PUBLIC-SCHOOL TRANSPORTATION EMPLOYEES ON THE BUS: IMPACTS OF STUDENT BEHAVIOR ON JOB STRESS AND WORKPLACE OUTCOMES

by

MEG ELLEN MCDUFFIE

(Under the Direction of Cynthia Vail)

ABSTRACT

As schools open their doors post-pandemic for in-person instruction, the bus driver shortage continues to be a nationwide problem. As a result, school systems are taking desperate measures to think outside the box to recruit and promote working within public school transportation as a career. Although there is research in the area of teachers and the teaching environment, there is a lack of research regarding the public-school bus environment and how it impacts both students' academic success and the work environment for transportation employees. The purpose of this study was to build on prior research to further understand the public-school bus environment as an extension of the brick-and-mortar school building for student success and a work environment for transportation employees. Survey methodology was used to solicit the perspectives of transportation employees, to gain a better understanding of their working conditions. Specifically, an analysis was conducted to determine the relationship between student-on-staff victimization and the workplace outcomes of occupational self-efficacy, job satisfaction, and burnout: emotional exhaustion and work disengagement mediated through job stress. This study further used these perspectives to analyze if the indirect effects of student-on-staff victimization mediated through job stress were moderated by a person's years of experience,

amount of behavior management training, and the employee's perceived level of school administration support within their job. Mediation and moderation analysis procedures to examine the data were conducted. Results indicate that student-on-staff victimization on workplace outcomes was mediated by job stress. However, the study did not establish that a person's years of experience, amount of behavior management training or perceived administration support was moderating the indirect effects. Through the voices of the transportation employees, it was also determined that they desire better communication with school system administration over additional behavior management training.

INDEX WORDS: Burnout, Job satisfaction, Job stress, Mediation, Moderated mediation, Occupational self-efficacy, Public-school bus employees, Student-on-staff victimization,

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MEG ELLEN MCDUFFIE

B.S. Justice Studies, Georgia Southern University, 1997

M.P.A., North Georgia College and State University, 1999

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MEG ELLEN MCDUFFIE

Major Professor:	Cynthia Vail
Committee:	Kevin Ayres
	Rebecca Lieberman-Betz
	Sally Zepeda

Electronic Version Approved:

Ron Walcott
Vice Provost for Graduate Education and Dean of the Graduate School
The University of Georgia
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DEDICATION

This dissertation is dedicated to my husband, Marvin; my four children, Connor, Duncan, Brody, and Kenzie; my parents, Jack and Ruth Bohac; my siblings, Michael Lidbury, David Lidbury, Marsha Lidbury, and Susanne Lidbury; and to all The Many Dips. Family is always important, and you have taught me never to take that for granted. Thank You for your unconditional love and endless support in everything I do.

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TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

As public-school buildings open their doors and the bells ring for students to settle in their seats, a small population of school employees tends to be overlooked in making the school day a success for all stakeholders. These employees make up the public-school system's transportation department. Every morning before most other public-school employees wake up, transportation employees are on the roads to ensure the students arrive safely from their homes to their schools. In turn, in the afternoon, transportation employees return to the schools to pick up students and transport them safely back to their afternoon destinations. These employees sometimes even run added routes during the school day beyond their regular routes. These additional routes are usually run between the employees' typical morning and afternoon routes, or sometimes in the evening or weekends, to take students on field trips or other school-sponsored events.

With this job description, a person might ask: What are the rewards and benefits of these positions? Is there a difference in the demographics of the bus routes that may make the job more rewarding or less stressful? Is there a difference between transporting students with and without disabilities or a mixed population? Finally, what makes a person remain in these positions considering the pay is not significant? Especially when it requires unusual work hours during the day with a break in between, and there is typically little to no professional learning regarding the management of the students in their care. These are just a few questions one may ask when

trying to determine why public-school transportation employees have such dedication when upholding their daily job expectations.

Public school bus transportation is one of the most prominent forms of mass transit in the United States. School Buses in the United States provide the transportation of more than 25 million students, which is more than one-half of all schoolchildren, on more than 480,000 school buses daily (American School Bus Council, 2018). According to the National Highway Traffic Safety Administration (NHTSA), a child is 70 times more likely to reach school safely riding a school bus than driving in a car (National Highway Traffic Safety Administration [NHTSA], 2018). In addition, according to the NHTSA, approximately four to six school-age children die each year on school transportation. This number is less than one percent of all traffic fatalities (amy.lee.ctr@dot.gov, 2018). Thus, school bus transportation continues to be one of the safest forms of transportation for children to ride to and from their homes and the school building.

Besides safety, public school transportation is one of the most consistent ways to get school-aged students to the school building. According to the American School Bus Council, students who ride public buses decrease their school truancy likelihood (Access-to-Learning, n.d.). Additionally, in a 2000 survey prepared by the FBI Law Enforcement Bulletin, 20% of students stated that they were truant from school because they missed the bus (Access-to-Learning, n.d.). Thus, the public-school bus is not only a safe means of transportation for children, but it also continues to be a consistent and reliable form of transportation.

Despite the safety and reliability data described, many parents fear placing their children on school buses as their student's primary form of transportation to and from school. Based on this fear, some parents continue to transport their students daily to and from home and the school

building (Henderson, 2009; Kennedy & King, 2019). With the safety and reliability data, it stands to reason that parents should not fear for the safety of their children while riding a school bus. However, many parents have grave concerns regarding putting their students on school buses due to the significant problem of exposure to challenging behavior within the bus environment (Ramage & Howley, 2005). According to several research studies, these continued concerns of families result from long bus routes, younger children being exposed to the behaviors of older students, conflicts between parents and transportation employees, conflicts between peers on the buses, and even conflict between the students and the transportation employees themselves (Gallinger et al., 2009; Henderson, 2009; Rampage & Howley, 2005; Raskauskas, 2005; Wiebe et al., 2014). In addition, the length and population of the rural bus routes are of concern to stakeholders because of the extended exposure time to challenging behaviors and the diverse ages of the passengers (Rampage & Howley, 2005). Furthermore, parents of students who ride rural routes are also concerned with the transportation employees' ability to monitor and intervene with student behavior based on the length of the ride and the diverse population (Rampage & Howley, 2005).

Beyond the route lengths and population diversity, parents were also concerned by their students' interactions with the transportation employees. In a study completed by Rampage and Howley (2005), the parents' perspectives of the transportation employees were that these employees tended to be very unpredictable and they typically had cantankerous attitudes. The parents attributed the employees' behavior to the difficulty and pressure of the job when fulfilling all the job expectations (Rampage & Howley, 2005). In addition, the conditions of rural school bus environments made the parents perceive that the transportation employees were not satisfied

with or became stressed under their working conditions (Rampage & Howley, 2005). The parents also perceived that the transportation employees did not have enough training to work with the student passengers on their buses under these conditions (Rampage & Howley, 2005).

Ultimately, in the minds of parents and other key stakeholders, the school bus environment continues to be a location where students have the opportunity to victimize other students and transportation employees. In addition, the parents do not feel the transportation employees are adequately trained to handle all the additional job responsibilities of student supervision and operate the moving vehicle safely. As a result, these factors continue to make some parents reluctant to rely on school transportation for their children to travel safely to and from school daily.

Shortage of Transportation Employees

As schools opened their doors post-pandemic in the 2022-2023 school year for in-person instruction, the bus driver shortage continued to be a nationwide problem. In July 2022, in a survey completed by the EdWeek Research Center, 86% of school leaders reported that they did not have enough bus driver applicants to cover vacant positions (Blad, 2022). Based on these numbers, transportation directors across the country have had to become creative with supplying school bus transportation for students. In some school districts, the following has had to take place: routes have been consolidated; drivers are driving two bus routes with school start times being staggered; parents are being compensated for transporting their children to school; walk zones have been increased; or in some areas, school systems are alternating weeks in which students are transported to school via the school bus (Blad, 2022; Hinton, 2022). These scenarios potentially create a chaotic and stressful start to everyone's day.

Many school districts have lost 50% or more of their transportation employees compared to their employment numbers pre-pandemic, even with increasing the starting pay (Blad, 2022). In a survey completed by the National Association of Pupil Transportation pre-pandemic (Cook, n.d.), 87% of participants, mainly transportation directors, reported that they felt the bus driver shortage was severe or desperate (Cook, n.d.; Crockett, 2021). In a 2018 School District Fleet Survey, respondents reported that the driver shortage was even worse than the prior school year, even with a $1 per hour pay raise (McMahon, 2018). Thus, the issue of bus driver shortage appears to be both a pre-pandemic issue and has continued to increase post-pandemic (Cook, n.d.).

The lack of drivers has made school districts desperate for advertising the need for transportation employees. In addition, transportation employee shortages have left school systems to develop creative ideas in recruiting that include such plans as increasing starting pay, offering sign-on bonuses, making flexible schedules, and offering referral bonuses to current employees. School systems have even resorted to school administrators and coaches becoming certified with commercial driver's licenses (CDL) to drive daily routes (Blad, 2022; Hinton, 2022). Taking it even further, governors in several states resorted to deploying National Guardsmen to transport students to school (Crockett, 2021).

To help elevate some of the shortage of drivers, in January 2022, the U.S. Department of Transportation and the U.S. Department of Education allowed applicants for commercial driver's licenses (CDL) to forgo the portion of the skills test that required the driver to identify engine components (U.S. Department of Education, 2022). This requirement lift was an attempt to alleviate the shortages of drivers across the nation. However, the requirement was only waived

from January 2022 to March 2022, and it was only allowed for those seeking licensure to drive school buses (U.S. Department of Education, 2022). School districts have also attempted to recruit by putting signs on the sides of buses and parking them in random places throughout their community. In addition, transportation directors have driven around towns in buses with signs advertising help wanted, and they have even sent flyers home to parents encouraging them to apply (Blad, 2022; Hinton, 2022).

As the bus driver shortage continues to be a national issue, there is a lack of research evaluating the potential correlations of why there is such a lack of interest in these positions. Based on those surveyed pre-pandemic and post-pandemic, the shortage of transportation employees was significant during both periods, but post-pandemic appears to be an even more elevated concern (Blad, 2022; Cook, n.d.; Crockett, 2021). In looking at potential correlations, could the bus driver shortage post-pandemic be the result of the employee's age and the fear of COVID-19? The median age of the average bus driver in the United States is 56, which happens to be 14 years above the median age of the U.S. worker (Crockett, 2021). Looking closer at the hypothesis that transportation employees left post-pandemic due to age could be a reasonable prediction, as this age group has a 40 times higher chance of dying from COVID-19 than those in the 18-29 age bracket.

Is the bus driver shortage due to pay? School transportation department positions are typically minimum wage jobs, in which some employees acquire the position for benefits such as health insurance. In addition, some transportation employees may have additional jobs beyond their bus routes to supplement their income. Is the shortage a result of the workplace environments within public school buses? Everyone wants their job to be at least enjoyable.

However, if there is constant chaos in a person's work environment, a person may elect to forgo working in that environment. Is the bus driver shortage due to job stress that comes with not having the proper training to work with challenging behavior presented by students riding the buses? Typically, transportation employees do not hold more than a high school diploma, nor do they have any educational training in behavior management of school-aged children (Allen et al., 2003; Brown et al., 2018; deLara, 2008; Goodboy et al., 2016). So, it is worth asking why someone would want to maintain employment where there is a high potential for stress, low occupational self-efficacy, low job satisfaction, or where job burnout is possible.

School Buses as an Extension of the Brick-and-Mortar Learning Environment

Reflecting on the school-bus environment, a person could consider the school bus an extension of the brick-and-mortar school building. As an extension of the school building, the bus environment allows students access to the benefits of social and emotional growth in conjunction with academic success, just as they would receive inside the walls of the brick-and-mortar school (deLara, 2008; Goldin & McDaniel, 2018). Thus, based on this consideration, a continued responsibility of transportation employees is to get students to school in a frame of mind ready to learn and then return them to their homes with a positive overall school experience. However, many factors contribute to shaping and forming a public-school bus environment, including the general "bus safety" and the spillover of challenging student behavior from the bus into brick-and-mortar schools.

Additional factors can include personality conflicts with the transportation employees, types of school bus routes, challenging behaviors from students riding the bus, relationships between the transportation employees and students, or even student-to-student relationships

(Hirsch et al., 2004; Ramage & Howley, 2005). Based on the limited research available for school bus environments, the empirical data has shown the environmental factors in the bus setting have a significant impact on both student passengers' and transportation employees' exposure to additional stress (Allen et al., 2003; Brown et al., 2018; deLara, 2008; Goodboy et al., 2016). The significant impact of these factors can then bleed over into the student's academic day in the brick-and-mortar school, just as they can significantly impact the transportation employees' workplace and home life. In other words, a student's bus experience can affect the student's demeanor at school and home, and an employee's experience can impact their workday and home life (Henderson, 2009; Ramage & Howley, 2005).

School and bus administrators regularly see challenging behaviors from school buses spill into their brick-and-mortar school buildings, which takes away from the academic success of the entire school. By administrators' reports, school discipline takes a significant amount of school personnel's time daily (Putnam et al., 2003). The considerable time administrators spend with discipline takes time away from academic achievement and student success in the brick-and-mortar learning environment. To support learning within the brick-and-mortar building, the school administrators need to look closely at the discipline data regarding many of these discipline referrals resulting from behaviors outside the brick-and-mortar school setting. In summary, the limited research regarding the bus environment has shown these additional stressors have a direct impact on the passengers' performance during the academic day and the transportation employees' workplace outcomes (Allen et al., 2003; Brown et al., 2018; deLara, 2008; Goodboy et al., 2016). Therefore, school administrators need guidance in supporting

transportation personnel in creating more positive environments in the bus setting for the students' and transportation employees' success and social-emotional well-being.

Transportation Employees' Workplace Environment

As researchers drill down deeper into the complete overview of the school system, the role transportation employees play in the learning environment and how transportation employees' workplace outcomes impact students' academic success is fundamental for researchers to consider. Being an employee of the school system's transportation department is a profession for some transportation employees. As a result, these employees may remain in these positions until retirement, much like a teacher may remain teaching until retirement. Thus, the school buses are these employees' everyday workplace environments. Just as a classroom is the workplace environment for classroom educators, or the entire school is the workplace environment for school administrators. Much like administrators evaluate the impact teachers have on the classroom environment, which impacts student success in the classroom, it may be beneficial for school administrators to assess the impact transportation employees have on student success.

In looking at the schoolbus environment as a whole, comparing the school bus to a classroom is a meaningful comparison. For example, a teacher may have a 20-35 student classroom size, whereas school bus transportation does not have a specific federal guideline on school bus capacity. According to the NHTSA, no federal regulations specify the number of individuals allowed per seat on a bus. Additionally, the manufacturers base the maximum seating capacity for a school bus on three elementary students sitting side by side in each bench seat. (NHTSA, 2018). As a result, typical school systems may simultaneously seat 30 to 80 students

from Pre-K to 12th grades on one school bus. (Raskauskas, 2005). This broad range of ages creates a vast social-emotional learning gap in one environment (Ramage & Howley, 2005). Thus, the management of students in this environment makes it look more like a multi-grade classroom. However, the transportation employees have not been trained to manage multi-grade classrooms, potentially adding to their job stress and lower occupational self-efficacy or job satisfaction.

Like classroom environments within brick-and-mortar schools, bus routes are sometimes set up to serve students of a specified need. For example, bus routes have specific buses to transport only students with disabilities. In addition, some bus routes combine students with disabilities with all other students, and even different bus routes break students into disability categories, such as all students with emotional behavior disorders. Based on these scenarios, each bus route can have a different set of challenges that contribute to a complex environment requiring the adults to have complex skills to control all factors impacting the entire climate and culture.

Along with the high number of students placed on some buses, another factor is the unstructured nature of the environment. It is a challenge for the transportation employees to see or know all that is happening with a student population size between 30 to 80 students, with one driver and possibly one support staff, all in this constricted area driving down the road (Raskauskas, 2005). If there is no support staff on the bus, this single person is driving the school bus with their back to the students, not to mention maintaining safety for the moving vehicle they are operating on the roads. When a person puts this scenario into perspective, the bus capacity equates to a typical school's physical education class in one confined area, with no direct

supervision, no structured activity planned, and potentially with elementary to high schoolers in attendance.

As one thinks further about this ratio, it is also pertinent to point out that the transportation employees' primary responsibility is to watch the road and ensure the bus remains safe on the public roads. So, the driver's initial job expectation is not to deal with challenging behavior inside the bus. Instead, the expectation is for transportation employees to get students to and from their destinations "safely." In other words, the transportation employees must maintain roadway safety and environmental safety while guaranteeing students arrive between home and school without social and emotional distress. Again, these responsibilities appear overwhelming considering the low pay rate, work conditions, and unusual work hours during a workday.

To understand how this learning environment impacts the workplace environment of the transportation employees and the workplace environment impacts the bus environment, several studies have used Bronfenbrenner's Theory (1979). This theory allows for additional explanations to conceptualize the multisystemic (adult, school system, community, and society) factors of the bus environment and how they link to make up the bus as a workplace environment for transportation employees (Espelage et al., 2013; Reddy et al., 2018; McMahon et al., 2020). In addition, Bronfenbrenner's Theory (1979) provides a model that allows for an understanding of the impacts of a person's immediate environment, an important area to focus on when evaluating the transportation employees' workplace outcomes.

Bronfenbrenner's Theory defines this as the "proximal process," or the reciprocal interactions between transportation employees and other individuals in their immediate environment, especially over an extended period making the interactions increasingly more

complex (Eriksson et al., 2018). The impact, either negative or positive, of adult-student interactions within the bus environment can ultimately impact the entire atmosphere of the bus, whether we consider it a learning environment for students or a workplace environment for transportation employees. Both setting descriptions link together, with student and employee interactions daily as the core of the interconnection. Based on this interconnection, students' interactions with the adults working in this environment can potentially impact the employees' workplace outcomes of job satisfaction, occupational self-efficacy, burnout in terms of exhaustion and disengagement, and job stress. Especially when one considers the impact student-on-staff violence displayed toward transportation employees could have on the transportation employees' overall job performance and its impact on the overall educational environment.

How, then, do school systems ensure transportation employees prepare to focus on safety, reliability, and the social-emotional needs of their passengers while maintaining a positive work environment for them and a positive learning environment for the riders? These are tremendous expectations to juggle under the working conditions provided. In looking at the job responsibilities of these employees, school systems expect transportation employees to talk with students about problems, take care of their medical needs, enforce structure through rules and expectations, and much more, all from the review mirror of the school bus. Those are extensive responsibilities and expectations for any employee in any environment.

Under these conditions, it appears that there is the potential for transportation employees to perceive themselves as having low occupational self-efficacy or job satisfaction and accumulate on-the-job stress and burnout, potentially impacting the transportation employees' overall daily workplace outcomes. As a result, the potential for these factors to create stressful

workplace outcomes is present, especially without proper employee professional learning. In addition, the employees may feel their voices are ignored when they express their concerns regarding the bus environment, mainly if the perception is that transportation employees are not a significant piece of the success of the school system's learning environment.

Challenging Student Behaviors in the Bus Environment

Looking deeper into the bus environment, one must consider the students' challenging behaviors to further assess the environmental factors on the bus. One of the most prevalent stressors for students and transportation employees on the school bus is extreme or challenging behaviors displayed by some students toward students and transportation employees. Transportation employees report dealing with problematic behaviors within the bus environment by frequently witnessing verbal and physical aggression between peers (Allen et al., 2003; Brown et al., 2018; deLara, 2008; Goodboy et al., 2016). Compared to a school building classroom, the transportation employees observe and attempt to control the problematic student behaviors in conjunction with their classroom being in motion. This scenario is much different from a classroom teacher witnessing and dealing with challenging student behaviors in a motionless classroom. Thus, it seems to reason that school systems should prioritize developing a plan for strategies to deal with the challenging behaviors of the student passengers on the bus, as the transportation employees continue to endure a great deal going on in a small confined environment (Raskauskas, 2005).

Although these behaviors may be happening behind them, the transportation employee's primary responsibility is the safety of the moving vehicle. A Nationwide survey of transportation employees revealed that 65% of drivers and other support personnel working on middle school

and urban area buses reported witnessing extreme aggressive behavior between peers (Bradshaw et al., 2011). In the same survey, 54% of the employees reported perceiving these environmental behaviors as a severe problem (Bradshaw & Johnson, 2011). Thus, transportation employees witness violence regularly, impacting their context over time based on Bronfenbrenner's Theory (Eriksson et al., 2018; Reddy et al., 2018; Rosa & Tudge, 2013).

