraisals, coping styles, and burnout. *Anxiety, Stress & Coping*, *21*(1), 37–53.

Stress. (2021, October 12). WHO World Health Organization. https://www.who.int/news-room/questions-and-answers/item/stress

Strickroth, S. (2019). Platon: Developing a graphical lesson planning system for prospective teachers. *Education Sciences*, *9*.

Stuckey, H. (2013). Three types of interviews: Qualitative research methods in social health. *Journal of Social Health and Diabetes*, *01*(02), 056-059. https://doi.org/10.4103/2321-0656.115294

Sultana, N., Yousuf, M. I., Ud Din, M. N., & Rehman, S. (2009). The higher the quality of teaching the higher the quality of education. *Contemporary Issues in Education Research*, *2*(3), 59-64. http://dx.doi.org/10.19030/cier.v2i3.1088

Summerford, S. L. (2022). Servant Leadership and Teacher Stressors: A Qualitative Study. Graduate Theses and Dissertations Retrieved from https://scholarworks.uark.edu/etd/4499

Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. The Canadian Journal of Hospital Pharmacy, 68(3). https://doi.org/10.4212/cjhp.v68i3.1456

Swandarujati, M., Nurfitri, T., & Anggraeni, A. I. (2020). Effect of organizational justice on stress with work-family conflict as a mediating variable. *Journal of research in management*, *2*(4). https://doi.org/10.32424/jorim.v2i4.87

Tabatadze, S., & Chachkhiani, K. (2021). COVID-19 and emergency remote teaching in the country of Georgia: Catalyst for educational change and reforms in Georgia? *Educational Studies*, *57*(1), 78–95.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education, 2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work–home interface: The work–home resources model. *American Psychologist*, *67*(7), 545-556. https://doi.org/10.1037/a0027974

The Governor's Office of Student Achievement. (2021, March 22). Oracle business intelligence sign in. Oracle HTTP Server 12c. https://gosa.georgia.gov/dashboards-data-report-card/report-card

Theofanidis, D., & Antigoni Fountouki, A. (2018). Limitations and delimitations in the research

    process. *PERIOPERATIVE NURSING*, *7*(3), 155-163. DOI: 10.5281/zenodo.2552022

Thomas, T. (2008). Fixing teachers evaluation. *Journal of Education Leadership*, *66*(2), 32-37.

Thompson, S., Clarke, E., Quickfall, A., & Glazzard, J. (2020). Averting the crisis in trainee

    teacher well-being -- learning lessons across European contexts: A comparative

    study. *Journal of Comparative and International Higher Education*, *12*(2), 38–56.

    http://dx.doi.org/10.32674/jcihe.v12iFall.1439

Timms, C., Graham, D., & Cottrell, D. (2007). "I just want to teach". Journal of Educational

    Administration, 45(5), 569-586. https://doi.org/10.1108/09578230710778204

Toprak, M., Tösten, R., & Elçiçek, Z. (2022). Teacher stress and work-family conflict:

    Examining a moderation model of psychological capital. *Irish Educational Studies*, 1-

    17. https://doi.org/10.1080/03323315.2022.2135564

Tosheva, I. (2016). Choosing the profession of a physical education teacher: In the perspective of

    meta-theory about the motivation sources. *Research in Kinesiology*, *44*(1), 120–127.

Toyon, M. A. (2021). Explanatory sequential design of mixed methods research: Phases and

    challenges. *International Journal of Research in Business and Social Science (2147-

    4478)*, *10*(5), 253-260. https://doi.org/10.20525/ijrbs.v10i5.1262

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive

    construct. *Teaching and Teacher Education*, *17*(7), 783-

    805. https://doi.org/10.1016/s0742-051x(01)00036-1

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs

    of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944-

    956. https://doi.org/10.1016/j.tate.2006.05.003

Udayar, S., Urbanaviciute, I., Massoudi, K., & Rossier, J. (2020). The role of personality profiles

in the longitudinal relationship between work–related well–being and life satisfaction

among working adults in Switzerland. *European Journal of Personality*, *34*(1), 77-

92. https://doi.org/10.1002/per.2225

Ullman, J. B. (2006). Structural equation modeling: Reviewing the basics and moving

forward. *Journal of Personality Assessment*, *87*(1), 35-

50. https://doi.org/10.1207/s15327752jpa8701_03

Ullman, J. B., & Bentler, P. M. (2012). Structural equation modeling. Handbook of Psychology,

Second Edition. https://doi.org/10.1002/9781118133880.hop202023

Valli, L., Croninger R., Walters, K. (2007). "Who (else) is the teacher? Cautionary notes on

teacher accountability systems." *American Journal of Education, 113*(4), 635-62.

Views from the Schoolhouse: Insights from Georgia Educators on the Education Profession and

Supporting Students. (2022). Professional Association of Georgia Educators.

https://www.pagelegislative.org/2022-legislative-survey-full-report

Vinz, S. (2022, July 27). *What is a theoretical framework? | Guide to organizing*.

Scribbr. https://www.scribbr.com/dissertation/theoretical-framework/

Von Bergen, C. W., & Bressler, M. S. (n.d.) Utilizing the power of yet. *Journal of Behavioral*

Studies in Business. 12, 1-14.

Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the

need hierarchy theory. *Organizational Behavior and Human Performance*, *15*(2), 212-

240. https://doi.org/10.1016/0030-5073(76)90038-6

Wang, C. C. & Burris, M. A. (1994). Empowerment through photo novella: Portraits of

 participation. *Health Education & Behavior*, *21*, 171–186.

 http://dx.doi.org/10.1177/109019819402100204

Wernimont, P. F., & Campbell, J. P. (1968). Signs, samples, and criteria. *Journal of Applied*

 Psychology, *52*(5), 372-376. https://doi.org/10.1037/h0026244

Westphal, A., Kalinowski, E., Hoferichter, C. J., & Vock, M. (2022). K−12 teachers' stress and

 burnout during the COVID-19 pandemic: A systematic review. *Frontiers in*

 Psychology, *13*. https://doi.org/10.3389/fpsyg.2022.920326

Whitman, G., & Kelleher, I. (2016). *Neuroteach: Brain science and the future of education*.

 Rowman & Littlefield Publishers.

Wiesner, W. H., & Cronshaw, S. F. (1988). A meta-analytic investigation of the impact of

 interview format and degree of structure on the validity of the employment

 interview*. *Journal of Occupational Psychology*, *61*(4), 275-

 290. https://doi.org/10.1111/j.2044-8325.1988.tb00467.x

Will, M. (2021). As teacher morale hits a new low, schools look for ways to give breaks,

 restoration. *Education Week*, *40*(17), 3–7.

Williams, P. G., Rau, H. K., Cribbet, M. R., & Gunn, H. E. (2009). Openness to experience and

 stress regulation. *Journal of Research in Personality*, *43*(5), 777-

 784. https://doi.org/10.1016/j.jrp.2009.06.003

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements

 for structural equation models. Educational and Psychological Measurement, 73(6), 913-

 934. https://doi.org/10.1177/0013164413495237

Wolters, C. A., & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: Their

relation and association to teaching experience and academic level. *Journal of Educational Psychology*, *99*(1), 181-193. https://doi.org/10.1037/0022-0663.99.1.181

Womack, S. T., Hannah, S. L., & Bell, C. D. (2012). Factor Analysis of Intern Effectiveness. *Administrative Issues Journal: Education, Practice, and Research*, *2*(1), 147–157.

Womack, S. T., Pepper, S., Hanna, S. L., & Bell, C. D. (2015). Most effective practices in lesson planning [Doctoral dissertation]. https://files.eric.ed.gov/fulltext/ED553616.pdf

Wong, V. W., Ruble, L. A., Yu, Y., & McGrew, J. H. (2017). Too stressed to teach? Teaching quality, student Engagement, and IEP outcomes. Exceptional Children, 83(4), 412–427. https://doi.org/10.1177/0014402917690729

Woods, R. (2022, June 16). Press release - Superintendent woods, 2022 Georgia teacher of the year Cherie Goldman release teacher burnout task force report. Georgia Department of Education. https://www.gadoe.org/External-Affairs-and-Policy/communications/Pages/PressReleaseDetails.aspx?PressView=default&pid=975

Worley, J. A., Vassar, M., Wheeler, D. L., & Barnes, L. L. (2008). Factor structure of scores from the Maslach Burnout Inventory: A review and meta-analysis of 45 exploratory and confirmatory factor-analytic studies. *Educational and Psychological Measurement*, *68*(5), 797-823. https://doi.org/10.1177/0013164408315268