In a study completed by Raskauskas (2005), the results revealed that in a 25-minute bus ride, there were approximately two episodes of student-on-student bullying. The data also displayed that the higher number of passengers riding the bus resulted in a higher significance of incidents of extreme behavior on the bus (Raskauskas, 2005). Based on this research, it appears that students traveling on crowded urban buses may potentially be exposed to higher incidents of challenging behavior. These results suggest that transportation employees working on urban and populated bus routes may get exposed to higher incidents of challenging behavior occurring on their bus routes. Thus, the expectation under these conditions is for transportation employees to intervene in more situations involving challenging behaviors. In another survey study that only included urban bus settings, the results suggested that the students perceived violence on the bus as inevitable immediately as the student boarded the bus to school (Wiebe et al., 2013). These studies highlight the potential job stress that urban school transportation employees can endure daily due to the challenging student behaviors within their work environment.

With challenging behaviors on the bus being one of the main concerns of stakeholders, a vital component of the transportation department that is sometimes overlooked, or taken for granted, is the transportation employees themselves. As one digs deeper into the relevant research about public school bus environments, numerous studies evaluate the topic of student-

on-student victimization using a bullying framework. However, there continues to be a dearth of research considering student-on-staff victimization, specifically in the public-school bus environment (Goodboy et al., 2016; Reddy et al., 2018). Along with the absence of student-on-staff victimization research, there is also a lack of research on implementing positive behavior interventions in the bus environment to extend these strategies from the brick-and-mortar school learning environment. As a result, the need to obtain the perspectives of transportation employees is essential to improve upon the resources school systems can provide them in preparation for their daily job expectations. Transportation employees ultimately need exposure to continuous professional learning and coaching in positive behavior supports, communication, de-escalation strategies, and behavior management strategies within their workplace environment.

Transportation Employee Professional Learning

Even though school system administrators know there is a lack of professional learning for transportation employees, school system administrators continue to expect transportation employees to manage student behaviors in a confined space without regular behavior management training. In contrast, this space sometimes triples the student capacity of a typical classroom environment managed by trained classroom teachers, whereas untrained employees work in the bus environment. Plus, the expectation is for drivers to do this job with their backs facing the student passengers while the "classroom" is riding down the roadways. These learning environment conditions are far from the research-based proximity strategies used by certified teachers in classrooms to intervene with challenging student behaviors.

Even though over half of the drivers and other support personnel feel student behaviors are a severe problem, school administrators neglect to provide professional learning for these employees concerning preventative behavior management strategies in these confined environments (Bradshaw & Johnson,2011). For example, in one study, bus drivers and support staff disclosed that only 27% had received training or direct involvement with challenging student behavior scenarios. Yet, they expressed an interest in needing additional training to handle such behaviors (Bradshaw & Johnson, 2011). Consequently, the lack of professional learning, communication, and involvement in being prepared for challenging behaviors could impact the transportation employees' job stress and other workplace outcomes such as occupational self-efficacy, job satisfaction, and burnout.

Therefore, based on the current literature, researchers need to gather data from the transportation employees' perspectives to explore this environment more in-depth. This in-depth evaluation could provide school systems and researchers with background information for designing and implementing professional learning to enhance transportation employees' daily job performance skills.

Voices of Transportation Employees

Along with providing professional learning designed just for transportation employees, probing deeper into the perspectives of the transportation employees themselves would allow these employees the opportunity to share their perceptions, experiences, and interventions being used based on their potentially limited knowledge of establishing a positive learning environment. This information could, in turn, inform school system administrators on how to prepare this employee population to work with students in the confined environments of the

school buses. The ultimate goal for school system administrators should be to listen to the voices of the transportation employees and properly train these employees in intervention strategies linked to creating a positive learning and working environment. This foundational work with transportation employees could eventually create an opportunity for more structured, safe, and positive environments beyond the school building for all riders and staff. In addition, this may also lead to better communication between the transportation employees and all stakeholders. Consequently, this could instill more confidence from all stakeholders in the safety of students using the public-school bus as daily transportation to and from their homes and the public-school building.

Examples of hearing the voices of transportation staff include a bus driver from Vancouver Public Schools, where a student passenger victimized the bus driver in May 2019. In this situation, an 8-year-old student described as having "behavior problems" attacked the driver while driving her regular route (Severance, n.d.). During the bus route, the student unbuckled her harness, stated that she would "get" everyone, and proceeded to the front of the bus while the bus was in motion. The bus driver repeatedly attempted to ask the student to stop while verbally redirecting the student back to her seat. Still, it was evident in the video that the driver did not have extensive training in working with the student. In this scenario, the bus driver's choice intervention was to use the radio to call for assistance while sitting on the side of the road. The driver repeated the following statement in the video as the student hit, kicked, and bit her: "This is not what I signed up for" (Severance, n.d.). Those words express how pertinent it is to provide professional learning for transportation employees working with students in public school bus environments. In particular, in cases like this bus driver, when the transportation employees have

to transport students who may have the propensity to engage in significant challenging behaviors due to their disabilities, the support of more professional learning on student behavior could be beneficial.

Yet another example includes a bus monitor from Greece Central School District in upstate New York, whom numerous teenage boys verbally abused as she monitored the students on their ride home from school. The public was made aware of the incident's significance by a video posted on the internet. The boys involved in the incident originally posted the video through a social media platform. During the video, the boys were repeatedly seen telling the bus monitor how fat she was, used profanity and sexual connotations toward her, poked her with a yearbook, and continually told her they were going to bring a knife and cut her (Hibbard, 2017, December 6). These victimizing behaviors toward the adult occurred while another student recorded the event with their cell phone. This bus monitor was a 68-year-old widow hired to monitor the students' behaviors on the bus. Throughout the student passengers' victimization episode against the bus monitor, she used tremendous willpower to ignore the students' behaviors. She even reminded them to "live with integrity" (Hibbard, 2017, December 6). Unfortunately, the calm attempt by the bus monitor did not stop the verbal abuse by any of the students involved in the incident. Again, an example of the workplace environment in which transportation employees work daily, and most transportation employees continue to return the next day to work in these conditions.

These are just two examples of student-on-staff victimization happening in school-bus environments. These examples remind the public-school systems how easy it is to overlook the importance of transportation employees and their vital role in all students' social-emotional

learning who board their buses. Daily, transportation employees report to work with the challenge of managing the vehicle's safety and the passengers in the seats. In addition, these employees continue to be the first and last school employees to interact with students between their homes and the school building (deLara, 2008; Goldin & McDaniel, 2018). This scenario has the potential to be both stressful and rewarding at the same time. In essence, transportation employees' job responsibilities to the passengers go much deeper than simply the operation of the bus itself. Considering all the duties of transportation employees, one must consider the anxiety and stress this could produce within a person's workplace environment. After all, this is the transportation employees' work environment, and the potential impact of a violent working environment could lead to professional burnout.

When considering all these factors, school systems should ask numerous questions that seek answers to why individuals continue to drive and monitor students on public school buses. Questions that came to mind include: Are these reasonable working conditions and expectations to set for any person? With all the daily stressors that transportation staff endure, does student behavior impact the transportation employee's overall job stress and other workplace outcomes? Does the impact of student behavior on job stress and workplace outcomes decrease by the number of years of on-the-job experience the transportation employees may have? Does the amount and extent of opportunities to participate in behavior management professional learning afforded to the school systems' transportation employees impact transportation employees' job stress or workplace outcomes? Or does the public school system administration's perceived level of support to their transportation department affect the employee's job stress or workplace outcomes? Have public school systems talked with transportation employees regarding their

working environment? How can public school systems provide additional support through professional learning communities to employees outside the brick-and-mortar school building?

Answers to these questions could potentially impact the school-bus environment for all stakeholders; yet, there is little empirical data that seek answers to these questions within the literature. Additionally, finding solutions to these questions could help provide a framework for supporting these essential yet sometimes underrecognized public-school system employees.

Statement of the Problem

More than 25 million students ride to and from home and school daily on a public-school system's bus transportation (American School Bus Council, 2018). This number equates to more than one-half of all school-aged children. According to the U.S. Bureau of Labor Statistics, 681,400 bus drivers in the United States transport these 25 million students daily (U.S. Bureau of Labor Statistics, 2018). Considering all the responsibilities of transportation employees, it is not surprising to know there is a national shortage of public-school bus drivers, even with increased pay rates. In a 2020 national survey of transportation officials, two-thirds of the districts reported moderate, severe, or desperate retention of bus employees (Mastros, 2020, February 13). Based on the data, there are not enough applicants to support the need for drivers (Blad, 2022), and looking further, the driver shortage was a pre-pandemic issue that has gotten even worse post-pandemic.

Although there is not a plethora of research regarding the school-bus environment, the main focus of the literature concerning this environment has been on student behavior and student outcomes. One area regarding the bus environment that lacks research is the transportation employees' perspectives and the daily working conditions in which they work.

Although limited, most literature regarding the public-school bus environment focuses on a Positive Behavior Interventions and Supports (PBIS) framework extended to the bus environment from the school building (Collins & Ryan, 2016; Goldin & McDaniel, 2018; Kennedy & King, 2019) or on student-on-student bullying behavior (Bosworth et al., 2018; Bradshaw, 2013; Bradshaw et al., 2015; Hendrix et al., 2019; Lawrence, 2017; Nese et al., 2014; Ostrander et al., 2018). Student–on–student bullying should be a definite concern of the public school's transportation department. However, school systems need help supporting the transportation employees' workplace outcomes, directly impacting the environmental climate and culture during the students' daily bus rides. The environment and culture on the school bus could consequently impact the students' success daily during their academic day, which ultimately creates a ripple effect interconnecting these two environments. Hence, transportation employees need road maps for their bus routes in addition to road maps to address and manage student behavior during their bus routes.

The transportation employees also have a unique perspective on students' social interactions while they ride their buses. In addition, the transportation employees have a wide-ranging view of communication with all stakeholders. They have to maintain communication with students, parents, teachers, school administrators, and the transportation department at a minimum daily. Thus, to add to the literature, there is a need to hear the perspectives of the transportation employees regarding the bus environment they experience daily. By the school systems knowing the transportation employees' views, it will provide them with insight into how to serve this employee population best. The ultimate goal is to ensure this group of employees has the tools to create a positive environment as an extension of the academic day beyond the

brick-and-mortar school building. While ultimately getting students safely to and from school each day.

To better understand the bus environment and design these environments to promote positive social-emotional learning for all passengers, listening to the employees' perspectives would benefit all stakeholders with the view of the complexity of factors making up this setting. This vital information will allow stakeholders to target this environment for positive changes. This knowledge will also help ensure the students have a safe learning environment and employees have a healthy working environment. The first-hand perspectives of transportation employees are needed to gain this essential information. Thus, it is first necessary to understand how student-on-staff victimization impacts workplace outcomes for these employees.

Understanding this interaction will allow researchers to determine if the effect of student-on-staff victimization on employee workplace outcomes is mediated through the employee's job stress. Thus, this creates a reciprocal exchange between the student's environmental conditions during transport and the employees' workplace environment. It is also essential to understand whether or not years of experience, exposure to professional behavioral learning, and perceived administration support may moderate the effect of job stress, impacting the transportation employees' workplace outcomes. Again, these interactions create a ripple effect by influencing the student's learning environment as an extension of the brick-and-mortar school building.

Ultimately, exploring the perspectives of transportation employees concerning the bus environment could provide invaluable information to school system leaders on how to support transportation employees' professional learning. In particular, school administration could focus on coaching transportation employees in positive behavior support strategies and student

behavior management within the bus environment. In addition, providing specific professional learning to transportation employees may increase their confidence in their job, which could help reduce job stress within their working environments and increase their job satisfaction and occupational self-efficacy. It could also create positive learning environments for student passengers outside the brick-and-mortar school building and improve positive communication between all stakeholders. Thus, increased professional learning for transportation employees could provide a positive connection between the students' learning environments and the transportation employees' workplace environment.

Purpose of Study

The purpose of this study was to expand on the research of Goodboy et al. (2016) by obtaining the perspectives of public-school transportation employees to understand further the relationship between student-on-staff victimization and the workplace outcomes of occupational self-efficacy, job satisfaction, and burnout: exhaustion and disengagement mediated through job stress. In addition, this study further expanded the Goodboy et al. (2016) research by analyzing if the indirect effects of student-on-staff victimization meditated through job stress were moderated by an employee's years of experience. Finally, this study went beyond the Goodboy et al. (2016) research by also exploring the moderation of behavior management training and the employee's perceived amount of school administration support on the indirect effects of student-on-staff victimization mediated through job stress.

Additionally, this study also expanded on the research of deLara (2008) by obtaining perspectives of the public-school transportation employees regarding their perceptions of the amount of participation they had in systemic behavior management planning within their school

systems that included the bus environment and the perceived amount of support the employees felt they received from school administration regarding behavior on their buses. Like Goodboy et al. (2016) and deLara (2008), this study used a survey method to collect participants' perspectives of the bus environment and their work outcomes. The researcher intends to use the study's results to assist in developing and implementing a professional learning program that would help transportation employees with behavior management within their work environment, potentially leading to less stress and better workplace outcomes.

Research Hypothesis

The evaluation of the following hypotheses statements used mediation models to analyze the effects of student-on-staff victimization on specific workplace outcomes (occupational self-efficacy, job satisfaction, burnout: exhaustion and disengagement) and how there is a potential impact through the employees' job stress:

1. The effect of transportation employees' victimization by students on the workplace outcome of occupational self-efficacy is mediated by job stress.
2. The effect of transportation employees' victimization by students on the workplace outcome of job satisfaction is mediated by job stress.
3. The effect of transportation employees' victimization by students on the workplace outcome of burnout: (a) emotional exhaustion, (b) work disengagement.

The evaluation of the following hypothesis statements used moderated mediation models to analyze the indirect effect were a function of the years of bus employment experience, amount of behavior management training, and the employees' perceived school system administration support.

4. The indirect effects, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of years of bus employment experience.
5. The indirect effects, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of the amount of behavior management training received by transportation employees.
6. The indirect effect, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of the transportation employee's perceived school system administration support.

Additionally, the survey used several open-ended questions to add depth and supplementary information to the dichotomous and Likert-scale responses provided by the transportation employees. Open-ended survey questions will explore the following:

7. Why did you become a transportation employee?
8. What strategies and interventions do transportation employees use most frequently to reduce behavior incidents in their work environment?
9. What workplace incentives encourage transportation employees to continue working in a public-school bus environment?
10. What is additional support from the school system needed to increase occupational self-efficacy and job satisfaction within the public-school bus environment?
11. What is additional professional learning needed to increase job satisfaction and occupational self-efficacy and decrease job stress and burnout?

Definitions

Bullying: "Bullying is any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm" (Moreno et al., 2018, p.445).

Burnout: "Burnout is a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity" (Maslach et al., 1996, p.192).

Job satisfaction: "'A pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences'" (Saari & Judge, 2004, p.396).

Job stress: "Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" (Centers for Disease Control (CDC), 2021).

School administration: All leadership-certified professionals within the school system are assigned to interact with transportation staff to regulate student behavior management within the public-school bus environment (i.e., principal, assistant principal, transportation director).

Perceived Self-Efficacy: "People's beliefs about their capabilities to produce effects" (Bandura, 1994, p.2).

Positive Behavior Interventions and Supports (PBIS): PBIS improves schools and other agencies' effectiveness, efficiency, and equity. PBIS improves social, emotional, and

academic outcomes for all students, including students with disabilities and students from underrepresented groups (Center on PBIS, 2022).

Professional Learning Community: "A professional learning community is an inclusive group of people, motivated by a shared learning vision, who support and work with each other, finding ways, inside and outside their immediate community, to enquire on their practice and together learn new and better approaches that will enhance all pupil's learning" (Zepeda, 2012, p. 83) "A group of individuals who share a similar vision of educational values (e.g., honesty, respect, trust, courage, and compassion) and beliefs (e.g., all children can learn)" (Zepeda, 2012, p. 83).

School-Wide Positive Behavior Interventions and Supports (SWPBIS): A school-wide system of change incorporated into the school as a whole. This framework involves a diverse group of school employees monitoring the school-wide change. These school employees may include administration, general education, special education teachers, and non-classified employees. The school may also elect to have a group of students serve as part of the process (Center on PBIS, 2022).

Stakeholders: This includes "Any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46).

Transportation employees (bus employees): All school system employees who drive a public-school bus with a Commercial Driver's License (CDL) or those public school system employees hired to assist the CDL drivers as extra support staff members during a designated public school bus transportation route.

Chapter 1 Summary and Overview of Study

Chapter 1 gave an introduction, a statement of the problem, and the research questions regarding the problem statement. This study used a simple mediation analysis conducted using ordinary least squares path analysis to describe relationships of variables through mediation and moderated models to answer these questions. The quantitative data came from an electronic online survey platform, Qualtrics. This survey included dichotomous scaled, Likert-scaled, and open-ended question items. Chapter 2 reviewed the relevant literature concerning: theoretical frameworks relating to the school bus environment: the public-school bus environment, public school transportation employees, and professional learning for transportation employees. Chapter 3 included a more in-depth description of the research design and methodology used during the study. Chapter 4 presented the results of the research analysis. Finally, chapter 5 summarized the results, limitations, further research, implications for practice, and conclusions.

CHAPTER 2

LITERATURE REVIEW

Several locations within the public-school environment lend themselves to increased student discipline due to the unstructured nature of the area or simply the lack of adult supervision in these locations (deLara, 2008). These locations can include playgrounds, hallways, cafeterias, and parking lots. Another unstructured area that could be considered an extension of the brick-and-mortar building is the public-school bus environment. This unstructured environment allows student passengers to engage in behaviors the students may not otherwise display in a structured, supervised environment. As a result of the unstructured nature of the public-school bus, with minimal direct supervision, students have the opportunity to engage in behavior that can be potentially harmful to others, both emotionally and physically.

Although extremely limited, the extent of the current research focusing on public school bus environments has mainly concentrated on examining student-on-student victimization using various definitions of a bullying framework. Researchers have determined that behaviors classified as bullying have been an extensive problem throughout society and have been researched systematically since the 1970s (Olweus, 2001). Many studies have explored the motivations of bullying behaviors and the detrimental impact the behaviors can have on victims of the behavior. However, there is a narrow focus in the literature on adults seen as potential victims of these highly challenging student behaviors. Even within the definition of bullying, which some researchers use, it appears the main focus of bullying references student-on-student victimization. For example, one working definition of bullying within the research is the following, "any unwanted aggressive behavior(s) by another youth or group of youths who are

not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated" (Moreno et al., 2018, p.445). Additionally, the definition goes on to read, "Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm" (Moreno et al., 2018, p.445). Although this is one working definition of bullying within the research, the focus is on student behavior toward another student, not student-on-staff victimization.

The research also suggests common myths regarding descriptive categories in which some people classify a "typical" student bully. Those myths include low self-esteem, insecurity, large classroom and school sizes, and the general social pressures of school (Olweus, 2001). Beyond the myths, research has found that specific personality characteristics, such as a person's stature, may lend themselves to someone having the potential to be labeled as a bully (Olweus, 2001). In addition to personality characteristics, environmental factors can influence how the prior mentioned characteristics of a bully can manifest inside public education environments (Olweus, 2001). In the research by Olweus (2001), one of the primary keys to reducing bullying and other anti-social behavior in public-school environments was to create positive environments with clear expectations, including the education of both staff and students use of positive behavior reinforcement (Olweus, 2001). Again, these concepts can all be applied within the context of the public-school bus environment to create positive learning environments beyond the brick-and-mortar school building.

Considering the school-bus environment as an extension of the brick-and-mortar school building, the transportation employees' roles in the climate and culture of the school environment are essential (Goldin & McDaniel, 2018). Transportation employees are naturally the first and

last school system representatives to interact with students daily (deLara, 2008; Goldin & McDaniel, 2018). On any given school day, transportation employees could have more contact with the parents than the teachers from the academic classrooms. As a result, these employees build positive relationships with many stakeholders while managing all professional expectations for their job. With all the above communication and expectations, one must remember that the transportation employees' main job is to deliver the students safely to each destination.

So, how can a public school system capitalize on these interactions and help create a positive first impression of the school system itself and view their transportation employees as vital members of the school's team to develop extensions of positive school environments? In the end, it seems school systems need a mindset shift. First, the school systems must evaluate their transportation employees' importance in creating a positive atmosphere on the bus. School systems need a better understanding of this group of employees' roles and their significance when looking at the complexity of the whole students' learning environment. Ultimately, these employees' roles impact the overall school bus environment, which spills over into the brick-and-mortar school building or the students' homes (Goldin & McDaniel, 2018). Yet, overall, the school systems typically underestimate the importance of the transportation employees regarding the significance of their jobs. Overall, if one thinks about all the transportation employees' job responsibilities, it entails complex job expectations with low wages and unusual working hours.