Wright, P. M., Lichtenfels, P. A., & Pursell, E. D. (1989). The structured interview: Additional studies and a meta-analysis. *Journal of Occupational Psychology*, *62*(3), 191-199. https://doi.org/10.1111/j.2044-8325.1989.tb00491.x

Yin, W. (2022). External locus of control and elementary teachers' subjective well-being: Self-efficacy as a mediator. *Social Behavior and Personality: an international journal*, *50*(6),

40-48. https://doi.org/10.2224/sbp.11517

YCSD. (2022). Yellow County School District. https://www.bcsdk12.net/

Young, J. C., Rose, D. C., Mumby, H. S., Benitez, C. F., Derrick, C. J., Finch, T., Garcia, C.,
Home, C., Marwaha, E., Morgans, C., Parkinson, S., Shah, J., Wilson, K. A., &
Mukherjee, N. (2018). A methodological guide to using and reporting on interviews in
conservation science research. *Methods in Ecology & Evolution*, *9*(1), 10–19.
https://doi.org/10.1111/2041-210X.12828

Yu, X., Wang, P., Zhai, X., Dai, H., & Yang, Q. (2014). The effect of work stress on job burnout
among teachers: The mediating role of self-efficacy. *Social Indicators Research*, *122*(3),
701-708. https://doi.org/10.1007/s11205-014-0716-5

Zedeck, S., & Mosier, K. L. (1990). Work in the family and employing organization. *American
Psychologist*, *45*(2), 240-251. https://doi.org/10.1037/0003-066x.45.2.240

Zetlin, M. (2015, July 10). Define Yourself by Your Work? How (and Why) You Should Stop
Now Think your identity comes from your profession? Three reasons to change your
mind. *Inc.com.* https://www.inc.com/minda-zetlin/define-yourself-by-your-work-how-
and-why-you-should-stop-it-now.html

Zhao, W., Liao, X., Li, Q., Jiang, W., & Ding, W. (2022). The relationship between teacher job
stress and burnout: A moderated mediation model. *Frontiers in
Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.784243

Zhou, Y. (2019). Collective teacher efficacy: An introduction to its theoretical constructs,
impact, and formation. *International Dialogues on Education
Journal*, *6*(2). https://doi.org/10.53308/ide.v6i2.60

Zhou, M., Zhang, J., Li, F., & Chen, C. (2020). Work-family conflict and depressive symptoms among Chinese employees: Cross-level interaction of organizational justice climate and family flexibility. *International Journal of Environmental Research and Public Health*, *17*(19), 6954. https://doi.org/10.3390/ijerph17196954

Zhou, H., & Ma, J. (2022). Organizational justice and teachers' turnover intention in primary and secondary schools: The importance of sustainable salary management. *Sustainability*, *14*(20), 13314. https://doi.org/10.3390/su142013314

Zhu, X., Yan, W., Lin, X., Que, J., Huang, Y., Zheng, H., Liu, L., Deng, J., Lu, L., & Chang, S. (2022). The effect of perceived stress on cognition is mediated by personality and the underlying neural mechanism. *Translational psychiatry*, *12*(1), 199. https://doi.org/10.1038/s41398-022-01929-7

Appendices

Appendix A. Conceptual Framework

Appendix B. Teacher Stress Inventory

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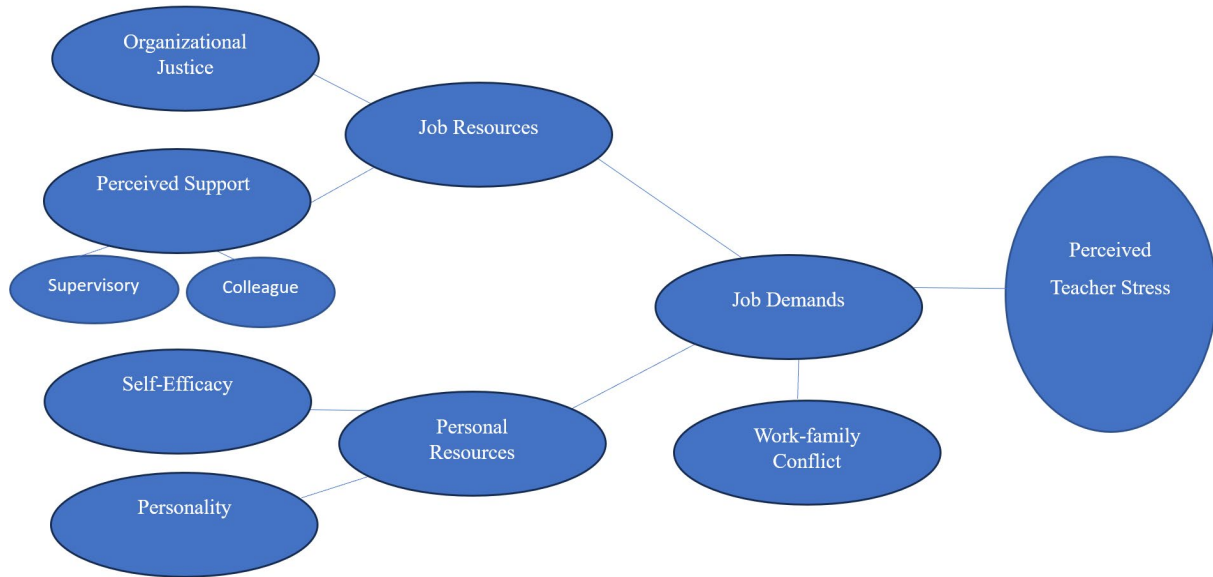Appendix G. Survey of Perceived Organizational Support

Appendix H. Structured Interview Questions

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Appendix A

Conceptual Framework

Appendix B

Perceived Stress Scale

Appendix
Teacher Stress Inventory

	As a teacher, how great a source of stress are these factors to you?	0 no stress	1 mild stress	2 moderate stress	3 much stress	4 extreme stress
1	poor career structure (poor promotion prospects)	none	mild	moderate	much	extreme
2	difficult class	none	mild	moderate	much	extreme
3	lack of recognition for good teaching	none	mild	moderate	much	extreme
4	responsibility for pupils (e.g. exam success)	none	mild	moderate	much	extreme
5	noisy pupils	none	mild	moderate	much	extreme
6	too short rest periods (mid-morning break, mid-day break)	none	mild	moderate	much	extreme
7	pupils' poor attitudes to work	none	mild	moderate	much	extreme
8	inadequate salary	none	mild	moderate	much	extreme
9	too much work to do (e.g. lesson preparation and marking)	none	mild	moderate	much	extreme
10	having a large class (i.e. many pupils)	none	mild	moderate	much	extreme
11	maintaining class discipline	none	mild	moderate	much	extreme
12	administrative work (e.g. filling in forms)	none	mild	moderate	much	extreme
13	pressure from parents	none	mild	moderate	much	extreme
14	ill-defined syllabuses (e.g. not detailed enough)	none	mild	moderate	much	extreme
15	lack of time to spend with individual pupils	none	mild	moderate	much	extreme
16	shortage of equipment and poor facilities	none	mild	moderate	much	extreme
17	attitudes and behaviour of other teachers	none	mild	moderate	much	extreme
18	pupils impolite behaviour or cheek	none	mild	moderate	much	extreme
19	pressure from headteacher and education officers	none	mild	moderate	much	extreme
20	having extra students because of absent teachers	none	mild	moderate	much	extreme

Any final comments? _____

_____

_____

_____

_____

PLEASE CHECK THAT ALL THE QUESTIONS HAVE BEEN ANSWERED.   THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.

Appendix C

Ohio State Teacher Efficacy Scale

Table 4
Factor loadings for the OSTES (study 3)

Ohio State teacher efficacy scale (OSTES)

Factor 1: *Efficacy for instructional strategies*
 1. To what extent can you use a variety of assessment strategies?
 2. To what extent can you provide an alternative explanation or example when students are confused?
 3. To what extent can you craft good questions for your students?
 4. How well can you implement alternative strategies in your classroom?
 5. How well can you respond to difficult questions from your students?
 6. How much can you do to adjust your lessons to the proper level for individual students?
 7. To what extent can you gauge student comprehension of what you have taught?
 8. How well can you provide appropriate challenges for very capable students?

Factor 2: *Efficacy for classroom management*
 9. How much can you do to control disruptive behavior in the classroom?
10. How much can you do to get children to follow classroom rules?
11. How much can you do to calm a student who is disruptive or noisy?
12. How well can you establish a classroom management system with each group of students?
13. How well can you keep a few problem students from ruining an entire lesson?
14. How well can you respond to defiant students?
15. To what extent can you make your expectation clear about student behavior?
16. How well can you establish routines to keep activities running smoothly?