Purpose of Literature Review

This literature review aims to understand the current literature on transportation employees' perspectives, the school-bus environment, student-on-staff victimization, and the theoretical frameworks that pertain to the bus as a workplace environment. The first part of the

review was to identify relevant literature targeting the impact challenging student behavior has within the school bus environment from the transportation employees' perspectives. This literature review focused on prior research that concentrated on gathering quantitative and qualitative data analysis on the perceptions of all school transportation employees working in a school-bus environment. Since there is an absence of literature focusing on the specific occupation of public-school bus transportation employees, this literature review focused on the limited available research that elicited these perspectives.

As there is a shortage of literature about the public-school bus environment, there is also a shortage of literature on student-on-staff victimization. This additional literature review explored relevant literature on general student-on-staff victimization within the public-school environment. Additionally, this literature review helped identify a comparable setting in which these behaviors occur. There is currently little to no literature on public school bus transportation employees becoming victims of challenging student behaviors within their work environments. This literature review focused on prior research concentrating on quantitative and qualitative data analysis of student-on-staff victimization within the public-school environment. Although there appears to be a meager amount of literature focusing on this significant public school system issue, it is pertinent to explore this topic. Additionally, more research is needed to know more about general student-on-staff victimization within the school system. This information will allow researchers to compare these behaviors exhibited in the brick-and-mortar school environment to the public-school bus environment.

This review of the literature also identified relevant literature regarding the theoretical frameworks that assisted with a better understanding of the contextual factors of educational

workplace environments and outcomes that may impact these settings. One specific theoretical framework examined was the impact components of the social-ecological systems had on the structure of public-school bus transportation employees' work environment within the bus environment. The literature review identified research regarding job stress, occupational self-efficacy, job satisfaction, and burnout concerning workplace outcomes for transportation employees based on their specific school bus environments. The literature review focused on more in-depth definitions of these employees' workplace outcomes, relevant to how the particular workplace outcomes reviewed may impact employee shortages, absenteeism, and overall relationships with all stakeholders.

Additionally, other literature was reviewed that incorporated the following areas: impact of years of public-school bus employment experience, the extent of participation in professional learning, perception of public school system administration support, and the extent transportation employees have in working with students with challenging behaviors. Finally, the literature review explored any additional information regarding correlations in student-on-staff victimization, transportation employees' job stress, and workplace outcomes.

Perspectives of Public-School Transportation Staff

In a review of the literature, there was a lack of empirical data on the perspectives and opinions of public-school transportation employees regarding student behavior within the public-school bus environment. Although there was a dearth of research found about the public-school bus environments overall, there have been several researchers who have attempted to explore these environments through analysis of quantitative and qualitative data collection methods (Allen et al., 2003; Brown et al., 2018; deLara, 2008; Goodboy et al., 2016). Some of these

studies included information directly from public-school transportation employees. These studies have allowed further exploration of behavior management within the public-school bus environment from the perspective of the adults within the actual setting. Obtaining these perspectives has then allowed for further investigation of reciprocal interactions between the transportation employees' workplace environment, the student's learning environment outside the brick-and-mortar public school building, and all other stakeholders impacted by the actions within all areas of the public-school bus environment. The following is a review of the studies, including input from transportation employees.

An exploratory study by deLara (2008) gave surveys to 30 bus drivers from 4 school districts with an additional opportunity to volunteer for individual interviews about their perspectives of the public-school bus environment. In this study, deLara (2008) denotes transportation employees were rarely involved in discussing student behavior on their routes, nor were they asked to plan for ideas to help improve behavior management within the public-school bus environment. Only 20% of the drivers in this study reported inclusion in the school system's planning for behavior management on the bus (deLara, 2008). The study revealed that school systems see the public-school bus environment, in most cases, as a separate entity from the brick-and-mortar building (deLara, 2008). However, the lack of inclusion does not apply to all school systems. Some school systems use a systematic approach and consider their bus environments as an extension of the academic day (deLara, 2008).

In the deLara 2008 research, the public-school transportation employees were allowed to voice their perspectives on the support from school-system administration, the extent of aggressive behavior seen on the bus, and their viewpoint for ideas of possible interventions

within the bus environment to address the aggressive behavior (deLara, 2008). Regarding support from the school administration, the study results revealed that the transportation employees felt school-system administration was only "somewhat" interested in the behavior on the school bus (deLara, 2008). Among the transportation employees surveyed, the employees perceived that the elementary school administration took more action to handle the behavioral problems in the bus environment versus the high school or middle school administration (deLara, 2008). The study results also supported more disappointment regarding administrative support from inexperienced transportation employees than the more experienced employees (deLara, 2008). The more experienced transportation employees reported disregarding the behavior and not filing student bus behavior referrals based on their initial frustrations with the administration's perceived lack of action and support. From the transportation employees' point of view, when the employee filed a behavior referral, the administration took no action (deLara, 2008). Thus, from the employee's perspective, completing behavior referrals was not productive in problem-solving the challenging behavior (deLara, 2008).

The results of the deLara, 2008 study also revealed that transportation employees perceived frustration with the administration in their lack of communication regarding possible solutions to bus behavior management (deLara, 2008). Furthermore, the survey revealed employees' frustration with their lack of training concerning their passengers' behavior management (deLara, 2008). In addition to the employees' frustration, this study revealed additional frustrations expressed by transportation employees not knowing the resolutions for bus behavior, mainly reported through office discipline referrals given to school administration. Ultimately, the transportation employees discussed the disconnect in communication between

transportation directors, school-system administration, teachers, and the transportation employees themselves, mainly in the lack of follow-up communication regarding any resolution for behavior referrals submitted (deLara, 2008).

During the deLara 2008 study, 70% of the drivers reported witnessing bullying and other aggressive behavior happening once in a while, whereas 30% reported it occurring often, and those that said it happened daily reported intervening daily (deLara, 2008). In these results, 90% of the drivers reported witnessing verbal bullying, 70% reported psychological intimidation, 27% reported physical aggression, and 20% reported sexual harassment (deLara, 2008). The transportation employees based these accounts on their perception of student-on-student victimization within their bus routes. The drivers in this study perceived poor students and students with disabilities as the most significant risk of being victims (deLara, 2008). The drivers also ranked students with emotional problems as more likely to engage in bullying behaviors in the bus environment (deLara, 2008). The drivers reported using various interventions to intervene with students engaging in challenging behaviors and communication with the parents. However, drivers also requested additional training and support in communicating with parents who would not take responsibility for their student's behavior within the bus environment (deLara, 2008). The drivers reported getting continual training in the medical needs of students. Yet, they did not receive adequate preparation in working with the students' psychological well-being in their care, especially when transporting students with disabilities (deLara, 2008).

Overall, the deLara (2008) study brought to light the continued need for additional support from school-system administration in the form of communication with public school transportation employees and the vital role these employees play in providing input into a

systemic behavior management problem (deLara, 2008). The study had the following limitations: a small sample size of transportation employee participants, no psychometrics, and the inability to differentiate if the issues reported by staff were between demographics of the bus route or simply a systemic problem within the school systems individually (deLara, 2008). This study adds to the literature uncovering the need for additional research looking closer at other variables that may impact the bus environment to decrease challenging behavior. Examples of such variables may include additional transportation employee professional learning for behavior management or transportation employees as part of the school problem-solving team. Research focusing on these variables would add to the depth of research into behavior displayed in the public-school bus environment.

In a qualitative study conducted by Brown et al. (2018), the researchers interviewed 18 urban African American bus drivers and attendants regarding their involvement in addressing bullying on the bus and their interaction with school administration regarding behavior management. In this study, the driving staff's perception of continued extreme behavior on the bus resulted from a lack of administrative support and parental cooperation (Brown et al., 2018). In this study, several bus drivers recall the extreme student behaviors exhibited on their buses. With no parental and school administration support, the students created so much distress for transportation employees that a bus driver walked out on his route during the bus route itself (Brown et al., 2018). In addition, the drivers reported feeling disregarded regarding their perception of how school administration treated them regarding inclusion in decision-making and procedures to reduce behaviors on the school bus (Brown et al., 2018).

In the results of this study, the transportation employees' perceptions of bullying varied for both the perpetrators and bullying victims. (Brown et al., 2018). The study revealed that the perceptions of the transportation employees regarding students with severe emotional disabilities were some of the most challenging incidents to handle, sometimes resulting in student restraints (Brown et al., 2018). The perceptions of those interviewed also suggested that bullying and aggressive behaviors depended on the bus route's time during the day, with afternoon bus routes recording more challenging behaviors than other routes (Brown et al., 2018).

In the Brown et al (2018) study, the transportation employees' primary complaint was the perception of the lack of support from the school administration. The employees felt this lack of support, in turn, continued the engagement of the behavior by riders feeling it was acceptable to continue the behavior as there were no consequences for their actions (Brown et al., 2018). Those student observers of the bullying behavior also saw no punishments for the engagement and perceived the behavior as acceptable to engage in while riding the bus. The staff interviewed also had the perception that parental influence was lacking. Based on the perception of the transportation employees, the parents either did not support the school administration and transportation employees, or the parental figure engaged in the same type of bullying behaviors when asked to discuss their child's behaviors displayed within the bus environment.

In general, based on the study's survey results, the perception of transportation employees was that collaboration between all stakeholders is essential to decreasing bullying behaviors within the bus environment (Brown et al., 2018). The Brown et al. (2018) study provided insight from the transportation employees' perspective with limitations. First, it had a small sample size of transportation employees' viewpoints. Also, the participants in the study were all African

American; thus, the perspectives of the issues could have been biased based on cultural background. This study revealed the intensity of student behaviors in a transportation employees' workplace environment while transporting students to and from the public-school building. Also, the study revealed the school system's lack of collaboration with the transportation employees by not allowing them to share their insights into the perceived issues with their school system. Much like the deLara (2008) study, the Brown et al. (2018) study adds to the literature supporting the need for additional research on the public-school bus environment, including all stakeholders. The study explains the need for continued literature to investigate the public-school bus environments' micro and macro levels (Brown et al., 2018). Additional research in these areas would contribute to the depth of research involving transportation employees' overall workplace outcomes and student behavior's influence on the entire bus environment.

In a study by Allen et al. (2003), the researchers received 58 school bus drivers' surveys regarding the prevalence of student-to-student sexual harassment within the public-school bus environment. During an in-service training, 78 bus drivers had the opportunity to complete a survey, of which 58 participated. In this study, approximately 67% of bus drivers reported witnessing sexual comments and jokes as the highest forms of sexual harassment in the public-school bus environment (Allen et al., 2003). The bus drivers said that the most frequent scenario in which sexual harassment happened within the bus environment involved one or more boys harassing a girl as the primary target (Allen et al., 2003). In this study, the bus drivers reported intervening with sexual harassment behaviors in 75% of the incidents (Allen et al., 2003). The drivers also conveyed through the survey that 60% of perpetrators of sexual harassment stopped the behavior when confronted by another peer (Allen et al., 2003). The drivers reported that 46%

of the bus drivers witnessed incidents of sexual harassment; of those incidents, 67% of the students received disciplinary consequences (Allen et al., 2003). Of the incidents the bus drivers reported to the administration, the study results revealed just a little over half of those incidents were dealt with through an administrative consequence regarding the sexual harassment behaviors the drivers witnessed. Regarding the bus driver's work environment, seeing challenging behavior and the lack of follow-through from the administration could cultivate frustration, anxiety, and stress within their work environment. The basis for these emotional reactions from transportation employees is that the transportation employees have a vested interest in keeping all passengers safe, both physically and emotionally.

The bus drivers in the Allen et al. (2003) study expressed that additional training for themselves and the students would be beneficial to support decreasing sexual harassment in the bus environment (Allen et al., 2003). In this study, 54% of the drivers reported participating in sexual harassment training, with 60% of those within the school year of the survey (Allen et al., 2003). The bus drivers also expressed the desire for the training regarding sexual harassment to involve more role-play scenarios and specific examples during training. The drivers reported that this would allow them to relate to student-to-student sexual harassment within the bus environment based on specified information. Overall, this study revealed the desire for bus drivers to have additional training regarding sexual harassment and better communication with the administration when a discipline referral is written and submitted.

In the research by Goodboy et al. (2016), 117 public school bus drivers participated in this study. The survey included the following information: the driver's perception of student victimization, witnessing student-on-student victimization, the bus driver's workplace coping

styles, and workplace outcomes. The survey examined students' victimization of public-school bus drivers and its effects on driver outcomes through job stress and its impact on the driver's work environment. In this study, a mediation analysis model was used to determine the effects of driver victimization on work outcomes mediated indirectly through job stress (Goodboy et al., 2016). The study also used moderated mediation to examine how years of working as a bus driver indirectly affected workplace outcomes mediated by job stress (Goodboy et al., 2016). In this study, all public-school bus drivers participated by completing a survey that inquired about the following items: the driver's perception of victimization by students, witnessing student-on-student victimization, the bus driver's workplace coping styles, and workplace outcomes. The study used multiple research questionnaires to collect data about the driver's perceptions of student-on-staff victimization and the impact in which it had on the driver's workplace outcomes (Goodboy et al., 2016).

Based on the survey results, this study determined that student-on-staff victimization did have an indirect effect through job stress on workplace outcomes such as driving anxiety, occupational efficacy, emotional exhaustion, and cynicism (Goodboy et al., 2016). The study also confirmed these indirect effects through job stress were more significant based on the increased level of experiences drivers had working as bus drivers (Goodboy et al., 2016). Overall, this study revealed that students' increased victimization of bus drivers leads to increased levels of on-the-job stress for bus drivers. This stress within their work environment created job dissatisfaction and a decreased ability to perform their everyday job expectations (Goodboy et al., 2016). The study also found that the more experienced the driver, the more

impact the victimization by students had on the drivers and their levels of job stress (Goodboy et al., 2016).

In a similar study focusing on public school transportation, Hendrix et al. (2019) used a nationally representative sample of transportation officials to examine the occurrence of behavioral problems within the public-school bus environment. However, instead of surveying the transportation employees, this study focused on the administration officials supervising them and the administration's perceived prevalence of behavioral problems within the public-school bus environment. The results of this study revealed that the transportation administration, on average, did not perceive any specific behavioral issues as everyday events within the public-school bus environment (Hendrix et al., 2019). Thus, these results seem to display a disconnect between administration to transportation employees based on the impacts of challenging behavior revealed in other research examining student behaviors on the bus.

Based on the survey results, the transportation officials perceived basic rule violations as the number one issue, followed by profanity and bullying (Hendrix et al., 2019). This study determined that the higher within school system administration and the further the respondents were from working directly with transportation employees, the less likely the administration responded that there was any significance in behavioral problems within their public-school bus environments. Hendrix et al. (2019) revealed that a possible reason for these responses could have been that the higher administrators in the districts did not want to admit that there could be behavioral concerns within their public-school bus environments. Based on the survey results, the researchers determined that it genuinely did matter who you ask about the severity of behavioral problems within the public-school bus environment. These results solidify the

necessity of asking the transportation employees questions regarding the public-school bus environment. The Hendrix et al. (2019) results show that getting the environmental description directly from the transportation employees is crucial. After all, these employees have their boots on the ground experiencing the environment first-hand.

This survey also allowed the researchers to determine several other factors that could increase actual misconduct on the bus, including the age of the passengers one the routes, ethnicity, and basic demographics (Hendrix et al., 2019). This information supports that behavior management professional learning for transportation employees must be tailored for the bus environments and consider other factors such as age, cultural backgrounds, and the communities themselves when designing the professional learning. All professional learning for transportation employees cannot be a "one-size fits most" content design, nor would it be beneficial to have a one-and-done sit-and-get and call it professional learning for these employees. Follow-up, coaching, and communication from the administration will place an extra level of support for the transportation employees to perceive they are a part of the school's learning community regarding their work environment.

The responses of the transportation employees surveyed and interviewed in these studies show how challenging student behavior in public school bus environments can impact transportation employees while attempting to fulfill the everyday expectations of their job requirements. These study results also display transportation employees' frustration with the school administration for the lack of communication and action taken when reporting the behavior to the administrators. Thus, potentially creating additional stress within their workplace environment. The results also reveal transportation employees' frustration based on the lack of

professional learning about behavior management within the public-school bus environment. Much like the classroom is a work environment for teachers, the public-school bus is a work environment for transportation employees. Thus, as teachers receive professional learning regularly to work with students in the classroom, bus employees should receive professional learning in working with the student populations on their buses. Thus, these studies confirm the necessity of improving administrator communication with transportation employees and providing them with additional professional learning to work with the students in their care. Therefore, the research should continue to explore this setting to evaluate workplace outcomes such as job stress, occupational self-efficacy, job satisfaction, and burnout for workers within this environment.

Although creating a positive environment has been extensively researched in public school settings, extending these expectations beyond the brick-and-mortar school building is limited. Additionally, there continues to be minimal research in positive behavior support professional learning for transportation employees who interact daily with students on public school buses (Hirsch et al., 2004). In particular, there is scarce research on providing professional learning to those transportation employees who transport students with special needs, especially those who work with students identified as having deficits in severe emotional and behavioral disorders. Students with challenging behaviors tend to overwhelm transportation employees and system-wide school personnel due to the students' high rates of disciplinary action needed to address behavioral concerns (George et al., 2018).

These reviewed studies supported additional research regarding working with students with significant behavioral deficits and the need for further professional learning and support for

transportation employees. This additional professional learning and behavioral support are given to your typical classroom educators and support staff inside the brick-and-mortar school buildings, working face-to-face with students in non-confined structured environments (Brown et al., 2018; deLara, 2008). Thus, based on the literature, supports for transportation employees in the area of behavior management has been decidedly lacking and yet found to be essential to the results of student outcomes in the area of behavior for the public-school bus environments (George et al., 2018; Kennedy & King, 2019).

This literature review's central theme is the lack of school systems' consideration for transportation employees' views and perspectives regarding the public-school bus environment. Throughout the literature, it was evident that there is frustration among transportation employees toward public school system administration regarding their lack of acknowledgment by school administration to be active participants in behavior management within their work environments. In addition, there is also evident frustration among transportation employees for lacking opportunities to participate in other professional learning communities within the public school system, which are used for problem-solving extreme behaviors within their bus environments.

The limited research on reciprocal interaction between public school bus environments and stakeholders needs further exploration and research. This additional exploration could support students and transportation employees with a more positive learning and working environment. Further research focusing on the entire public school bus environment may provide valuable insight into many aspects of the transportation department. The additional research may provide insight into the following areas: staff retention, the complexity of bus routes, the culture, and climate of the public-school bus environment, the design of professional learning

communities that includes public school transportation staff, increased positive communication between all stakeholders, and the overall well-being of the transportation staff themselves.

Student-on-Staff Victimization within the Public-School Environment

In addition to the lack of literature on student-on-staff victimization within the public-school bus environment toward transportation employees, there is also a shortage of research about violence directed toward adults within the brick-and-mortar school buildings. This phenomenon of teachers being the victims of significant student behavior is a multisystemic, national, and international issue with many negative impacts on educators working within the public school system (Espelage et al., 2013; Longobardi et al., 2019; Maeng et al., 2020; Moon et al., 2019; Reddy, et al., 2013; Reddy et al., 2018).

Much like within the public-school transportation departments, violence against adults has not been explored extensively in the literature. However, the research conducted by the American Psychological Association Task Force on Classroom Violence Directed Against Teachers has brought the most recent attention to the issues surrounding student-on-staff victimization within public school environments (Espelage et al., 2013; Longobardi et al., 2019; McMahon et al., 2014; Reddy, Espelage, McMahon, et al., 2013; Reddy, Espelage, Anderman, et al., 2018). According to the American Psychological Association (APA)Task Force's National Survey, 80% of teachers reported being victimized at least once during the current or past school year, with 94% reporting being the victim of students (Espelage et al., 2013; Longobardi et al., 2019; McMahon et al., 2014). According to the APA, the nationwide costs of teacher victimization exceeds 2 billion dollars annually and approximately 927,000 days of lost educator work days (APA, 2016). This national cost significantly impacts the educational system,

affecting educators, parents, students, and taxpayers (APA, 2016). In addition, according to the American Psychological Association, “the U.S. Department of Education (2015), from 2011 to 2012, approximately 20% of public-school teachers reported being verbally abused, 10% reported physical threats, and 5% reported physical attacks in schools” (APA, 2016, p.1). These statistics reveal the significance of student-on-staff victimization and the essential need to explore these issues across all school environments.

A longitudinal study completed by Dworkin et al. (1988) explored the correlation between public school teachers' reported experiences with student victimization and task-specific stressors of the teachers' job expectations. In this study, 291 urban public school teachers participated in a forced-choice survey regarding stress levels and a Likert scale survey regarding student victimization. The results of this study found that the following: a teacher's ethnicity, grade level taught, and school characteristics could impact a teacher's conceptualization of their fears and victimization experiences (Dworkin et al., 1988). This study supports that if a teacher has intrinsic and extrinsic environmental factors influencing them, they may feel more or less impacted or "victimized" by specific student behaviors displayed within the teacher's classroom environment (Dworkin et al., 1988).

In the Espelage et al. (2013) study, the authors focused on the understudied issue of student-on-staff victimization and how this victimization is a multisystemic issue within the public-school systems. Within the article, the authors gave recommendations requesting national research focusing on the following: student-on-staff victimization, practice, and public policy agendas concentrate on understanding and preventing teacher victimization within the public school system (Espelage et al., 2013). The authors discussed all stakeholders' collaboration

concerning educating current in-service teachers and pre-service teachers to incorporate strategies and interventions revolving around classroom management (Espelage et al., 2013).

The authors reviewed many vital pieces of the public-school system's environment that influenced teacher victimization outcomes. The authors also suggest that public policymaking for teacher licensure be consistent nationwide to ensure pre-service teachers receive the necessary behavior management training before entering a classroom full of students (Espelage et al., 2013). If this behavior management training would benefit the teachers entering a classroom setting with students, the additional support for those not trained in the education profession would become an essential component of the non-classroom teacher's success outside the classroom environment.

In a study completed by Reddy et al. (2018), the researchers reviewed the literature from 1988-2016. This systematic literature review evaluated how to advance research on educator victimization (Reddy et al., 2018). The literature review emphasized teacher victimization's long-term effects on the public school system environment (Reddy et al., 2018). The researchers found 37 studies in 28 journals meeting the criteria in this study. The authors emphasize the importance of the establishment of the 1988 American Psychological Association (APA) Violence Against Teachers Task Force, which collaborated with the National Education Association (NEA) to conduct a national survey regarding violence against teachers (Reddy et al., 2018). The Reddy et al. (2018) study further uses interactional and social-ecological theories to help explain the student victimization of teachers. Much like Espelage et al. (2013), the researchers suggest public policy reform based on the knowledge obtained through more consistent reporting and measurement of student-on-staff victimization.

In a study completed by McMahon et al. (2020), the researchers used qualitative questionnaires to interview 245 Pre-K through 12th-grade teachers regarding school violence. The study used the social-ecological theory and conventional content analysis to assess factors correlated with teacher-directed violence through the four interconnected systems of the individual, school, community, and society (McMahon et al., 2020). The study explains the complexity of interactions at each corresponding level based on concepts from Bronfenbrenner's Theory (1979). Much like the transportation employees discussed in the articles mentioned above, the teachers in this study also expressed their desire for more support from the school system administration and parents. Overall, the paper used the concepts of the interconnection of individual, school, community, and society with a social-ecological approach to help better conceptualize the interactions to improve all stakeholders' intertwined environments (McMahon et al., 2020).

All the articles reviewed regarding student-on-staff victimization emphasized it as a systemic issue in the United States and globally. From the review of these similar articles using the public-school system's teachers as the focus of student victimization, similarities to both groups are made based on the population's similarity with their general working environments. Overall, student-on-staff victimization is systemic across multiple settings. This victimization is understudied and lacking in the current literature across all locations. Continued evaluation of the interconnectedness of all stakeholder environments needs further exploration to improve these environments for all stakeholders. Regarding the public-school system's transportation employees, many areas need further investigation within the bus environment to change to a more positive culture and climate for each bus route.

Theoretical Frameworks

This literature review explored the concepts from Bronfenbrenner's Theory (1979) on the Process-Person-Context-Time model about the workplace environment of public-school bus transportation employees and the reciprocal interaction between this environment and all stakeholders interacting with these public-school systems' employees. The review also explored Bandura's Social Cognitive Theory concerning occupational self-efficacy regarding transportation employees' job performance. Additionally, the literature was reviewed regarding burnout and job satisfaction to understand the impact these workplace outcomes have on transportation employees when mediated by the stress of the job. The review further explored the research on burnout, using the Oldenburg Burnout Inventory to explore employee burnout more in-depth. Finally, the literature examined research on employee job satisfaction using the Brief Index of Affective Job Satisfaction.

Bronfenbrenner's Theory

Since the 1970s, Bronfenbrenner's Theory has developed over time. Rosa and Tudge (2013) described this theory as having three phases of development. In the first phase, Bronfenbrenner's Theory focused on the ecological approach to human development (Eriksson et al., 2018). Bronfenbrenner (1979) described an ecological environment comprised of four different ecological systems in this phase. The theory provided a social-ecological framework for understanding human behavior within a person's background by evaluating the interaction of contextual systems within the environment. Based on the social-ecological framework within the theory, these four names: the microsystem, mesosystem, exosystem, and macrosystem, were given to the contextual framework during this phase of the theory's development (Eriksson et al.,

2018). Understanding how the violence relates to different factors across the transportation employee's working environment is essential when connecting the concepts of this developmental phase of Bronfenbrenner's Theory (1979) to describe the multisystemic violence directed toward transportation employees by students within their environment.

According to Bronfenbrenner's Theory, the microsystem encompasses the people in the employees' immediate environment (Eriksson et al., 2018; Espelage et al., 2013). For example, in the case of transportation employees, the microsystem could include family, friends, the employee's connection to community organizations, students on the bus, parents/guardians of families served, co-workers, and school administrators. Thus, in this defined microsystem, reactions to environmental factors are bi-directionally interacting with one another.

The second system during this phase of Bronfenbrenner's Theory is the mesosystem. The theory defines the mesosystem as the microsystem's influences on each other (Eriksson et al., 2018; Espelage et al., 2013). For example, the mesosystem for transportation employees could include the following relationships: staff-parent relationships, staff-administrator relationships, staff-student relationships, and co-worker relationships. The mesosystem interconnects the microsystems with each other. Based on the interconnection of the mesosystem beyond the microsystem, the reaction of one influencer between the two microsystems, whether positive or negative, can impact another person's mesosystem response. Thus, this connection affects the employee's mesosystem within their workplace outcomes (Espelage et al., 2013).

The third system during this phase of Bronfenbrenner's Theory (1979) is the exosystem. The theory defines the exosystem as the social, environmental, and governmental forces that can indirectly influence a person (Eriksson et al., 2018; Espelage et al., 2013). For transportation

employees, this may include administrative policies for individual schools, especially about reinforcement or discipline, the board of education policies regarding bus regulations, state laws regarding bus regulations, national laws regarding bus regulations, or insurance and safety policies for bus transportation. For example, even though a person may not directly contact the influence within the exosystem, the employee could be indirectly impacted through their microsystem.

The fourth system during this phase of Bronfenbrenner's Theory (1979) is the macrosystem. The theory defines the macrosystem as making up the outermost layer of the employee's environment and encompasses the cultures and subcultures in which the other three systems nest within each other (Eriksson et al., 2018; Espelage et al., 2013). Within the macrosystem, the cultural values, community traditions, laws, ideologies toward adult-student relationships, etc., impact the employee's environment. The indirect influence on the transportation employee's exosystem, mesosystem, and microsystem affects the employee's macrosystem.

Phase two of Bronfenbrenner's Theory during the 1980s–1990s described a person's interaction between biological and psychological persons and their environments. (Eriksson et al., 2018). In this phase, the theory described the fifth system as the final outer layer called the chronosystem. The Chronosystem describes changes in both the environment and person over time (Eriksson et al., 2018). Within the chronosystem, the changes over time impact transportation employees and includes external and internal factors and social and cultural movements. For example, external factors such as a global pandemic or war or internal factors such as job satisfaction, stress, or burnout can impact a transportation employee's chronosystem.

In phase three of Bronfenbrenner's Theory during the mid-1990s – mid-2000's, the theory describes the Process-Person-Context-Time (PPCT) model. During this development phase, the theory redefines the microsystem through what the theory labeled the proximal process (Eriksson et al., 2018). At this point in the theory development, redefining the proximal process includes the interactions between persons as features of a person's immediate environment within the microsystem (Eriksson et al., 2018). Bronfenbrenner developed the PPCT model to guide those conducting bioecological research (Rosa & Tudge, 2013; Eriksson et al., 2018). The "Process" piece of the model includes all events and interactions with others within an individual's immediate environment (Eriksson et al., 2018). The "Person" piece of the model allows researchers to determine how individual characteristics, such as age, gender, ethnicity, etc., influence the proximal process (Eriksson et al., 2018). The "Context" involves evaluating how the four interrelated systems described in phase 1: microsystem, mesosystem, exosystem, and macrosystem, influenced the proximal process (Eriksson et al., 2018). Lastly, the "Time" piece of the model should include two measurement points with the current historical time point, ideally within a longitudinal study (Eriksson et al., 2018). Bronfenbrenner never states that all the elements from the model must be included in a study using the PPCT model (Eriksson et al., 2018). However, the theory states that the research should focus on the proximal process, the characteristics of the advancing person, and the context in which they all occur (Eriksson et al., 2018).

Self-Efficacy

The concept of self-efficacy was derived from Bandura's Social Cognitive Theory (1977). Bandura proposed that personal efficacy expectations impact their coping behaviors, motivation,

and endurance when faced with obstacles or aversive experiences (Bandura, 1977). Bandura (1989) reflected that the more belief a person has in their capabilities, the more persistent they would be in their efforts. In terms of Bandura's Social Cognitive Theory, it allows transportation employees to believe in themselves regarding their abilities to work with students within the public-school bus environment and their use of student behavior management skills while the bus is rolling.

Bandura (1989) explains that a person's confidence level in their capabilities can impact their stress level during taxing and threatening situations. Based on this concept, research might hypothesize that giving employees more knowledge regarding student behavior management may decrease their stress levels during a crisis on the bus. Thus, this theory suggests that creating specialized professional learning for these employees could increase the employees' belief they can handle challenging student behavior. Then, as the employees deal with the challenging student behaviors, they may perceive them as less of a stressor. In addition, this professional learning should include modeling and coaching opportunities to deal with significant student behaviors, potentially decreasing the negative impact of the transportation employee's workplace outcomes. However, if people believe they are not controlling their stressors, they could endure more stressors (Bandura, 1989). Thus, if a person's perceived self-efficacy is high, the person is more likely to approach complex tasks with less stress instead of seeing the difficult task as an unavoidable threat. (Bandura, 1989).

Burnout

The research on burnout started in the 1970s. This research included employee characteristics of high exhaustion levels and negative attitudes toward the employee's work

environment (Demerouti et al., 2010). The early research on burnout focused mainly on human service occupations. However, as research has evolved in this area, burnout has been correlated to more than just employees in the human service professions. Since the 1970s, continued research on burnout has directly related burnout to increased stress levels at work, impacting absenteeism, turnover rates, attitudes toward work environments, and overall job performance (Lubbadeh, 2020). Maslach et al.'s (1996) definition of burnout is the following: "Burnout is a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity" (p.192).

The three components of burnout include emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 1996). The most commonly used measurement tool for burnout is the Maslach Burnout Inventory-General Survey (MBI-GS) (Demerouti et al., 2010). However, one psychometric inadequacy found within the subscales of the MBI-GS is that the phrasing within the survey's subscales is all one-sided, either positively or negatively written in each subscale (Demerouti et al., 2010). An alternate burnout measurement to the MBI-GS is the Oldenburg Burnout Inventory (Demerouti et al., 2010). The Oldenburg Burnout Inventory (OLBI) includes positively and negatively phrased items within the subscales to assess burnout. Based on this view, burnout and work engagement are opposite facets (Demerouti et al., 2010). Therefore, the OLBI accounts for the psychometric inadequacies found in the MBI-GS using 16 items stated positively and negatively to assess the two main dimensions of burnout – exhaustion and disengagement (Reis et al., 2015).

Job Satisfaction

The research on job satisfaction dates back to the 1930s. This research included studies associating job satisfaction with the employees' perception and attitude toward their work environment (Zhu, 2013). As the research has evolved, there has been significant debate about whether or not satisfaction in the job itself leads to increased performance or satisfying performance, leading to overall job satisfaction (Aziri, 2011; Luthans, 1998). Researchers have described job satisfaction as both affective and cognitive (Thompson & Phua, 2012). Affective job satisfaction is the overall satisfaction in one's job, and cognitive job satisfaction is the person's perception of the components of the job itself (Thompson & Phua, 2012). Researchers have debated the relationship between these two aspects of job satisfaction throughout the literature, resulting in varying measurement surveys (Thompson & Phua, 2012). One survey used to measure job satisfaction is the Brief Index of Affective Job Satisfaction (BIAJS). The BIAJS is a four-item measure using a Likert response format with distractor items to help mask the intention of the questions to measure job satisfaction (Goodboy et al., 2016; Thompson & Phua, 2012).

Based on the literature review, there is a noticeable void in the research regarding transportation employees and their work environments. This lack of existing literature leads back to the questions asked before this literature review: What are the rewards and benefits of these positions? Is there a difference in routes that may make the job more rewarding or less stressful? Is there a difference between transporting students with and without disabilities or a mixed population? What makes a person remain in these positions considering the following: the pay is not significant, it is unusual hours of the day with a break in between, and there is typically little to no professional learning regarding the management of the students in their care? How can a

public school system capitalize on the interaction and help create a positive first impression of the public school system and view transportation employees as vital members of the school's team to generate extensions of positive brick-and-mortar school environments?

Ultimately, public school systems need to value that their transportation employees' role in creating a positive environment is essential. In the long run, the transportation employees' position impacts the overall public school bus environment that spills over into the brick-and-mortar school building or the student's home (Goldin & McDaniel, 2018). Thus, continued research of these areas within the public-school system's environment needs to be conducted to add to the literature.

CHAPTER 3

RESEARCH DESIGN AND METHODS

Overview

The purpose of this study was to expand on the research of Goodboy et al. (2016) by obtaining the perspectives of public-school transportation employees to understand further the relationship between student-on-staff victimization and the workplace outcomes of occupational self-efficacy, job satisfaction, and burnout: exhaustion and disengagement mediated through job stress. This study further expanded the Goodboy et al. (2016) study by analyzing if the indirect effects of student-on-staff victimization meditated through job stress were moderated by an employee's years of experience. Beyond Goodboy et al. (2016), this study additionally explored the moderation of behavior management training and the employee's perceived amount of school administration support on the indirect effects of student-on-staff victimization mediated through job stress. The study also expanded on the research of deLara (2008) by again obtaining perspectives of the public-school transportation employees regarding their perceptions of the amount of participation they had in systemic behavior management planning within their school systems that included the bus environment and the support the transportation employees receive from school administration regarding behavior on their buses. Like Goodboy et al. (2016) and deLara (2008), this study used a survey method to collect participants' perspectives of the bus environment and their work outcomes.

Research Design

A quantitative analysis of the survey results explored the relationships of the variables using the Statistical Package for the Social Sciences (SPSS) Version 27 to determine descriptive

statistics within the data, along with regression analysis using Version 4 of PROCESS v4.1(Hayes, 2022) to answer hypothesis questions one through six. During this study, there were no experimental control or treatment groupings among the transportation employees. The quantitative data came from an electronic online survey platform, Qualtrics. This survey included dichotomous scaled, Likert-scaled, and open-ended question items and was disseminated to eligible participants through the electronic survey platform Qualtrics. Qualtrics is a web-based survey software program that allows for creating surveys and reports based on the responses provided by participants. The participants could access the electronic survey either by computer or cell phone. The description of the relationships of variables through mediation and moderation models used a simple mediation and moderation analysis using ordinary least squares path analysis. These approaches provided statistical analyses that enabled the researcher to determine if one mediation pattern was more likely than another (Shrout & Bolger, 2002).

Hypotheses one, two, and three used mediation models to analyze the effects of student-on-staff victimization on specific workplace outcomes (occupational self-efficacy, job satisfaction, burnout) indirectly impacted by the employee's job stress:

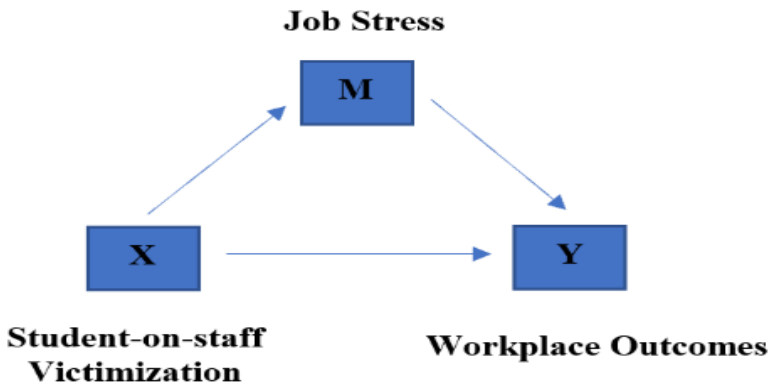
(See Figure 1 for a visual model of Hypothesis 1-3)

1. The effect of transportation employees' victimization by students on the workplace outcome of occupational self-efficacy is mediated by job stress.

2. The effect of transportation employees' victimization by students on the workplace outcome of job satisfaction is mediated by job stress.

3. The effect of transportation employees' victimization by students on the workplace outcome of burnout: (a) emotional exhaustion, (b) work disengagement is mediated by job stress.

Figure 1
Model for simple mediation analyses of H1-H3

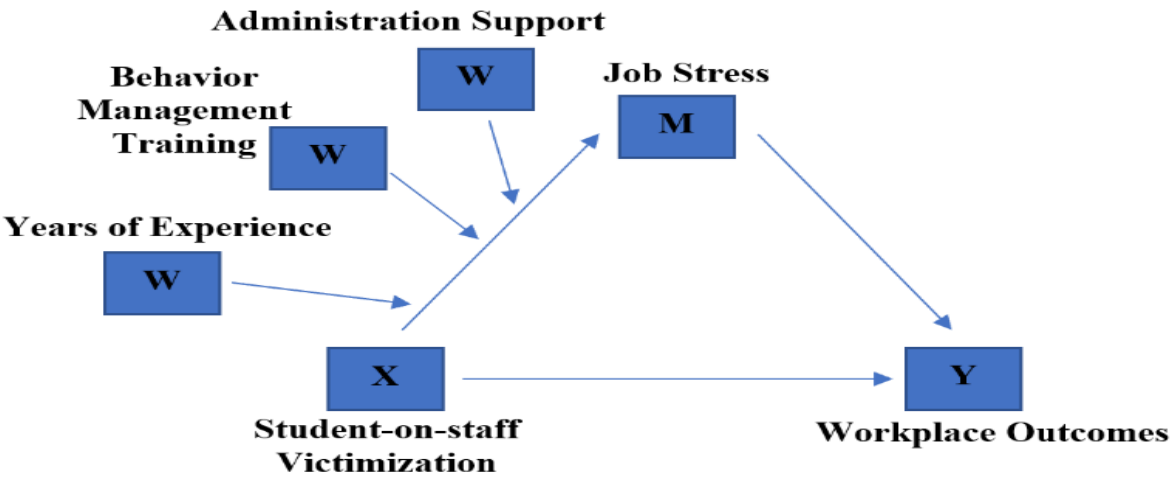


Once the mediation model analysis of hypotheses one through three was complete, a moderated mediation model was used to determine if the significant indirect effects of job stress on workplace outcomes varied systematically as a function of the following hypotheses: (See Figure 2 for a visual model of Hypothesis 4-6)

4. The indirect effects, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of years of bus employment experience.
5. The indirect effects, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of the amount of behavior management training received by transportation employees.

6. The indirect effect, mediated through job stress, of student-on-staff victimization on transportation employees' workplace outcomes will vary systematically as a function of the transportation employee's perceived school system administration support.

Figure 2
Model of moderated mediation analyses H4-H6



Additionally, the survey used several open-ended questions to add depth and supplementary information to the dichotomous and Likert-scale responses provided by the transportation employees. The open-ended questions will solicit the following information:

7. Why did you become a transportation employee?
8. What strategies and interventions do transportation employees use most frequently to reduce behavior incidents in their work environment?
9. What workplace incentives encourage transportation employees to continue working in a public-school bus environment?

10. What is additional support from the school system needed to increase occupational self-efficacy and job satisfaction within the public-school bus environment?
11. What is additional professional learning needed to increase job satisfaction and occupational self-efficacy and decrease job stress and burnout?