Factor 3: *Efficacy for student engagement*
17. How much can you do to get students to believe they can do well in schoolwork?
18. How much can you do to help your students value learning?
19. How much can you do to motivate students who show low interest in schoolwork?
20. How much can you assist families in helping their children do well in school?
21. How much can you do to improve the understanding of a student who is failing?
22. How much can you do to help your students think critically?
23. How much can you do to foster student creativity?
24. How much can you do to get through to the most difficult students?

The Big Five Personality Scale

A Brief Version of the Big Five Personality Inventory.

Big Five Inventory-10 (BFI-10)

Adapted from Rammstedt, B. & John, O. P. (2007). Measuring personality in one minute or less: A 10 item short version of the Big Five Inventory in English and German. *Journal of Research in Personality, 41*, 203-212.

Instructions: How well do the following statements describe your personality?

I see myself as someone who …	Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree strongly
1. … is reserved	(1)	(2)	(3)	(4)	(5)
2. … is generally trusting	(1)	(2)	(3)	(4)	(5)
3. … tends to be lazy	(1)	(2)	(3)	(4)	(5)
4. … is relaxed, handles stress well	(1)	(2)	(3)	(4)	(5)
5. … has few artistic interests	(1)	(2)	(3)	(4)	(5)
6. … is outgoing, sociable	(1)	(2)	(3)	(4)	(5)
7. … tends to find fault with others	(1)	(2)	(3)	(4)	(5)
8. … does a thorough job	(1)	(2)	(3)	(4)	(5)
9. … gets nervous easily	(1)	(2)	(3)	(4)	(5)
10. … has an active imagination	(1)	(2)	(3)	(4)	(5)

Scoring the BFI-10 scales (R = item is reverse-scored):

Extraversion: 1R, 5

Agreeableness: 2, 7R

Conscientiousness: 3R, 8

Neuroticism: 4R, 9

Openness to Experience: 5R, 10

(Retrieved 7/31/10 from http://www.ocf.berkeley.edu/~johnlab/pdfs/BFI-10.doc)

Appendix E

Organizational Justice Scale

Table 1
Justice Measure Items

Measure item	Source on which item is based[a]
Procedural justice	
The following items refer to the procedures used to arrive at your (outcome). To what extent:	
1. Have you been able to express your views and feelings during those procedures?	Thibaut & Walker (1975)
2. Have you had influence over the (outcome) arrived at by those procedures?	Thibaut & Walker (1975)
3. Have those procedures been applied consistently?	Leventhal (1980)
4. Have those procedures been free of bias?	Leventhal (1980)
5. Have those procedures been based on accurate information?	Leventhal (1980)
6. Have you been able to appeal the (outcome) arrived at by those procedures?	Leventhal (1980)
7. Have those procedures upheld ethical and moral standards?	Leventhal (1980)
Distributive justice	
The following items refer to your (outcome). To what extent:	
1. Does your (outcome) reflect the effort you have put into your work?	Leventhal (1976)
2. Is your (outcome) appropriate for the work you have completed?	Leventhal (1976)
3. Does your (outcome) reflect what you have contributed to the organization?	Leventhal (1976)
4. Is your (outcome) justified, given your performance?	Leventhal (1976)
Interpersonal justice	
The following items refer to (the authority figure who enacted the procedure). To what extent:	
1. Has (he/she) treated you in a polite manner?	Bies & Moag (1986)
2. Has (he/she) treated you with dignity?	Bies & Moag (1986)
3. Has (he/she) treated you with respect?	Bies & Moag (1986)
4. Has (he/she) refrained from improper remarks or comments?	Bies & Moag (1986)
Informational justice	
The following items refer to (the authority figure who enacted the procedure). To what extent:	
1. Has (he/she) been candid in (his/her) communications with you?	Bies & Moag (1986)
2. Has (he/she) explained the procedures thoroughly?	Bies & Moag (1986)
3. Were (his/her) explanations regarding the procedures reasonable?	Shapiro et al. (1994)
4. Has (he/she) communicated details in a timely manner?	Shapiro et al. (1994)
5. Has (he/she) seemed to tailor (his/her) communications to individuals' specific needs?	Shapiro et al. (1994)

Note. All items use a 5-point scale with anchors of 1 = *to a small extent* and 5 = *to a large extent.*
[a] Citations reflect the source of the concepts measured by the scale items.