Methods

Sample and Setting

The study used a cross-sectional design to collect data from participants recruited from 13 school systems in the Northeast region of a Southeastern State within the United States. All eligible participants were transportation employees currently employed by 1 of the 13 school systems, either bus drivers or bus support staff, who hold part-time or full-time positions. The sample size was 115 participants, with 114 consenting to participate and 1 declining. Further participant demographic information is shared in the result section. Each targeted school system serves a student population ranging from Pre-K through High School students (age 4 through their 22nd birthday) with public-school bus transportation to and from their homes and the public school they attend. In addition, each system provided special education and general education transportation to all students within their particular school system.

The demographics of this regional school system are representative of urban, suburban, and highly rural communities. The majority of school systems in the region are made up of rural communities. The region has the following schools throughout the region: 1 school with K through 12th grade in one building, 5 primary schools, 56 elementary schools, 1 5th grade academy, 22 middle schools, 1 junior high school, 20 high schools, 1 9th grade academy, 1 non-traditional school serving dual enrollment students, and 14 alternative schools. The K through

12th school serves students in a highly rural area in grades K through 12th in 1 building. The following is the traditional population of students within the schools mentioned above: The primary schools typically serve Pre-K through 2nd grade students; the elementary schools typically serve the Pre-K through the 5th-grade population, with one school having the 6th-grade student population remaining in the elementary setting; the middle schools typically serve 6th through 8th-grade students, with one fifth-grade academy separated within the same building; the junior high school serves students in 8th through 9th grade; the high schools serve students in the 9th through the 12th-grade population, with some receiving educational services until their 22nd birthday; the 9th-grade academy only has students in the 9th grade and is in a separate location from the typical high school campus; the one non-traditional school simultaneously serves students who complete both high school and college credits, referred to dual enrollment; and the alternative schools typically serve students from 6th through 8th grades or 9th through 12th grades. The students are placed in alternative school settings generally as a result of a punitive placement outside of the student's typically assigned school within the school system. However, some school systems use it simply as an alternative to the typical school setting. For instance, students who cannot maintain success in a larger environment can be moved to a smaller academic environment where they tend to be more successful. Further setting demographic information is shared in the result section.

Measurements

A Qualtrics online survey was used to gather data for analysis (Appendix A). The survey was composed of the following questions: an initial question for the participant to consent or deny participation; 24 demographic questions regarding the transportation employee themselves

and their job within the transportation department; 5 questions containing multiple items in each question on the following topics: student-on-staff victimization, occupational self-efficacy, job stress, job satisfaction with three distractor items, and burnout; and 19 questions regarding the transportation staff's perception of behavior management training and administration support questions. In addition, to add depth to the dichotomous and Likert-scaled items, five open-ended response questions were presented relating to the overall school bus environment and any additional information the participants may have wanted to provide.

Before sending the survey to eligible participants, a field test group of 16 participants completed the online survey for the researcher to elicit improvement feedback from a similar sample population. The individuals included in the field test group were school system support staff working within the regional school system used for this research. To obtain a similar sample of participants for the field test group, the researcher purposefully looked for individuals who have not worked in the school bus environment but support students similar to transportation staff except within the classroom environment. The researcher used this employee population for the field test group to avoid potential biased responses during the actual study.

The field test group was given the same online question format and questions as the study participants. An additional question was added to request the time it took the field test participants to complete the survey. These participants were asked to time themselves at the beginning of the survey, and the last question allowed them to record their completion time. In the survey, this was the only question and direction that deviated from the actual participant survey. The purpose of enabling the field test group to review the research survey before the actual participant completion was to obtain input regarding any improvements to questions and

formatting within the survey itself before the final draft was disseminated to eligible participants (Creswell, 1994).

In addition, the researcher provided the field test group with a link to a Google Survey to receive more in-depth information on each question. This Google Survey allowed the field test group to provide specific feedback on each question within the research survey. The researcher took the field test group's input and suggestions into consideration before the final draft of the survey was sent to eligible participants. Overall, this group stated the survey was easy to use through the Qualtrics platform using either a phone or computer/Chromebook. Based on the feedback, some field test participants said there was some redundancy of the agree/disagree questions. However, some measurements could not be changed. Additional comments were also optimistic regarding the survey questions being clear to read, understand, and answer.

Demographics

This study used demographic questions used in the deLara (2008) study to extend their prior research. As a result, this study asked participants demographic questions developed from this research to obtain additional demographic information on each participant. To use these questions within this study, deLara (2008) shared the study's questionnaire and permitted the researcher to incorporate the questions into the current research (Appendix B). The breakdown of demographics questions within the survey are as follows: six questions asked specific background information about each participant, 11 questions asked about the make-up of the participant's job role and work history, and 8 questions asked detailed demographics regarding each participant's bus route, student population, and student behavior during morning and afternoon routes.

Behavior Management Training and Administration Support

To further extend the deLara (2008) research study, the survey used seven questions to obtain additional information on each participant's amount of behavior management training provided by the school system and eight questions to get the participant's perception of administration support when dealing with bus discipline. In addition, the last four questions allowed the participants to give their knowledge and involvement in the System-Wide Positive Behavior Interventions and Supports planning in their school district. Finally, an additional six open-ended questions were added at the end of the survey to allow the participants to further elaborate on the following: their reasons for becoming a transportation employee; their strategies used to manage student behavior in the bus environment; their incentives for working in the bus environment; additional support the participants thought they needed from school administrators; the type of additional training the participants felt they might need; and any other comments they had about their job on the school bus.

Student-on-staff victimization

This study used the Goodboy et al. (2016) survey to explore the extent of student-on-staff victimization. The survey items used were developed based on several already-established bullying measures. Goodboy et al. (2016) developed the specific survey items using the following survey measures: The Retrospective Bullying Questionnaire by Schäfer et al. (2004); the AAUW Sexual Harassment Survey by the American Association of University Women (2001); the Adolescent Peer Relations Instrument by Parada (2000); the Illinois Bully Scale by Espelage and Holt (2001); and the California Bullying Victimization Scale by Felix et al. (2011). In the Goodboy et al. (2016) study, these questions were developed and used to establish the

frequency of student-on-staff victimization in the bus environment. The current survey incorporated most questions from Goodboy et al. (2016) as found in Appendix C. However, four items from the original questionnaire included in Goodboy et al. (2016) were excluded from this study per the request of a school system as a prerequisite for their participation. The measure used by Goodboy et al. (2016) included 20 items presented on a Likert-scale response ranging from (1) never to (5) most days (Goodboy et al., 2016).

Occupational Self-Efficacy

To further extend the research of Goodboy et al. (2016) in the area of occupational self-efficacy, this study used the Short Version of the Occupational Self-Efficacy Scale (Appendix D). This version assessed the competence of the transportation employee's experience while completing their job expectations during their daily bus routes (Rigotti et al., 2008).

Job Stress Measure

To further extend Goodboy et al. (2016), the survey for the present study used job stress measures developed by Netemeyer et al. (2005) found in Appendix E. Netemeyer et al. (2005) used the job stress measure as one of the focal construct measures to determine the relationships between work-family conflict, family-work conflict, job stress, in-role customer purchase intent for service employees, customer-directed extra-role performance, and customer purchase intent (Goodboy et al., 2016). The job stress measure included four items presented on a Likert-scale response ranging from (1) strongly disagree to (5) strongly agree (Goodboy et al., 2016).

Job Satisfaction

To further develop the work of Goodboy et al. 2016 regarding the job satisfaction of transportation employees, the survey used the Brief Index of Affective Job Satisfaction (BIAJS)

(Appendix F). The BIAJS measures affective job satisfaction, the pleasurable feelings one has about their job instead of measuring cognitive job satisfaction, and the satisfaction with particular factors of the job itself (i.e., pay scale, insurance, etc.) (Thompson & Phua, 2012). In a study by Thompson and Phua (2012), they found the BIAJS to be statistically valid and comparable to other research questions regarding job satisfaction.

Burnout

This present study used the Oldenburg Burnout Inventory (OLBI) to measure transportation staff burnout (Appendix G) and to obtain information about staff burnout. The Maslach Burnout Inventory – General Survey (MBI-GS) is one of the most commonly used instruments to measure burnout outside the human service and education professions (Demerouti et al., 2010). However, the subscales have weaknesses within the MBI-GS as the phrasing of the scales is either positive or negatively stated within each subscale (Demerouti et al., 2010). Thus, the terminology within the MBI-GS only allows for one-sided rankings (Demerouti et al., 2010). Therefore, an alternate burnout measurement to the MBI-GS is the Oldenburg Burnout Inventory (OLBI).

The OLBI includes positively and negatively phrased items within each subscale to assess burnout. Burnout and work engagement are opposite facets (Demerouti et al., 2010). The OLBI accounts for the psychometric inadequacies found in the MBI-GS using 16 items stated positively and negatively to assess the 2 main dimensions of burnout – exhaustion and disengagement (Reis et al., 2015). Thus, the OLBI concurrently evaluates burnout and work engagement within the same survey (Demerouti et al., 2010). This study used the OLBI to evaluate transportation employees' burnout.

Procedures

The researcher received approval from the Institutional Review Board (IRB) at the University of Georgia before any eligible participants completed the survey. After IRB gave consent, the researcher obtained additional approval in the form of a letter from each school system. Each school system had an appointed designee that granted permission to conduct the research. The written consent came from superintendents, program directors, site administrators, or transportation directors (based on whom the researcher was directed to contact by the school system superintendent to grant permission to conduct research within their school system) (Appendix H). The Transportation employees working as full-time or part-time employees for the school systems were eligible to participate in the study after obtaining IRB approval (Appendix I). After IRB and the school system approval were received, the researcher requested a list of the eligible transportation employees' contact information in the form of an email address from the transportation head or designee for the school system.

Upon being granted permission by the individual school systems, the researcher either directly sent the participant an email or the school system designee sent eligible participants an email (Appendix J). Each school system's designee decided to send the email directly or through the school system to the eligible participants. Either way, the email was sent, and the content was the same in each scenario. The email briefly explained the research to the participant and included the web link and QR code linking them directly to the online electronic survey. In addition to the email, in 5 of the 10 systems, a video was recorded by the researcher explaining the research and included as an attachment to the email.

The survey started with a consent question informing participants of their willingness to participate. The consent allowed all participants to consent or decline participation in the study. Participation in the survey was voluntary, and participants completing the electronic survey remained anonymous. This study did not focus on identifying individual students during the collection or analysis of data. Thus, the study did not require permission to participate from the students or their parents/guardians.

Each participant electing to complete the survey had the opportunity to respond to the survey at their convenience and stop and start their survey at any point using the electronic platform. The researcher waited four weeks after the initial survey distribution to eligible participants before sending a reminder email. According to Deutskens et al. (2004), there is optimal timing in reminding participants to complete online surveys. Deutskens et al. (2004) reported that in a literature review by Illieva et al. (2002), the average response latency for online surveys was 5.59 days (Deutskens et al. 2004). The Deutskens et al. (2004) study clarified that the follow-up timing is critical for improving survey response rates. According to another study by Blumenberg et al. (2019), higher response rates come with more frequent reminders. Thus, the researcher made three attempts over four weeks from the original email to remind participants to participate. In addition, those electing to complete the survey had the opportunity to enter their email address at the end to be randomly selected for one of five $25.00 Amazon gift cards.

Power Analysis

There is currently little guidance regarding power and sample size determination for mediation and moderation analysis (Hayes, 2022). The most applicable recommendation came

from Fritz and Mackinnon (2007), who provided necessary sample sizes based on six mediation tests at various parameters. For example, the table in Fritz and Mackinnon's (2007) article estimated the sample size needed for .80 power with a medium effect size (0.39) for both a path and b path, using a percentile bootstrap, which would equal 78 participants. Thus, this was the number used for the power analysis before disseminating the survey.

Data Analysis

The Qualtrics online survey platform collected all questionnaire data individually from each participant. Once the data were extrapolated from Qualtrics, the data analysis included descriptive statistics and regression methods through the Statistical Package for the Social Sciences (SPSS) v27 software. The regression analysis used SPSS with Version 4 of PROCESS v4.1 (Hayes, 2022). The PROCESS macro is a modeling tool that allows researchers to conduct observed-variable mediation, moderation, and conditional process analysis through the SPSS software (Hayes, 2022).

For the mediation analysis of hypotheses one, two, and three, Hayes PROCESS Model 4 used 5,000 bootstrap samples with percentile bootstrap at 95% confidence intervals. PROCESS Model 4 was used in all four-mediation analyses. Thus, this model was used to determine if the effects of student-on-staff victimization on specific workplace outcomes of occupational self-efficacy, job satisfaction, or burnout: exhaustion and disengagement were indirectly impacted by employee job stress.

For the moderation analysis of hypotheses questions four, five, and six, Hayes PROCESS Model 7 used 5,000 bootstrap samples with percentile bootstrap at 95% confidence intervals. The following PROCESS options were selected: generate code for visualizing interactions, three

decimal places in output, only continuous variables that define products were chosen for mean centering for construction of products, Probe interactions if $p < .10$, -1SD, Mean, +1SD, and Johnson-Neyman Output. PROCESS Model 7 was used in all three-moderated analyses to determine if the significant indirect effects of job stress on workplace outcomes varied systematically as a function of the following: years of bus employment experience; the amount of behavior management training received by transportation employees; and the transportation employee's perceived school system administration support.

SPSS Version 27 descriptive statistics options were used to obtain the output to analyze the additional dichotomous and Likert-scaled data received through the survey. Content analysis procedures were used to analyze the data retrieved through the six open-ended questions. Content analysis procedures assist in analyzing trends and patterns for specific phrases used by the participants to answer the open-ended question (Stemler, 2000). Additionally, the survey response rate was calculated. This calculation was completed by dividing the number of completed survey responses by the number of people who received a survey. The final number was multiplied by 100 to convert the data into a percentage. The response rate was then calculated using the list of eligible participants who were sent surveys compared to the number of completed surveys. Unfortunately, the number of participants who were sent a survey was not known for all sites because the school systems sent some of the surveys out and never responded to the question of how participant surveys were sent to eligible participants.

Reliability

Cronbach's alpha was used to determine the reliability of the measurement instruments used in this study. Cronbach's alpha estimates the internal consistency reliability of the

measurement instrument (Haller & Kleine, 2001, Jaeger, 1993). Cronbach's alpha can be used with measurements involving Likert-scale items and data collected in the single administration of the measurement instrument (Jaeger, 1993). Based on Cronbach's alpha results, typically, an alpha value of 0.9 or greater is considered excellent, an alpha value of 0.7 or greater is considered acceptable, and an alpha value below 0.5 is unacceptable (Glen, n.d.; Goforth, 2015; Jaeger, 1993). However, these levels are considered general rules for interpreting the alpha results. When analyzing the results of Cronbach's alpha, one must also consider the number of items in the test measured. If there is a higher number of items, this may result in a larger alpha result, versus if there is a smaller number of items, it may result in a smaller alpha result (Glen, n.d). This study determined Cronbach's alpha using the statistical software SPSS v27. Also, before conducting Cronbach's alpha for each measurement instrument, the researcher ensured all scale items were proportionally going in the same direction.

Correlation Analysis

Pearson's r was used to describe the strength and direction of the linear relationships of the variables used in this study. Pearson's r correlations do not determine cause and effect or one variable's influence over another; it is simply the analysis of the linear relationships between two variables, whether quantitative or dichotomous (Hayes, 2022). For example, using Person's r, the closer the r value is to 1, whether the value is negative or positive, the stronger the linear relationship between the two variables (Hayes, 2022).

CHAPTER 4

RESULTS

The approval to conduct this research study and invitation to participate was emailed to 13 different school superintendents in the targeted school system region. Within this region, 10school systems approved transportation employees to participate in the study. One system denied the request to conduct research in their system, and two systems never responded to the request. Five school systems had a committee of their own and IRB approval procedures within their school system, which had to be completed before approving the research to be conducted. Six systems approved the research study to be performed with a sign-off from their Superintendent. The one school system denying the survey to be completed within their system stated the denial directly resulted from transportation staff shortages. The system did not want to take the chance of the study negatively impacting the current transportation employees.

To determine response rates, the school system designee who sent the survey to participants was asked to provide how many eligible participants the survey was disseminated to via email. Forty percent (n = 4) of the school systems provided this email to their staff from the researcher, and 30% (n = 3) of the participants were emailed the survey directly from the researcher. Thus, the rough estimate of transportation surveys sent to eligible participants was 546, and the total number of participants who completed the survey was 115. Twenty-two participants started the study but did not complete the survey to the point of response submission. Adding all these respondents to the total would give an approximate response rate of 25% (n = 136). However, several systems with higher numbers of emailed surveys advised that their email database may have been outdated and that some messages were returned. This number of

returned messages was never given to the researcher to subtract from the estimated number of participants to whom the school system sent the emailed survey.

All school system transportation departments were also given a flyer to be handed out in each employee's school mailboxes as a follow-up to the email. This flyer was an exact copy of the email sent to each individual. A member of the transportation department advised the researcher that these flyers were disseminated to the eligible participants. Still, the researcher could not confirm that the eligible participants received the information. In addition, the researcher created a video requesting that the participants participate in the survey. This video was attached to the original email to each participant in the particular school systems randomly chosen to receive the video. As a result, 50% (n = 5) of the school systems participating in the study received the videos with their email.

Descriptive Statistics

Participants

This section of the survey collected data on the demographics of each research participant to assist with understanding the sample population. A total of 115 participants completed the survey for this study. Of the 115 participants, 99.1% (n = 114) consented to participate in the survey and 0.9% (n = 1) declined participation. Table 1 reflects the results of the participant descriptive statistics. Based on these results, most participants were female and reported a White/Caucasian ethnicity. All school systems were asked for their demographic information to ensure this study's participant demographics were representative of the population surveyed. However, the information was only provided by 5 out of the 10 participating school systems. The personnel demographic data provided by these five school systems show that their employee

population comprises a majority of females and White/Caucasian Ethnicity. Most surveyed participants reported being married and having a median age of 54. Just a little over half the

Table 1

Sociodemographic characteristics of participants

		N = 114	
Characteristic	Category	n	%
Gender			
	Female	68	59.6
	Male	46	40.4
Ethnicity			
	Asian/Pacific Islander	1	0.9
	Black/African American	3	2.6
	Hispanic/Latino(a)	1	0.9
	White/Caucasian	106	93.0
	Other	1	0.9
	Preferred not to answer	2	1.8
Marital Status			
	Never Married	6	5.3
	Married	87	76.3
	Separated	3	2.6
	Divorced	9	7.9
	Widowed	7	6.1
	Engaged	1	0.9
	Preferred not to answer	1	0.9
Education			
	Some High School	12	10.5
	High School Diploma	30	26.3
	GED	6	5.3
	Some College	46	40.4
	Associate's Degree	8	7.0
	Master's Degree	2	1.8
	Specialist's Degree	2	1.8
	Undergraduate Degree	5	4.4
Some Graduate Level Coursework		3	2.6

		N = 114	
Characteristic	Category	n	%
Job Description	Only Job		
	Yes	56	49.1
	No	58	50.9
	Current Job		
	Driver Only	100	87.7
	Monitor Only	5	4.4
	Both	9	7.9
Attendance			
	Always out of work	0	0
	Often out of work	0	0
	Sometimes out of work	5	4.4
	Rarely out of work	109	95.6
		M	SD
Age	Range (Yrs.)		
	26-80	54.84	11.34
Job Experience			
	Range (Months)		
Driver	2 - 408	120.26	108.33
Monitor	2 - 96	25.25	27.43

participants reported they had additional employment beyond their public-school transportation jobs to supplement their income. All participants reported their attendance at work to be consistently present by reporting "rarely out of work" or "sometimes out of work." The range in bus driver experience was from fairly new employees (2 months) to those who have been working for decades (34 years). The mean number of employment years was around 10 years as

a driver. The bus monitor experience ranged from two months to eight years, with the median years being slightly over two.

Setting

This section of the survey collected data on the characteristics of the participant's routes, the student populations they serve, and the support personnel on the bus. Table 2 shows the results of the setting characteristics descriptive statistics. Participants reported that most of this

Table 2
Setting characteristics

Characteristic	Category	N = 114 n	%
Route Type			
	Rural Only	87	76.3
	Rural & Urban	3	2.6
	Rural, Suburban, Urban	2	1.8
	Suburban Only	4	3.5
	Suburban & Urban	1	0.9
	Urban Only	6	5.3
	Not Sure	11	9.6
Route Based on Schools			
	Pre-K & Elementary K-5	3	2.6
	Pre-K, Elementary K-5, & MS/Jr. HS	1	0.9
	Pre-K, MS/Jr. HS, & HS	1	0.9
	Pre-K, Elementary K-5, MS/Jr. HS, & HS	45	39.5
	Elementary K-5 Only	18	15.8
	Elementary K-5 & MS/Jr. HS	2	1.8
	Elementary K-5 & HS	1	0.9
	Elementary K-5, MS/Jr. HS, & HS	20	17.5
	MS/Jr. HS Only	5	4.4
	MS/Jr. HS & HS	16	14.0
	HS Only	2	1.8
Number of Student Passengers			
	1-10	13	11.4
	11-20	8	7.0
	21-30	18	15.8
	31-40	10	8.8
	41-50	30	26.3
	51-60	24	21.1
	Over 60	11	9.6
Type of Route			
	Special Education Only	20	17.5
	General Education Only	72	63.2
	Both	20	17.5
	Unsure	2	1.8

Characteristic	Category	n	%
Route Time		N = 114	
	Morning Only	0	0.0
	Afternoon Only	2	1.8
	Both	112	98.2
More than one AM Route		N = 112	
	Yes	13	11.6
	No	99	88.4
More than one PM Route		N = 114	
	Yes	15	13.2
	No	99	86.8
Support Staff on Bus			
Monitor		N = 109	
	Yes	21	19.0
	No	88	81.0
Have Monitor & Helpful		N = 21	
	Yes	21	100.0
	No	0	0.0
Want a Monitor		N = 88	
	Yes	59	67.0
	No	29	33.0

study's routes were mainly rural, serving students from Pre-K age to High School on one bus route. The participants also reported that most routes served 31 to above 60 students per bus

route each day. The majority of data came from transportation employees who worked on General Education bus routes, coinciding with the demographic data provided by the five school systems. Participants reported that they mainly drove one afternoon and one morning route during the school day. Of the 109 participants who reported being bus drivers, most described that they did not have a bus monitor on their bus; however, all the drivers that reported having a bus monitor conveyed it was helpful. Over half of the participants who described not having a bus monitor also reported wanting a monitor on their routes.

Participants also had an opportunity to report noise levels and student behaviors during their morning and afternoon routes. Table 3 displays the results of the bus noise level and behavior during the morning and afternoon routes. Participants reported that the noise level of

Table 3

Bus Noise Levels and Behavior During the Morning and Afternoon Routes

		AM Route N = 112		PM Route N = 114	
Characteristic	Category	n	%	n	%
Behavior	Noise Level				
	Very quiet	62	55.4	7	6.1
	Somewhat noisy	48	42.9	54	47.4
	Very noisy	2	1.7	53	46.5
	Typical Behaviors				
	Not active	49	44.0	3	2.6
	Somewhat active	60	53.4	45	39.5
	Very active	3	2.6	66	57.9

the students were "very quiet" during the morning routes versus "very noisy" during the afternoon routes. Furthermore, participants also reported that the majority of students were "not active" during the morning route versus "very active" during the afternoon route.

Transportation Employees Perceived School Administration Support

This section of the survey collected data on the participant's perception of school administrators' support for transportation employees regarding challenging student behaviors on their bus routes. The descriptive statistics are presented in Table 4 regarding the transportation

Table 4

Transportation Employee's Perception of School Administrator's Support

Characteristic	Category	N = 114 n	%
Admin interested in student bus behavior			
	Not interested at all	19	16.7
	Somewhat interested	50	43.9
	Often interested	24	21.1
	Always interested	21	18.4
Admin is supportive of efforts to control behaviors on bus			
	Not at all	18	15.8
	Somewhat	52	45.6
	Often times	14	12.3
	Always	30	26.3
Admin ask more details about bus behaviors reported			
	Yes	55	48.2
	No	59	51.8
Admin gives follow-up on behavior referrals			
	Yes	64	56.1
	No	50	43.9
Admin takes action when bus behavior reported		N = 114	
	Not at all	12	10.5
	Somewhat	49	43.0
	Often times	22	19.3
	Always	31	27.2
Admin action reduces student behavior incidents		N = 102	
	Yes	57	55.9
	No	45	44.1
Stopped submitting bus behavior referrals because no admin support		N = 114	
	Yes	66	57.9
	No	48	42.1
Better communication needed with admin about behavior		N = 114	
	Not at all	27	23.7
	Somewhat	32	28.1
	Often times	12	10.5
	Definitely	43	37.7

employees' perception of the school administrators' support. Based on the participants' reports, most transportation employees perceived school administration as either "not interested at all" or "somewhat interested" regarding the challenging student behavior on their bus routes.

In addition, the participants reported they felt either "not at all supported" or only "somewhat" supported by school administrators in their efforts to control the challenging behaviors on their buses. For example, when submitting behavior referrals, most participants reported that administrators do not ask for more details regarding the reported problematic behaviors; however, most of the participants conveyed that the school administrators did give them follow-up on the referrals they submitted. The participants described that they felt school administration either "not at all" or "somewhat" took action when filing a bus behavior referral. However, most participants reported that when the administrators take action on the challenging behavior, it reduces the behavior incidents on the bus. Overall, most participants described there needs to be better communication between themselves and the school administrators. Most participants reported they had stopped submitting bus behavior referrals because there was no administrator support when they did turn in behavior referrals.

Transportation Employee Behavior Training

This section of the survey collected data on the participant's perception of the amount of behavior training they have received to work with the students on their bus, as well as the style and time of day in which they would like professional learning presented to them. The descriptive statistics are found in Table 5 regarding the transportation employees' perception of training. Most participants reported receiving behavior training during the current school year and did not feel they needed additional training. Most participants also stated that they had been

made aware of the behavioral needs of the students on their bus and thought they had been trained to implement these behavior plans or requirements. Most participants reported that it

Table 5

Transportation Employee's Perception of Training

Characteristic	Category	n	%
Received behavior training		N = 114	
	Yes	89	78.1
	No	25	21.9
Behavior training current year		N = 89	
	Yes	53	59.6
	No	36	40.4
Feel need more behavior training		N = 114	
	Yes	45	39.5
	No	69	60.5
Made aware of student behavior needs		N = 114	
	Yes	50	43.9
	No	64	56.1
Trained to implement behavior student needs		N = 50	
	Yes	34	68.0
	No	16	32.0

Characteristic	Category	N = 45 n	%
Time of day want training (First and Second Choices)			
	After AM Route	41	92.0
	After PM Route	7	16.0
	In between AM & PM Route	30	67.0
	Get sub/all day training	4	9.0
	Saturday	1	2.0
	School workday - No students	6	13.0
	Other	1	2.0
Presentation of Training (First and Second Choices)			
	In person	37	82.0
	Virtually	14	31.0
	Modules at own pace	15	33.0
	Hybrid (In-person/Virtual)	25	56.0

would be better to have the training after the morning but before the afternoon route if offered professional learning opportunities. Most participants also wanted to have this training in-person or a hybrid of in-person and virtual if necessary.

Transportation Employees Inclusion in School-Wide Behavior Supports

This section of the survey collected data on the participant's perception of their inclusion in the planning and implementation of school-wide behavior supports. Table 6 displays the

results of the descriptive statistics regarding the transportation employees' perceptions of inclusion in school-wide behavior supports. Based on the participants' reports, most reported that they did not participate in their district planning for bus behavior. The majority said their district did not implement PBIS or were "unsure." Most participants also reported that they were not involved with the school administrators or other staff to plan for PBIS or positive reinforcers in

Table 6

Transportation Employee's Perception of Inclusion in School-Wide Behavior Supports

Characteristic	Category	n	%
Participated in district behavior planning for bus behavior		N = 114	
	Yes	16	14.0
	No	98	86.0
School district implements PBIS		N = 114	
	Yes	26	22.8
	No	36	31.6
	Unsure	52	45.6
Are included with admin/other staff to plan for PBIS/positive reinforcers on the bus		N = 114	
	Yes	9	7.9
	No	105	92.1
Would like to be included with admin/other staff to plan for PBIS/positive reinforcers on the bus		N = 105	
	Yes	66	62.9
	No	39	37.1

the bus environment. As a result, the majority reported that they would like to be included in this planning.

Reliability

Cronbach's alpha was used to determine the reliability of the measurement instruments used in this study. Below are the results of each reliability test based on the data provided within the Goodboy et al. (2016) article, compared to the results found in this study.

School Administration Support

For this study, the scale to measure school administration support used three items arranged with a Likert-scale response from (1) not at all to (5) always. In this study, Cronbach's alpha for the calculated summed measure was $\alpha = .90$ ($M = 7.54$, $SD = 2.8$).

Student-on-staff Victimization

The Cronbach's alpha results for the summed measure of the student-on-staff victimization questions used in the Goodboy et al. (2016) study were $\alpha = .92$ ($M=26.91$, $SD=9.28$). The criterion used for this study included 16 of the original 20 items found in the Goodboy et al. (2016) study, which was also presented as a Likert-scale response choice ranging from (1) never to (5) most days. For the 16 items used in this study, Cronbach's alpha for the calculated summed measure was $\alpha = .92$ ($M=1.52$, $SD=.54$).

Occupational Self-Efficacy

The Cronbach's alpha results for the summed measure of the Short Version of the Occupational Self-Efficacy Scale questions used in the Goodboy et al. (2016) study were $\alpha = .83$ ($M= 24.89$, $SD = 3.26$). For this study, the scale to measure occupational self-efficacy used six items arranged with a Likert-scale response from (1) strongly disagree to (5) strongly agree (Goodboy et al., 2016; Rigotti et al., 2008). In this study, Cronbach's alpha for the calculated summed measure was $\alpha = .81$ ($M = 4.02$, $SD = .47$).

Job Stress Measure

The Cronbach's alpha results for the summed measure of the job stress questions used in the Goodboy et al. (2016) study were α = .83 (M = 7.44, SD = 3.06). In this study, Cronbach's alpha for the calculated summed measure was α = .83 (M=2.42, SD=.79).

Job Satisfaction

The Cronbach's alpha results for the summed measure of the BIAJS questions used the Goodboy et al. (2016) were α = .86 (M= 15.99, SD = 2.67). This study presented the four-item BIAJS to participants in a survey with Likert-scale responses ranging from (1) strongly disagree to (4) strongly agree. This set of questions used distractor items between items one and two, two and three, and three and four, allowing for a reduction in the method variance (Thompson & Phua, 2012). This study did not include the distractor items during the analysis of the results. Thus, there was a total of seven items included in the survey presented to participants. In this study, Cronbach's alpha for the calculated summed measure was α = .86 (M=3.90, SD=.68).

Burnout

This study used the Oldenburg Burnout Inventory (OBLI) to measure burnout regarding emotional exhaustion and work disengagement. The OLBI included 16 items arranged with a Likert-scale response from (1) strongly agree to (4) strongly disagree. The researchers noted that within the survey, the "disengagement items are questions 1, 3(R), 6(R), 7, 9(R), 11(R), 13, 15, exhaustion items are 2(R), 4(R), 5, 8(R), 10, 12(R), 14, 16. The (R) means reversed item when the scores should be such that higher scores indicate more burnout" (Demerouti et al., 2010). In this study, the Cronbach's Alpha for the calculated measure of emotional exhaustion was α = .85 (M = 17.70, SD = 3.63), and disengagement was α = .78 (M = 2.22, SD = .43).

Correlation Analysis

Pearson's r was used to describe the strength and direction of the linear relationships of the variables used in this study. Descriptive statistics and intercorrelations for all variables used in this study are reported in Table 7.

Table 7

Means, standard deviation, and intercorrelations between variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Student-on-staff victimization	1.53	.54	1								
2. Job Stress	2.42	.79	.51**	1							
3. Occupational Self-Efficacy	4.02	.47	-.23*	-.35**	1						
4. Job Satisfaction	3.91	.68	-.24**	-.48**	.41**	1					
5. Burnout: Exhaustion	2.21	.45	.42**	.69**	-.40**	-.55**	1				
6. Burnout: Disengagement	1.22	.43	.32**	.47**	-.38**	-.70**	.69**	1			
7. Years of Experience	9.61	8.99	.09	.12	.12	.03	-.04	-.06	1		
8. Behavior Management Training	1.23	.42	.02	.08	-.29**	-.26**	.23**	.19*	-.17	1	
9. Administration Support	2.54	.55	-.24**	-.33**	.08	.28**	-.34**	-.36**	-.04	-.28**	1

**. Correlation is significant at the 0.01 level (2-tailed Pearson correlations).

*. Correlation is significant at the 0.05 level (2-tailed Pearson correlation).

As reported in Table 7, six of the variables were correlated with student-on-staff victimization. The six variables were as follows: job stress ($r = .51$, $p < .01$), occupational self-efficacy ($r = -.23$, $p < .05$), job satisfaction ($r = -.24$, $p < .01$), burnout: exhaustion ($r = .42$, $p < .01$), burnout: disengagement ($r = .32$, $p < .01$), and administration support ($r = -.24$, $p < .01$). Based on the data, years of experience and behavior management training showed no correlation.

The data suggest a positive correlation between job stress and student-on-staff victimization suggests that the more staff members are victimized in their work environment, the

more on-the-job stress they experience. There is also a positive correlation between burnout: exhaustion and disengagement, and student-on-staff victimization. This data suggests that the more a staff member is victimized, the more emotional exhaustion and work disengagement they may have. In addition, the data suggests a negative correlation between occupational self-efficacy and job satisfaction, suggests that the more a transportation employee is victimized, the lower their occupational self-efficacy and lower job satisfaction. Finally, the data suggest a negative correlation between student-on-staff victimization and administration support. Thus, the more a staff member is victimized by students, the less they feel they have the support of the administration.

As can be seen from Table 7, five of the variables were correlated with job stress. The five variables were as follows: occupational self-efficacy ($r = -.35$, $p < .01$), job satisfaction ($r = -.48$, $p < .01$), burnout: exhaustion ($r = .69$, $p < .01$), burnout: disengagement ($r = .47$, $p < .01$), and administration support ($r = -.33$, $p < .01$). The data also suggests there is no correlation between job stress and years of experience and behavior management training.

Based on the data, there are negative correlations between job stress and occupational self-efficacy, job satisfaction, and administration support. Thus, the data suggests the more stress a person may have when performing their duties, the less they will feel occupational self-efficacy and job satisfaction. This a negative correlation between job stress and administration support suggests that the more stress a person is feeling on the job the less support they feel from school administration. There is also a positive correlation between job stress and burnout. The more job stresses an employee feels, the more likely they will become burned out through emotional exhaustion and work disengagement.

As can be seen from Table 7, four of the variables were correlated with occupational self-efficacy. The four variables were as follows: job satisfaction ($r = .41$, $p < .01$), burnout: exhaustion ($r = -.40$, $p < .01$), burnout: disengagement ($r = -.38$, $p < .01$), and behavior management training ($r = -.29$, $p < .01$). Based on the data, there was no correlation between occupational self-efficacy and years of experience or administration support.

The data suggest a negative correlation between occupational self-efficacy and burnout: emotional exhaustion and work disengagement, and behavior management training. The negative correlation indicates as a person feels less occupational self-efficacy, they will also feel more emotional burnout and disengagement from work. The negative correlation between occupational self-efficacy and behavior management training suggests the more transportation employees think they do not have adequate training, the less self-efficacy they will feel toward their job. However, the data also suggests a positive correlation between occupational self-efficacy and job satisfaction. This data indicates the better a person feels about their occupational self-efficacy, the higher the job satisfaction they will have in their job.

As can be seen from Table 7, four of the variables were correlated with job satisfaction. The four variables were as follows burnout: exhaustion ($r = -.55$, $p < .01$), burnout: disengagement ($r = -.70$, $p < .01$), behavior management training ($r = -.26$, $p < .01$), and administration support ($r = .28$, $p < .01$). Based on the data, there was no correlation between job satisfaction and years of experience.

The data suggest negative correlations between job satisfaction and burnout: emotional exhaustion and work disengagement, and behavior management training. Thus, the data suggest the more an employee's job satisfaction decreases, the more a person’s feeling of emotional

exhaustion and work disengagement will increase. There was also a negative correlation between job satisfaction and behavior management training. Thus, the more a person feels they do not have adequate behavior management training, the less likely they will be satisfied with their job. The data further suggests a positive correlation between job satisfaction and administration support. Thus, the data suggests the more employees feel the administration supports them, the more satisfied they are with their job.

As seen from Table 7, three variables were correlated with burnout: emotional exhaustion. The three variables were as follows burnout: disengagement ($r = .69$, $p < .01$), behavior management training ($r = .23$, $p < .01$), and administration support ($r = -.34$, $p < .01$). Based on the data, there was no correlation between burnout: emotional exhaustion and years of experience.

The data suggest a positive correlation between burnout: emotional exhaustion and burnout: disengagement and behavior management training. Thus, the more their emotional exhaustion increases, the more their work disengagement will increase. In the same respect, the more emotional exhaustion a person has at work, the more behavior management training they may feel they will need. This data also suggests a negative correlation between burnout: emotional exhaustion and administration support. Thus, the less an employee feels supported by their administration; the more a person's emotional exhaustion will increase.

As seen from Table 7, two variables were correlated with burnout: work disengagement. The two variables were as follows behavior management training ($r = .19$, $p < .05$) and administration support ($r = -.36$, $p < .01$). Based on the data, there was no correlation between burnout: work disengagement and years of experience. The data suggest a positive correlation

between burnout: work disengagement, and behavior management training. This data implies the more a person feels disengaged from their job, the more they will feel they need behavior management training in working with the students on the bus. The data also suggests a negative correlation between burnout: work disengagement, and administration support. This data implies that the less a person feels supported by their administration, the more work disengagement they will feel.

As can be seen from Table 7, one variable was correlated with behavior management training. The one variable was administration support ($r = -.28$, $p < .01$). The data suggests a negative correlation between behavior management training and administration support. Thus, the less a person feels supported by their administration, the more they think they need behavior management training.

Mediation Analysis

Mediation analyses were used to analyze hypotheses one, two, and three of this data set. Researchers use mediation analysis models to determine if a causal antecedent variable X is anticipated to influence the outcome variable Y through a mediating variable M (Hayes, 2022). For this study, the variables for the mediation analyses were the causal antecedent variable (IV) student-on-staff victimization, the intervening variable (M) job stress, and the outcome variable (DV) either occupational self-efficacy, job satisfaction, burnout: exhaustion, or burnout: disengagement depending on the hypotheses being explored. Each model analysis used 5,000 bootstrap samples with 95% bootstrap confidence levels to measure the indirect and direct

effects. Table 8 summarizes the simple mediation models and unstandardized model coefficients with standard errors of the indirect and direct effects for hypotheses one, two, and three.

Table 8

Simple mediation models and unstandardized model coefficients (H1 - H3)

		Consequent						
		M (Stress)				Y (Self-Efficacy)		
Antecedent		Coeff.	SE	p		Coeff	SE	p
X (VIC)	*a*	0.737	0.119	< .001	*c′*	-0.063	0.9	0.4826
M (Stress)					*b*	-0.183	0.061	0.003
Constant	i_M	1.294	0.193	< .001	i_y	4.562	0.148	< .001
		$R^2 = 0.256$				$R^2 = 0.123$		
		$F(1,112) = 38.480$, $p < 0.001$				$F(2,111) = 7.772$, $p < .001$		

		Consequent						
		M (Stress)				Y (Job Satisfaction)		
Antecedent		Coeff.	SE	p		Coeff	SE	p
X (VIC)	*a*	0.737	0.119	< .001	*c′*	0.005	0.122	0.9703
M (Stress)					*b*	-0.422	0.084	< .001
Constant	i_M	1.294	0.193	< .001	i_y	4.92	0.202	< .001
		$R^2 = 0.256$				$R^2 = 0.235$		
		$F(1,112) = 38.480$, $p < 0.001$				$F(2, 111) = 17.008$, $p < 0.001$		

		Consequent						
		M (Stress)				Y (Exhaustion)		
Antecedent		Coeff.	SE	p		Coeff	SE	p
X (VIC)	*a*	0.737	0.119	< .001	*c′*	0.082	0.067	0.225
M (Stress)					*b*	0.368	0.046	< .001
Constant	i_M	1.294	0.193	< .001	i_y	1.197	0.111	< .001
		$R^2 = 0.256$				$R^2 = 0.478$		
		$F(1,112) = 38.480$, $p < 0.001$				$F(2, 111) = 50.96$, $p < 0.001$		

		Consequent						
		M (Stress)				Y (Disengagement)		
Antecedent		Coeff.	SE	p		Coeff	SE	p
X (VIC)	*a*	0.737	0.119	< .001	*c′*	0.089	0.076	0.2481
M (Stress)					*b*	0.227	0.053	< .001
Constant	i_M	1.294	0.193	< .001	i_y	1.535	0.127	< .001
		$R^2 = 0.256$				$R^2 = 0.233$		
		$F(1,112) = 38.480$, $p < 0.001$				$F(2, 111) = 16.880$, $p < 0.001$		

Hypothesis 1:

A simple mediation analysis conducted using ordinary least squares path analysis determined that student-on-staff victimization on occupational self-efficacy was mediated by job stress. As seen from Table 8, student-on-staff victimization indirectly influenced occupational self-efficacy through its effect on job stress. Participants reporting student-on-staff victimization had a positive effect on job stress (*a* = .737; 95% CI = (.502, .972); p = .000), and participants reporting job stress had a negative effect on their occupational self-efficacy (*b* = -.183; 95% CI = (-.304, -.062); p = .003). A bootstrap 95% confidence interval for the indirect effect (*ab* = -0.135) based on 5,000 bootstrap samples was entirely below zero (-0.246 to -0.054). There was also no evidence that student-on-staff victimization influenced occupational self-efficacy independent of its effect on job stress (*c'* = -.063; 95% CI = (-.240, .114); p = .483).