Appendix F

Work-Family Conflict Scale

Work and Family Conflict Scale WAFCS

For the following scale please rate how much you agree with the following statements by circling the appropriate number.

1. Very strongly disagree
2. Strongly disagree
3. Disagree
4. Neither agree nor disagree
5. Agree
6. Strongly agree
7. Very strongly agree

		Very strongly disagree						Very Strongly Agree
1.	My work prevents me spending sufficient quality time with my family	1	2	3	4	5	6	7
2.	There is no time left at the end of the day to do the things I'd like at home (e.g., chores and leisure activities)	1	2	3	4	5	6	7
3.	My family misses out because of my work commitments	1	2	3	4	5	6	7
4.	My work has a negative impact on my family life	1	2	3	4	5	6	7
5.	Working often makes me irritable or short tempered at home	1	2	3	4	5	6	7
6.	My work performance suffers because of my personal and family commitments	1	2	3	4	5	6	7
7.	Family related concerns or responsibilities often distract me at work	1	2	3	4	5	6	7
8.	If I did not have a family I'd be a better employee	1	2	3	4	5	6	7
9.	My family has a negative impact on my day to day work duties	1	2	3	4	5	6	7
10.	It is difficult to concentrate at work because I am so exhausted by family responsibilities	1	2	3	4	5	6	7

Work and Family Conflict Scale WAFCS- SCORING

	Scoring	Range	Interpretation
Work-to-family conflict subscale	Sum items 1-5	5-35	Higher scores indicate higher levels of conflict
Family-to-work conflict subscale	Sum items 6-10	5-35	

Recommended Variable Names (for use with posted syntax)

Item Names	WAFCS_1, WAFCS_2, WAFCS_3, etc
Work-to-family conflict subscale	WFC_Tot_WAFCS
Family-to-work conflict subscale	FWC_Tot_WAFCS

Appendix G

Survey of Perceived Organizational Support

Survey of Perceived Organizational Support

Statement	Factor loading 1	Factor loading 2
1.[a] The organization values my contribution to its well-being.	.71	−.07
2.[a] If the organization could hire someone to replace me at a lower salary it would do so. (R)	.69	.10
3.[a] The organization fails to appreciate any extra effort from me. (R)	.72	−.11
4.[a] The organization strongly considers my goals and values.	.74	−.22
5. The organization would understand a long absence due to my illness.	.60	.19
6.[a] The organization would ignore any complaint from me. (R)	.71	.00
7.[a] The organization disregards my best interests when it makes decisions that affect me. (R)	.73	−.04
8.[a] Help is available from the organization when I have a problem.	.74	−.12
9.[a] The organization really cares about my well-being.	.83	−.14
10. The organization is willing to extend itself in order to help me perform my job to the best of my ability.	.80	−.21
11. The organization would fail to understand my absence due to a personal problem. (R)	.62	.12
12. If the organization found a more efficient way to get my job done they would replace me. (R)	.59	.12
13. The organization would forgive an honest mistake on my part.	.66	.12
14. It would take only a small decrease in my performance for the organization to want to replace me. (R)	.64	.35
15. The organization feels there is little to be gained by employing me for the rest of my career. (R)	.64	.24
16. The organization provides me little opportunity to move up the ranks. (R)	.43	−.10
17.[a] Even if I did the best job possible, the organization would fail to notice. (R)	.80	−.08
18. The organization would grant a reasonable request for a change in my working conditions.	.67	−.17
19. If I were laid off, the organization would prefer to hire someone new rather than take me back. (R)	.65	.38
20.[a] The organization is willing to help me when I need a special favor.	.72	.01
21.[a] The organization cares about my general satisfaction at work.	.82	−.18
22.[a] If given the opportunity, the organization would take advantage of me. (R)	.73	−.08
23.[a] The organization shows very little concern for me. (R)	.84	−.08
24. If I decided to quit, the organization would try to persuade me to stay.	.60	.14
25.[a] The organization cares about my opinions.	.82	−.08
26. The organization feels that hiring me was a definite mistake. (R)	.60	.37
27.[a] The organization takes pride in my accomplishments at work.	.76	−.01
28. The organization cares more about making a profit than about me. (R)	.59	−.06
29. The organization would understand if I were unable to finish a task on time.	.60	−.03
30. If the organization earned a greater profit, it would consider increasing my salary.	.65	−.18
31. The organization feels that anyone could perform my job as well as I do. (R)	.66	.21
32. The organization is unconcerned about paying me what I deserve. (R)	.50	−.18
33. The organization wishes to give me the best possible job for which I am qualified.	.67	−.15
34. If my job were eliminated, the organization would prefer to lay me off rather than transfer me to a new job. (R)	.56	.30
35.[a] The organization tries to make my job as interesting as possible.	.72	−.18
36. My supervisors are proud that I am a part of this organization.	.65	.13