Hypothesis 2:

A simple mediation analysis conducted using ordinary least squares path analysis determined that student-on-staff victimization on job satisfaction was mediated by job stress. As seen from Table 8, student-on-staff victimization indirectly influenced job satisfaction through its effect on job stress. Participants reporting student-on-staff victimization had a positive effect on job stress (*a* = .737; 95% CI = (.502, .972); p = .000) and participants reporting job stress had a negative effect on job satisfaction (*b* = -.422; 95% CI = (-.588, -.257); p = .000)). A bootstrap 95% confidence interval for the indirect effect (*ab* = -.311) based on 5,000 bootstrap samples was entirely below zero (-.493 to -.161). There was also no evidence that student-on-staff victimization influenced job satisfaction independent of its effect on job stress (*c'* = .005; 95% CI = (.246, .004); p = .970).

Hypothesis 3a:

A simple mediation analysis conducted using ordinary least squares path analysis determined that student-on-staff victimization on burnout: exhaustion was mediated by job stress. As seen from Table 8, student-on-staff victimization indirectly influenced burnout: exhaustion through its effect on job stress. Participants reporting student-on-staff victimization had a positive effect on job stress (*a* =.737; 95% CI = (.502, .972); p = .000) and participants reporting job stress had a positive effect on burnout: exhaustion (*b* = .368; 95% CI = (.277, .459); p = .000)). A bootstrap 95% confidence interval for the indirect effect (*ab* = .271) based on 5,000 bootstrap samples was entirely above zero (.156 to .413). There was also no evidence that student-on-staff victimization influenced burnout: exhaustion independent of its effect on job stress (*c'* = 0.082; 95% CI = (-.051, .214); p = .225).

Hypothesis 3b:

A simple mediation analysis conducted using ordinary least squares path analysis determined that student-on-staff victimization on burnout: disengagement was mediated by job stress. As seen from Table 8, student-on-staff victimization indirectly influenced burnout: disengagement through its effect on job stress. Participants reporting student-on-staff victimization had a positive effect on job stress (*a* = .737; 95% CI = (.502, .972); p = .000) and participants reporting job stress had a positive effect on burnout: disengagement (*b* = .227; 95% CI = (.123, .331); p = .000). A bootstrap 95% confidence interval for the indirect effect (*ab* =.167) based on 5,000 bootstrap samples was entirely above zero (.078 to .280). There was also no evidence that student-on-staff victimization influenced burnout: disengagement independent of its effect on job stress (*c'* = .089; 95% CI = (-.063, .240); p = .248).

Moderation Analysis

The mediation analysis of hypotheses one through three determined that all four models of student-on-staff victimization indirectly affected occupational self-efficacy, job satisfaction, burnout: exhaustion and disengagement mediated through job stress. Based on these results, a moderated mediation model analysis was used to determine if the significant indirect effects of student-on-staff victimization on workplace outcomes mediated through job stress varied systematically as a function of years of bus employment, perceived participation in behavior management training received, and perceived school system administration support. Moderated mediation analyses are used to determine if the effect of an independent variable on the mediator or the dependent variable is influenced by or dependent upon a moderating variable (Hayes, 2022). Each model analysis used 5,000 bootstrap samples with 95% bootstrap confidence levels to measure the indirect and direct effects. Table 9 – Table 11 summarizes the index of moderated mediation analysis for hypotheses four, five, and six.

Hypothesis 4a:

Based on the index of moderated mediation value, the years of experience is not significantly moderating the indirect effect of student-on-staff victimization on occupational self-efficacy through job stress since the 95% CI includes zero (Index = .000, 95% CI = (-.001, .000)). Thus, it can be concluded that the indirect effect of student-on-staff victimization on occupational self-efficacy mediated through job stress is not moderated by years of experience. See Table 9 for the index of moderated mediation results.

Hypothesis 4b:

Based on the index of moderated mediation value, the years of experience is not significantly moderating the indirect effect of student-on-staff victimization on job satisfaction through job stress since the 95% CI includes zero (Index = .000, 95% CI = (-.001, .001). Thus, it can be concluded that the indirect effect of student-on-staff victimization on job satisfaction mediated through job stress is not moderated by years of experience. See Table 9 for the index of moderated mediation results.

Hypothesis 4c:

Based on the index of moderated mediation value, the years of experience is not significantly moderating the indirect effect of student-on-staff victimization on burnout: exhaustion through job stress since the 95% CI includes zero (Index = .000, 95% CI = (-.001, .001). Thus, it can be concluded that the indirect effect of student-on-staff victimization on burnout: exhaustion mediated through job stress, is not moderated by years of experience. See Table 9 for the index of moderated mediation results.

Hypothesis 4d:

Based on the index of moderated mediation value, the years of experience is not significantly moderating the indirect effect of student-on-staff victimization on burnout:

Table 9

H4 Index of Moderated Mediation

Indirect Effect	Index	BootSE	BootLLCI	BootULCI	Results
H4a X_VIC --> M_Stress --> Y_SelfEf	.000	.000	-.001	.000	No moderated mediation
H4b X_VIC --> M_Stress --> Y_JobSat	.000	.001	-.001	.001	No moderated mediation
H4c X_VIC --> M_Stress --> Y_Exhau	.000	.000	-.001	.001	No moderated mediation
H4d X_VIC --> M_Stress --> Y_Disen	.000	.000	.000	.001	No moderated mediation

Note: X_VIC = Student-on-staff victimization; M_Stress = Job stress; Y_SelfEf = Occupational Self-Efficacy; Y_Exhau = Burnout: Exhaustion; Y_Disen = Burnout: Disengagement

disengagement through job stress since the 95% CI includes zero (Index = .000, 95% CI = (.000, .001). Thus, it can be concluded that the indirect effect of student-on-staff victimization on burnout: disengagement mediated through job stress is not moderated by years of experience. See Table 9 for the index of moderated mediation results.

Hypothesis 5a:

Based on the index of moderated mediation value, the perception of participation in training is not significantly moderating the indirect effect of student-on-staff victimization on occupational self-efficacy through job stress since the 95% CI includes zero (Index = -.038, 95% CI = (-.127, .095). Thus, it can be concluded that the indirect effect of student-on-staff victimization on occupational self-efficacy mediated through job stress is not moderated by the amount of training. See Table 10 for the index of moderated mediation results.

Hypothesis 5b:

Based on the index of moderated mediation value, training is not significantly moderating the indirect effect of student-on-staff victimization on job satisfaction through job stress since the 95% CI includes zero (Index = -.087, 95% CI = (-.280, .208). Thus, it can be concluded that the indirect effect of student-on-staff victimization on job satisfaction mediated through job stress is not moderated by the amount of training. See Table 10 for the index of moderated mediation results.

Hypothesis 5c:

Based on the index of moderated mediation value, training is not significantly moderating the indirect effect of student-on-staff victimization on burnout: exhaustion through job stress since the 95% CI includes zero (Index = .076, 95% CI = (-.185, .212). Thus, it can be concluded

that the indirect effect of student-on-staff victimization on burnout: exhaustion mediated through job stress, is not moderated by the amount of training. See Table 10 for the index of moderated mediation results.

Hypothesis 5d:

Based on the index of moderated mediation value, training is not significantly moderating the indirect effect of student-on-staff victimization on burnout: disengagement through job stress

Table 10

H5 Index of Moderated Mediation

Indirect Effect	Index	BootSE	BootLLCI	BootULCI	Results
H5a X_VIC --> M_Stress --> Y_SelfEf	-.038	.055	-.127	.095	No moderated mediation
H5b X_VIC --> M_Stress --> Y_JobSat	-.087	.125	-.280	.208	No moderated mediation
H5c X_VIC --> M_Stress --> Y_Exhau	.076	.104	-.185	.212	No moderated mediation
H5d X_VIC --> M_Stress --> Y_Disen	.047	.069	-.117	.156	No moderated mediation

Note: X_VIC = Student-on-staff victimization; M_Stress = Job stress; Y_SelfEf = Occupational Self-Efficacy; Y_Exhau = Burnout: Exhaustion; Y_Disen = Burnout: Disengagement

since the 95% CI includes zero (Index = .047, 95% CI = (-.117, .156). Thus, it can be concluded that the indirect effect of student-on-staff victimization on burnout: disengagement mediated through job stress, is not moderated by the amount of training. See Table 10 for the index of moderated mediation results.

Hypothesis 6a:

Based on the index of moderated mediation value, the perceived amount of school administration support is not significantly moderating the indirect effect of student-on-staff victimization on occupational self-efficacy through job stress since the 95% CI includes zero (Index = .025, 95% CI = (-.077, .092). Thus, it can be concluded that the indirect effect of

student-on-staff victimization on occupational self-efficacy mediated through job stress is not moderated by the transportation employees' perceived amount of school administration support. See Table 11 for the index of moderated mediation results.

Hypothesis 6b:

Based on the index of moderated mediation value, the perceived amount of school administration support is not significantly moderating the indirect effect of student-on-staff victimization on job satisfaction through job stress since the 95% CI includes zero (Index = .057, 95% CI = (-.173, .195). Thus, it can be concluded that the indirect effect of student-on-staff victimization on job satisfaction mediated through job stress is not moderated by the transportation employees' perceived amount of school administration support. See Table 11 for the index of moderated mediation results.

Hypothesis 6c:

Based on the index of moderated mediation value, the perceived amount of school administration support is not significantly moderating the indirect effect of student-on-staff victimization on burnout: exhaustion through job stress since the 95% CI includes zero (Index = -.050, 95% CI = (-.164, .149). Thus, it can be concluded that the indirect effect of student-on-staff victimization on burnout: exhaustion mediated through job stress, is not moderated by the transportation employees' perceived amount of school administration support. See Table 11 for the index of moderated mediation results.

Hypothesis 6d:

Based on the index of moderated mediation value, the perceived amount of school administration support is not significantly moderating the indirect effect of student-on-staff victimization on burnout: disengagement through job stress since the 95% CI includes zero (Index = -.031, 95% CI = (-.106, .097). Thus, it can be concluded that the indirect effect of student-on-staff victimization on burnout: disengagement mediated through job stress is not moderated by the transportation employees' perceived amount of school administration support. See Table 11 for the index of moderated mediation results.

Table 11

H6 Index of Moderated Mediation

Indirect Effect	Index	BootSE	BootLLCI	BootULCI	Results
H6a X_VIC --> M_Stress --> Y_SelfEf	.025	.041	-.077	.092	No moderated mediation
H6b X_VIC --> M_Stress --> Y_JobSat	.057	.092	-.173	.195	No moderated mediation
H6c X_VIC --> M_Stress --> Y_Exhau	-.050	.080	-.164	.149	No moderated mediation
H6d X_VIC --> M_Stress --> Y_Disen	-.031	.050	-.106	.097	No moderated mediation

Note: X_VIC = Student-on-staff victimization; M_Stress = Job stress; Y_SelfEf = Occupational Self-Efficacy; Y_Exhau = Burnout: Exhaustion; Y_Disen = Burnout: Disengagement

Transportation Employees' Additional Data

Content analysis procedures were used to analyze the additional comments from participants. Each open-ended question response was probed, and quantitative data were collected on shared content within each response. The participants were asked for this additional information to add depth and supplementary information to the responses given to the dichotomous and Likert-scaled answers. The following is the overall content obtained from these questions.

Q7: Why did you become a transportation employee?

The majority of participants, 85% (n = 97), submitting the survey responded and provided additional information and insight into why they started working with the public-school transportation department. Within the data analysis, one driver may have reported several reasons for becoming a transportation employee; these all were considered when summing the overall totals for that particular content. Based on the data, 38% (n = 37) reported coming to the profession for insurance benefits. Twenty-five (n = 24) responded that the convenience of the work schedule for either being on their children's/grandchildren's schedule or taking care of elderly parents. Twenty percent (n = 19) reported loving to work with children. Twelve percent (n = 12) of transportation employees described taking a transportation job as a second career change. Ten percent (n = 10) reported just liking the driving job, and 9% (n = 9) conveyed they came to the profession because of the need for drivers. Eight percent (n = 8) reported needing the supplemental income working with the transportation department brings for them.

Q8: What strategies and interventions do transportation employees use most frequently to reduce behavior incidents in their work environment?

The majority of participants, 83% (n = 95) submitting the survey, responded and provided additional information regarding what interventions they use to reduce behavior incidents on the bus. Within the data analysis, one driver may have reported several strategies and interventions, and these all were considered when summing the overall totals for that particular content. The most common student discipline intervention reported by participants, 70% (n = 70), was assigned seating. Eighteen percent (n = 17) stated they contacted the parents, and 15% (n = 14) reported just trying to treat the students with respect by talking with them and treating them with respect. Thirteen percent (n = 12) said they used discipline referrals, and 8%

(n = 8) reported using individual conversations with students regarding their behavior. Seven percent (n = 7) described using positive rewards and competition on the bus. In contrast, five percent (n = 5) reported implementing a no talking policy on their bus when there was increased behavior on their routes. Four percent (n = 4) stated they make students write sentences as a form of discipline, and another 4% (n = 4) reported having daily helpers on the bus.

Three percent (n = 3) described setting behavior expectations for their routes, and 2% (n = 2) reported providing fidgets, sensory toys, or dry-erase boards for students to use while on their bus. Two percent (n = 2) said they pulled their buses to the side of the road when there was increased behavior on the bus. Only 1% (n = 1) reported asking for the removal of students from their bus, and 1% (n = 1) reported asking for car seats for younger students who had increased behaviors.

Q9: What are the workplace incentives which encourage transportation employees to continue to work in a public-school bus environment?

The majority of participants, 86% (n = 98) submitting the survey, responded and provided additional information regarding what workplace incentives encouraged them to continue working on public school transportation. Within the data analysis, one driver may have reported several incentives that encouraged them to continue to work for the transportation department, and these all were considered when summing the overall totals for that particular content. A little over one-third, 35% (n = 34), of the transportation employees reported that the insurance benefits keep them working in this environment. Twenty percent (n = 20) said better pay would make them want to continue working for the transportation department. Twenty percent (n = 20) reported that the love for the job itself and the love of working with children

keeps them motivated to work in this profession. Eighteen percent (n = 18) reported the work schedule. Eight percent (n = 8) said they did not feel there were any real incentives for them to continue working in this profession. Four percent (n = 4) of participants reported they either continued working for retirement benefits, to serve the community or for the recognition and goodies they get from the schools. Two percent (n = 2) reported having a good boss encouraged them to stay.

Q10: What additional support do you feel you need from the school system to perform your daily job during your school bus route(s)?

The majority of participants, 73% (n = 83) submitting the survey, also responded and provided additional information regarding what support they felt the school system could give them to perform their daily job on the bus. Within the data analysis, one driver may have reported several supports they perceived as needed to perform their daily job during their bus route, and these all were considered when summing the overall totals for that particular content. Forty-one percent (n = 34) reported needing more support from school administration after a discipline write-up was made. Eighteen percent (n = 15) reported not needing any. Twelve percent (n = 10) reported needing better communication with administrators, teachers, and parents, and 10% (n = 8) conveyed the need to add bus monitors; specifically, requests were made for this to occur on more populated routes.

Seven percent (n = 6) wanted teachers and administrators to ride the bus routes with them or remove students with discipline issues from the privilege of riding the bus. Five percent (n = 4) requested better pay, 2% (n = 2) wanted to remind administrators not to argue or disagree with them in front of the students, and 2% (n = 2) wanted follow-up regarding the discipline write-ups

they made to the administration. One percent (n = 1) of participants reported the following additional support needed: being included in the student's Individual Education Plan (IEP) meetings concerning the bus; more information about the students on their bus; they wanted schools to stop giving candy and allowing on the bus; a PA system for each driver so they didn't have to yell at riders in the back of the bus, and one participant had no idea what supports were needed.

Q11: What additional training do you need/want to increase your success in your current job working on the school buses?

A greater part of the participants, 64% (n = 73) submitting the survey, also responded and provided additional information regarding what additional training they needed to increase their success working with the public-school transportation department. Within the data analysis, one driver may have reported the additional training they would like to receive to assist in their job duties, and these all were considered when summing the overall totals for that particular content. Forty-one percent (n = 30) reported none. Fifteen percent (n = 12) stated needing training for behavior management and discipline of students, and 15% (n = 11) wanted more training in communication with administration, teachers, parents, and students. Ten percent (n = 7) reported wanting more training working with students with special needs on their bus. Ten percent (n = 7) were not sure what they needed. Four percent (n = 4) reported wanting additional CPR, First-Aid, and medical crisis training. Three percent (n = 2) reported wanting additional bus safety. One percent (n = 1) of participants reported the following additional training: anger management, physical restraint; de-escalation/conflict resolution; dealing with students needing mental health and emotional support; and new drivers having the time to talk with experienced drivers.

Additional Comments

The participants were also allowed to provide additional comments regarding their job on the school bus. A small portion of the survey participants provided other statements and information beyond what they had already offered, 40% (n = 46). Of these participants, 33% (n = 15) stressed the importance of being paid more for working in this environment; 28% (n = 13) reiterated the need for administration support when dealing with behavior management and discipline; 22% (n = 10) stated they had no additional information; 15% (n = 7) reiterated the lack of communication between administration, teachers, parents, and students; and 11% (n = 5) discussed the point that more consistent policies and procedures need to be put in place to support the transportation department.

Nine percent (n = 4) of participants reported the following comments: the need for monitors; the need for appreciation in the form of actions and words from school systems, parents, and students; and the importance of recognizing how working on the bus was an emotionally stressful job. Two percent (n = 1) of participants reported the following comments: money needed to be allocated for the transportation department to buy rewards for positive incentives for transportation employees to give on the buses, and more special education routes needed to be created.

CHAPTER 5

DISCUSSION

The purpose of this study was to expand on Goodboy et al. (2016) and deLara (2008) studies by gathering the perspectives of transportation employees serving students riding on public school transportation. This targeted group of transportation employees shared their views through survey responses. The expectation was that allowing the transportation employees to express their perspectives would make them feel like the school system valued their voices and perspectives. In addition, the transportation employees had the opportunity to interject their feelings regarding student-on-staff victimization and how it impacts their work environment based on the amount of stress the employees perceive in their job. The specific workplace outcomes for this study were occupational self-efficacy, job satisfaction, and burnout: emotional exhaustion and work disengagement. The desire was to see if there was a correlation between these variables and how each of these variables may impact an employee's working environment.

As there continues to be a critical issue with transportation employee shortages, there is still a dearth of research regarding this topic. The reports of reasons "why" this shortage continues to increase post-pandemic include such ideas as the age of the population working in transportation was an older group who decided to retire due to health concerns. Others were forced to drive commercial trucks or buses for a higher pay rate; or even some employees sought jobs outside the transportation industry to work with employers who could pay higher wages (Blad, 2022; Cook, n.d.; Crockett, 2021; Hinton, 2022; McMahon, 2018). Thus, the significance of this research is critical to helping ask the "why" of the shortage. It is also important to note that the COVID-19 pandemic is not the only factor contributing to the deficit of transportation

employees, as the need was also seen pre-pandemic. Thus, evaluating how and when the work environment impacts transportation employees to the ultimate point of leaving the profession is essential.

This study adds to the lack of research by evaluating the correlation of some variables in the work environment of transportation employees. As a result, it is known that the interconnection between brick-and-mortar schools and the bus environment impacts many stakeholders. Overall, the transportation employee shortages impact the school system as a whole. This impact includes students, parents, teachers, administrators, and all school system stakeholders. These impacts relate to the literature describing Bronfenbrenner's Theory (1979) of a person's microsystem being impacted by environmental factors. A person's mesosystem is also influenced by the relationships with all stakeholders, which can ultimately affect the transportation employee's workplace outcomes through any stress created.