Note. (R) indicates the item is reverse scored.
[a] These items were retained for the short version of the survey.

Appendix H

Structured Interview Questions

1. (Stress) If you experience stress from your daily job demands, what are the main causes?

1.1. How does _____ (the source(s) of stress) inhibit you from completing your job duties or efficiency at work? (Repeat question based on the number of responses to Q1)

1.2 (Self-efficacy) Were you able to alleviate the stress caused by _____ (insert cause)?

1.3 If yes, how were you able to cope with the stress?

1.4 What type of positive change did you experience after coping with stress?

2. (Extroverts) Do you feel you are able to vocalize your work-related stress to colleagues or principals? Please explain.

3. (Agreeableness) Do you often take on more responsibilities than you can handle to not let your principal down or support your colleagues? Please explain.

4. (Neuroticism) Do you believe in constructive feedback from your principal and/or colleagues that helps you to improve the quality of your work? Please explain.

4.1 Describe a situation where the constructive feedback was perceived more like a criticism than support.

5. (Openness) Would you consider yourself to be able to produce multiple strategies when a stressful situation arises? Please explain.

6. (Conscientiousness) Please describe a situation in which stress was caused because of your own actions (planning and organization, scheduling).

6.1 (Following rules aspect) Please describe a situation where you encountered stress when rules and regulations were fully implemented.

7. What types of support from administration (principal, district leaders) do you feel is needed to help you manage stress from work-related responsibilities?

7.1 (Based on responses of 7 about teaching assistance) How would _____ help you to cope with stress?

8. What type of support from colleagues do you feel is needed to help you manage stress from work-related responsibilities?

8.1 (Based on responses of 8 about colleague assistance) How would _____ help you cope with stress?

9. Work-family conflict occurs when work-related stress is negatively impacting your home life. In what ways can administration (principals, coordinators, district leaders) and colleagues help to alleviate family conflict due to work-related stress?

10. (Interpersonal Justice) Please explain how you feel you are treated with respect during daily communications with principals and colleagues.

11.(Procedural Justice) Please explain how you think due process is fairly applied by administration (principals, district leaders) when following school district rules and regulations.

12. (Informational Justice) In regard to communication with administration, would you consider it to be timely, fair, thorough, and specific to your job duties and responsibilities? Please explain.

13. (Distributive Justice) Do you believe you are fairly compensated based on the effort to complete daily work-related responsibilities? Please explain.

14. Please rank the following areas as they relate to sources of stress for you. 1 stressful, 2 moderately stressful, 3 extremely stressful: organizational justice, perceived supervisory/colleague support, work-family conflict.

Organized Justice (Workplace fairness)	
Perceived Supervisory Support (Assistance and encouragement provided or lack thereof)	
Work-family conflict (Spillover of work on family time/events)	

Appendix I

Survey Consent Form

INSTITUTIONAL REVIEW BOARD
Informed Consent Form

You are being asked to participate in a research project conducted by Lisa Freeman, a student in the College of Education at Columbus State University. This project is under the supervision of Dr. Jessica VanValkenburgh.

I. Purpose:

The purpose of this project is to investigate the impact that individual (self-efficacy and personality) and contextual factors (organizational justice, work-family conflict, and perceived supervisory support) have on teacher stress on teacher experience levels (novice, mid-career, and experienced) within the various levels of academic settings within K-12 schools and identify sources of stress perceived by teachers.   .

II. Procedures:

Individuals will be eligible to participate in this mixed methods study by if they are certified teachers within the XX County School District. The quantitative study will begin with an email that contains the link to the Qualtrics survey. Upon opening the survey, participants will be asked to provide consent. If participants do not agree, the survey will automatically close. The final question of the survey will ask participants if they want to be included in the qualitative portion of the study. If a respondent wants to participate, they will provide their email address for future contact to schedule the interview that will occur through Microsoft Teams and will be recorded. A purposeful random cluster-level selection will occur after the quantitative data collection to determine participants in the qualitative interviews. The quantitative study will take 15-20 minutes to complete and remain open for 2 weeks. The interviews should be no more than 15-20 minutes and should be completed within 2 weeks of the survey ending.

Quantitative survey data will be analyzed by using correlation analysis and structural equation modeling. Qualitative data analysis will begin with the researcher reviewing each respondent's work independently and then creating an inductive thematic coding system. A second coder will be utilized. Mixed-methods analysis will use the procedures of joint display tables, and data transformation procedures to integrate quantitative and qualitative data.

III. Possible Risks or Discomforts:

Participants could experience some risks.
The quantitative survey housed in Qualtrics, is monitored by the CSU IT department which has firewalls, anti-theft security, and malware-tracking software. The Qualtrics platform is housed within the researcher's MyCSU account and is password protected and can only be accessed by a one-time password which can time out. The only person who can access the survey is the researcher through their account via CSU. Participant's

electronic information will be stored on password-protected devices of the research team to avoid risks of confidentiality breaches that could adversely affect their employment status. Qualitative information (transcriptions) will be securely stored in the locked office of the researcher, the second coder, and the co-investigator. To mitigate social risks for participants if they share sensitive details on their documents, the county and participants will be referenced using pseudonyms.

IV. Potential Benefits:

The benefits to the district will be real feedback concerning employees' stress levels and potential ways to alleviate the sources. In addition, potentially provide additional support at the school level to aid in retention efforts. The students will benefit from decreasing teacher stress and potentially increasing student achievement as more insight in gained into teacher perspectives.

V. Costs and Compensation:

Participants completing the survey will not receive compensation. However, those who agree to participate in the structured interview portion of the study will be entered into a drawing for two $10.00 gift cards to Amazon using a computer-generated system.

VI. Confidentiality:

The survey does not require any identifiable information. The electronic data will be stored on password-protected computers. The survey housed within Qualtrics that is password protected, has CSU IT anti-theft security, and timed-out settings. Only participants who want to be a part of the qualitative portion of the study will provide their email addresses to set up meeting dates and times.

The interview participant's recordings and the district being studied will be coded with pseudonyms. The documents will be maintained in a secure and locked office for one year after the doctoral candidate's degree has been conferred. Then, all electronic data will be wiped from the hard drive and all paper-based documents will be shredded to retain anonymity.

VII. Withdrawal:
Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, Dr. Jessica VanValkenburgh at (706) 565-1413 or vanvalkenburgh_jessica@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By selecting the *I agree* radial and *Submit*, I agree to participate in this research project.

○ I agree.   ○ I do not agree.

Submit

Appendix J

Interview Protocol

Hello, my name is Lisa Freeman and I am a doctoral student at Columbus State University. Thank you for taking the time to meet with me today. I really appreciate it. Before we get started let me ensure that you are aware that the interview is being recorded along with the researcher taking notes to be able to review the audio later for transcription purposes. The results of the interview will only be reviewed by myself and members of my dissertation committee at Columbus State University and the recordings and transcriptions will be discarded when the study is complete. Please be assured that anything you tell me during this interview is completely confidential and will only be used for research purposes. Our conversation will last up to thirty minutes.

You were selected by a computer-generated report after suggesting interest in participating in this portion of the study from your survey response. The purpose of this interview is to expound upon the results obtained in the quantitative survey to provide further insight into stress contributing factors from teacher perspectives. Each question will align with the constructs addressed in the previous survey of teacher stress, self-efficacy, personality, organization justice, work-family conflict, and perceived supervisory support and colleague support. I am interested in speaking to you today to learn how these factors have shaped your perception of stress related to education.

I will now start the recording.

<u>Consent</u>

I will now share my screen and read aloud the consent form regarding this interview. At the end, if you agree to these terms please reply, "I agree."

The researcher will read the consent in Appendix I.

Do you agree to participate in this qualitative study?

Let's begin.

The researcher reads the interview questions in Appendix H.

This concludes the interview. Thank you again for your time and participation today.