The present study built on the research of Goodboy et al. (2016) to examine the effects of student-on-staff victimization on workplace outcomes mediated through job stress. The results of this study correlated with the results of Goodboy et al. (2016), as this study also found that student-on-staff victimization had an indirect effect through job stress on the workplace outcomes of occupational self-efficacy, job satisfaction, and burnout: emotional exhaustion and work disengagement. The results of this study expanded on the Goodboy et al. (2016) research by confirming that student-on-staff victimization was positively correlated to job stress which then impacted the transportation employee's workplace outcomes of occupational self-efficacy, job satisfaction, and burnout: exhaustion and disengagement. Unlike the Goodboy et al. (2016) study, this study did not ask the participants about their anxiety while driving; thus, there is no

comparison regarding this outcome variable. Based on the data in both studies, the job stress in these positions continues to mediate the relationship between student-on-staff victimization and transportation employees' workplace outcomes.

The present study also extended the Goodboy et al. (2016) study concerning the moderation of years of experience as a function of the indirect effect of student-on-staff victimization mediated through job stress. However, unlike the Goodboy et al. (2016) research, this study did not find that the transportation employee's years of experience moderated the indirect effect of student-on-staff victimization on the employee's workplace outcomes (occupational self-efficacy, job satisfaction, burnout: exhaustion, and disengagement) through job stress. Thus, based on the results of this study, the number of years a transportation employee was in their job did not moderate the impact of their perceived job stress.

In addition, in extending the research of Goodboy et al. (2016), this study also hypothesized that the perceived participation in behavior management training and the amount of school administration support would moderate the indirect effect of student-on-staff victimization on workplace outcomes through job stress. However, based on this study's data analysis, neither of these variables had a moderating impact on the participant's job stress. The data from this study also suggest that the participants felt they had enough training and were aware of the behavioral needs of the students they were transporting. Although the amount of training and administrator support did not mediate job stress based on the data analysis, there was still data to support that having administrative support and better communication were areas of concern. Much like the participants in the deLara (2008) research, this study's participants repeatedly expressed their desire for better communication between themselves and school

administrators. Through their responses in this study, these participants also conveyed a more significant concern about not feeling supported by the administration when discussing and reporting challenging student behavior than wanting additional training.

The present study built on the deLara (2008) study by analyzing how much transportation employees were involved in planning their school system's behavior management policies and procedures. Like the deLara (2008) study, the results of this study found that the majority of participants, 60.6%, felt the school administration was not interested in the behavior happening on their buses, and 51.8% of the administrators failed to ask the transportation employees more details regarding the behavior on their bus. Based on the lack of perceived support, it makes sense that 76.3% of the participants surveyed also reported frustrations with the lack of communication between them and the school administrators. In addition, the frustration with school administrators went deeper because 57.9% of participants in this study reported they stopped submitting discipline reports because of the lack of administrative support. This study adds to deLara's (2008) findings through the data reflecting that when transportation employees perceive that completing behavior referrals is non-productive to assisting them with the challenging student behavior on the bus, they are more likely to stop reporting the behavior to school administration. One can see where this would add to the increased stress of this working environment, as the transportation employees feel their reports fall on deaf ears and there is no support from their school administration.

Also, building on the deLara (2008) research, this study found that 86% of the participants responded that they had not been involved in their school system's PBIS or district plan to discuss reducing challenging student behavior within the bus environment. School-wide

PBIS includes a system of change that must be incorporated into the whole school system. Thus, this should consist of school buses as an extension of the brick-and-mortar school. This study's results showed a need for PBIS to be reviewed with all stakeholders and for systemic implementation to be closely monitored. Based on the data, this systemic issue appeared in all school systems within this region. Based on the reports of this study, if the system administrators report the implementation of PBIS within their school system, transportation employees may need to be better informed on what this looks like for their school district. The issue of transportation employees' lack of awareness of PBIS within the school system or on the bus can be correlated to the lack of communication reported by transportation staff throughout the data. In many areas of this study's data output, the participants expressed dissatisfaction with communication between themselves and all the stakeholders and how it impacted their jobs.

In addition, this study allowed participants to give additional information beyond the dichotomous and Likert-scaled responses to provide better insight into why transportation employees come to work every day under the tremendous amount of responsibilities they have to fulfill their job. For example, most current literature focuses on student-on-student interactions within the bus. Still, there is very little research on transportation employees and their interactions with all stakeholders. The additional responses in this study allowed the participants to share that many participants come to work every day because they enjoy working with students or being on their family member's schedules. In addition, many come to work for the benefits, such as retirement and health insurance. However, one of the most significant takebacks from the information was that most participants reported they did not want/need additional

training; they wanted better communication and support from school administration regarding challenging student behaviors.

Limitations

There were several limitations of this study. As in the Goodboy et al. (2016) study, this study used a cross-sectional design to collect the data. Goodboy et al. (2016) reported this as a limitation of their research as it did not look at the long-term effects of student-on-staff victimization. This study was not only cross-sectional but also the surveys were distributed to transportation employees almost precisely a year after the COVID-19 pandemic happened. It was also a time when COVID-19 was again on the rise nationwide. This timing could have impacted the participant's responses to the survey instead of looking at the long-term effects.

Additionally, as in the deLara (2008) study, several questions did not have prior psychometrics within the literature to compare the reliability of the questions. For example, the questions used to measure the perceived participation in behavior management training and administration support had no primary psychometric data for comparison within the literature, as the researcher of this study created them. Thus, validity had not been established for these questions. Another limitation of this study was the distribution of the surveys to all eligible participants, which led to difficulty in determining an accurate response rate. The school systems participating in the study could not provide consistent data regarding how many individuals the survey was distributed to within each school system. Thus, making it difficult to calculate an accurate response rate.

Future Research

In reflecting on the Hendrix et al. (2019) research, this study determined that the higher within school system administration and the further the respondents were from working directly with transportation employees, the less likely the administration responded to any significant behavioral problems within their public-school bus environments. This study confirms that the voices of those working in the environment must be heard for a systemic change. Suppose those making the policies do not perceive there is a problem. In that case, one could most likely assume they will not feel the need to change any policies and procedures that align with the transportation employees and their opinions. Thus, taking into consideration the school administration that makes the policies reporting low incidents of behavior and the research results of Allen et al. (2003), Brown et al. (2018), deLara (2008), and Goodboy et al. (2016) along with the results of this study, support the opposite reports from those working in this environment. It stands to reason those making policy and procedure decisions need to look closer at exploring input from the transportation employees themselves when developing policies and procedures about behavior management within the bus environment.

This study did not focus on coping strategies, as did Goodboy et al. (2016). Although the coping strategies explored by Goodboy et al. (2016) did not decrease the stress of transportation employees, this area of research may need to be expanded. For example, further research may expand in this area to determine if the moderating effect of such variables as a transportation employee's age, sex, and marital status could potentially moderate the impacts of student-on-staff victimization, job stress, or workplace outcomes. In addition, the coping strategies used by those in different demographic groups, such as these, may impact each group differently. Thus, supporting this through further research may provide school administration insight into a specific

demographic group to target with support in particular areas that may help reduce job stress, which then impacts the employee's workplace outcomes.

Implications for School Administration

The expectation would be that the school system could use these findings to develop better communication and support from the administration to transportation employees. A communication plan could be designed specifically for this employee demographic by obtaining transportation employees' perspectives. Hearing the employees' voices and frustrations could help alleviate some of their stress within the work environment for the transportation staff. As in the deLara (2008) study, the participants provided strategies they used to intervene with challenging behavior within the bus environment. The participants in this study also offered methods they used to alleviate challenging behavior. Better communication between the transportation employees and school administrators would form more cohesive relationships, thus benefiting the employees and the students on the bus. By opening communication, the administrators could use the employee's self-identified needs regarding job stress and workplace outcomes impacted by student-on-staff victimization to further the transportation employees' knowledge of working with students in their care.

For example, the transportation employees in this research provided insight that they did not want/need professional learning. However, they did express the want/need for additional administration support or improved stakeholder communication pertinent to their daily job duties. Therefore, the expectation would be to produce a communication plan that would provide support to transportation employees to create the following: a more positive working environment for the employees themselves, a more positive learning environment for students as

an extension to their brick-and-mortar school day, and increased positive interactions and communication between transportation employees, teachers, school administration, parents, students, and other peers. Ultimately, all stakeholders would benefit, overall.

Related to communication support, these survey participants also reported the need for bus monitors, especially in looking at the noise levels and behavior activity on the bus during the afternoon route. Others said pay was low, and they needed to supplement their income. As the shortage of school personnel, in general, is a nationwide problem, school administration needs to look at how they could use these transportation employees to fill some employee gaps within the brick-and-mortar schools during their downtime between the morning and afternoon routes. For example, could administrators hire employees to be paraprofessionals throughout the day in classrooms and then provide monitoring on overcrowded buses in the afternoons? Administrators need to think outside the box and see how they could potentially maximize these employees for the benefit of all stakeholders.

Implications for Nationwide Policy Makers

One of the areas not explored by this study and other prior literature was the impact of the salaries and benefits provided for transportation employees. However, based on the reports of the participants in this study, this was a significant area of concern. Many of the participants reported having additional jobs to supplement their income. In terms of pay, some school systems have attempted many different avenues to pay transportation workers more money to keep them, but during the COVID-19 pandemic, schools were not in-person. Thus, there was no need for transportation employees, leading to layoffs for these employees (Crockett, 2021). A total of $13.5 billion in federal aid was given to school systems during the pandemic; however, it

was not used to supplement the employment of transportation employees (Crockett, 2021). These layoffs forced many of these employees into the private sector as drivers or in other higher-paying jobs. The school systems are now having trouble getting these employees back due to the same pay issues and the fact that the employees don't have to put up with the extra behavior management of students in their new public sector jobs (Crockett, 2021). In a driver's eyes, the new packages they deliver on their routes aren't disrespectful, and they don't fight or call them names like the students on their buses. They also don't have to deal with school administrators or the feeling of not being supported when addressing student behavior concerns.

However, for those sticking with the profession, how can we maintain their employment by taking some of the job stress away through the support they get from the school systems? This support could be through offering better benefits and pay. This study's results show that most participants had some college or higher education. Thus, based on these findings, policymakers may want to look at a pay increase based on a scaled factor involving the level of a person's education. Some participants also reported that this was a second career opportunity for them. A differentiated pay scale based on experience and education may allow transportation employees to see their employment as a career, not just a job to get them by.

Conclusion

In conclusion, the replicated results from Goodboy et al. (2016) confirm that extreme student behavior impacts the employee's workplace outcomes through job stress. This stress could be reduced for this employee population by increasing communication between all stakeholders, especially the school administration. Participants in this study repeatedly reported with their answers the impact of not getting paid enough or being rewarded/praised by the school

system. Another frustration for the transportation employees is not feeling supported by the school administration. Thus, each district should look at its data from the transportation employee's perspective. The administrator may gain insight into systemic behavior issues by gathering input from this invaluable team of people working with the students daily.

Additionally, these study results add to the literature regarding the continued need for communication and support for transportation employees in all aspects of their job. The study participants also offered insight into the time of day and format they felt would be most beneficial if they were provided further professional learning. One would assume that if the participants are available during these times, the time could also be used to allow for input and communication between themselves and the administration. Ultimately, school systems need to listen to the voices of their transportation employees and provide the additional support they are voicing. Thus, the anticipation would be for transportation employees to feel they had an active role in implementing school system policies to create more positive learning environments beyond the school building. Ultimately, the anticipation would be for the transportation employees to communicate more effectively and efficiently with all stakeholders during their daily routes. In turn, they would feel prepared to work with all students in their care on the public-school bus. Thus, creating a positive learning environment for students and a positive work environment for themselves.

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Appendix A

Participant Survey

Informed Consent

Q1.

Welcome to the transportation employee research survey!

Thanks in advance for your help with this important research!

Again, your participation in this survey is voluntary, and your decision to participate or not participate will not affect your employment. Furthermore, the survey results will not identify your personal information once you answer the questions, and your responses will be kept entirely confidential. This research does involve the transmission of data over the Internet, and every reasonable effort has been taken to ensure the effective use of available technology. However,

confidentiality during online communication cannot be guaranteed.

If you have any questions about this research, please feel free to contact the project coordinator for this study through the following email: Meg McDuffie - megellen@uga.edu. If you have any complaints or questions about your rights as a research volunteer, contact the IRB at 706-542-3199 or by email at IRB@uga.edu.

The survey will begin after your following response:

By clicking the button below, you acknowledge:
Your participation in the study is voluntary. You are 18 years of age. You are aware that you may choose to terminate your participation at any time for any reason.

-

- ◯ **I consent, begin the study**
- ◯ **I do NOT consent. I do NOT wish to participate**

Q2.
Thanks for considering participation in the survey.

I want to Thank You for being such an essential part of your school system daily. Have a great rest of your day!
Please click on the words "Amazon Gift Card" below to enter the drawing for one of five Amazon Gift Cards:

Amazon Gift Card

This link is separate from the survey responses and none of the personal identification you provide for the gift card can be linked to you. Your responses to the survey will remain confidential.

Block 1

Q3.

Welcome! Thank you in advance for participating in this survey regarding your job experiences on your bus. The survey is broken into four sections. The first section will first ask some questions describing who you are. The second section will ask you questions about your job and experiences with the student passengers. The third section will ask you questions pertaining to communication with the school

administration. The fourth section will allow you an opportunity to give additional information to support the planning of professional learning for all transportation employees. The last question will lead you to the gift card link. Have a great day!

Q4.

Please pick the school system(s) or programs you provide student bus transportation within. (If it is more than one, select all that apply. Example: If you work for Lumpkin Co. and drive a FUTURES bus or other specialty route, check both.)

Q5.

What is your age?

Q6.

Which best describes your racial background?

- ○ Asian or Pacific Islander
- ○ Black/African-American
- ○ Hispanic/Latino(a)
- ○ Native American
- ○ White/Caucasian
- ○ Other:
- ○ Prefer Not to Answer

Q7.

What is your current marital status?

- ○ Never married
- ○ Married
- ○ Separated
- ○ Divorced
- ○ Widowed
- ○ [ ] Other
- ○ Prefer Not to Answer

Q8.

To which gender do you most identify?

- ○ Female
- ○ Male
- ○ Not Listed

Q9.

What is your highest level of education?

- ○ Elementary School
- ○ Middle School
- ○ High School
- ○ High School Diploma
- ○ GED
- ○ Some College
- ○ Associate's Degree

- ○ Undergraduate Degree
- ○ Some Graduate Level Coursework
- ○ Master's Degree
- ○ Specialist's Degree
- ○ Doctoral Degree

Q10.

How many total years have you worked as a transportation employee in the following jobs? (check each box that applies and place the number of years in the box next to each position)

- ☐ _____ Driver
- ☐ _____ Bus Monitor

Q11.

Is working on the bus your only job during the day?

- ○ Yes
- ○ No

Q12.

How would you describe your overall attendance at work as a transportation employee?

- ◯ Always out of work
- ◯ Often out of work
- ◯ Sometimes out of work
- ◯ Rarely out of work

Q13.

What best describes your current job on the school bus (Pick one answer)?

- ◯ Bus Driver
- ◯ Bus Monitor
- ◯ Both

Q14.

If you are a driver, is a bus monitor typically on your assigned bus route(s)?

- ◯ Yes
- ◯ No

Q15.

Do you think it is helpful to have a bus monitor on your bus during the route(s)?

- ○ Yes
- ○ No

Q16.

Do you think it would be helpful to have a bus monitor on your bus during the route(s)?

- ○ Yes
- ○ No

Q17.

Do you consider your route: (Mark all that apply)

- ☐ Rural
- ☐ Suburban
- ☐ Urban
- ☐ Not sure

Q18.

During your assigned bus route, what age levels do you transport on the bus at the same time? (Check all

age groups that apply)

- [ ] Pre-K (5 or under)
- [ ] Elementary (K-5)
- [ ] Middle School/Jr. High (6-8)
- [ ] High School (9-12)

Q19.

Do you transport:

- ○ Special Education Students
- ○ General Education Students
- ○ Both Special Education and General Education Students together
- ○ Unsure

Q20.

On average, how many total students ride your bus during one route daily?

- ○ 1-10
- ○ 11-20
- ○ 21-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ over 60

Q21.

Which applies most to your job on the school bus? (Pick one answer)

- ○ Morning route only
- ○ Afternoon route only
- ○ Both Morning and Afternoon routes

Q22.

Do you have more than one route during the MORNING in a typical school day?

- ○ Yes
- ○ No

Q23.

During the MORNING route, is the bus noise level typically: (Mark the one that best fits "most" days)

- ○ Very Quiet
- ○ Somewhat Noisy
- ○ Very Noisy

Q24.

During the MORNING route, are the student behaviors typically: (Mark the one that best fits "most" days):

- ○ Not active
- ○ Somewhat active
- ○ Very active

Q25.

Do you have more than one route during the AFTERNOON in a typical school day?

- ○ Yes
- ○ No

Q26.

During the AFTERNOON route, is the bus noise level typically: (Mark the one that best fits "most" days)

- ○ Very Quiet
- ○ Somewhat Noisy
- ○ Very Noisy

Q27.

During the AFTERNOON route, are the student behaviors typically: (Mark the one that best fits" most" days:

- ○ Not active
- ○ Somewhat active
- ○ Very Active

Block 2

Q28.

Thanks for continuing to participate! Just a few more questions regarding student behavior and your bus route(s). (Please answer openly and truthfully)

Q29.

Please rate the following items regarding your job working on a school bus:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
I find real enjoyment in my job.	○	○	○	○	○
My job is unusual.	○	○	○	○	○
I like my job better than the average person.	○	○	○	○	○
My job needs me to be fit.	○	○	○	○	○
Most days I am enthusiastic about my job.	○	○	○	○	○
My job is time-consuming.	○	○	○	○	○
I feel fairly well satisfied with my job.	○	○	○	○	○

Q30.

Please rate the following items regarding your job working on a school bus:

	Strongly Agree	Agree	Disagree	Strongly Disagree

	Strongly Agree	Agree	Disagree	Strongly Disagree
I always find new and interesting aspects in my work.	○	○	○	○
There are days when I feel tired before I arrive at work.	○	○	○	○
It happens more and more often that I talk about my work in a negative way.	○	○	○	○
After work, I tend to need more time than in the past in order to relax and feel better.	○	○	○	○
I can tolerate the pressure of my work very well.	○	○	○	○
Lately, I tend to think less at work and do my job almost mechanically.	○	○	○	○
I find my work to be a positive challenge.	○	○	○	○

	Strongly Agree	Agree	Disagree	Strongly Disagree
During my work, I often feel emotionally drained.	○	○	○	○
Over time, one can become disconnected from this type of work.	○	○	○	○
After working, I have enough energy for my leisure activities.	○	○	○	○
Sometimes I feel sickened by my work tasks.	○	○	○	○
After my work, I usually feel worn out and weary.	○	○	○	○
This is the only type of work that I can imagine myself doing.	○	○	○	○
Usually, I can manage the amount of my work well.	○	○	○	○
I feel more and more engaged in my work.	○	○	○	○

	Strongly Agree	Agree	Disagree	Strongly Disagree
When I work, I usually feel energized.	○	○	○	○

Q31.

Please rate the following items regarding your job working on a school bus:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I can remain calm when facing difficulties in my job because I can rely on my abilities.	○	○	○	○	○
When I am confronted with a problem in my job, I can usually find several solutions.	○	○	○	○	○
Whatever comes my way in my job, I can usually handle it.	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My past experiences in my job have prepared me well for my occupational future.	○	○	○	○	○
I meet the goals that I set for myself in my job.	○	○	○	○	○
I feel prepared for most of the demands in my job.	○	○	○	○	○

Q32.

Please rate the following items regarding your job working on a school bus:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My job tends to directly affect my health.	○	○	○	○	○

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
At the end of the day, my job leaves me "stressed out".	○	○	○	○	○
Problems associated with work have kept me awake at night.	○	○	○	○	○
I feel fidgety or nervous because of my job.	○	○	○	○	○

Q33.

Please rate how often the following student challenging behaviors happen during your bus route(s).

My student passengers .....

	Never	Rarely	Sometimes	Very Often	Most Days
Call me names	○	○	○	○	○
Hit me	○	○	○	○	○
Push me	○	○	○	○	○

	Never	Rarely	Sometimes	Very Often	Most Days
Threaten me	○	○	○	○	○
Damage my property	○	○	○	○	○
Make sexual comments directed at me	○	○	○	○	○
Spread rumors about me	○	○	○	○	○
Make rude gestures at me	○	○	○	○	○
Play pranks on me	○	○	○	○	○
Rally other passengers against me	○	○	○	○	○
Sexually harass me	○	○	○	○	○
Spit on me	○	○	○	○	○
Taunt me	○	○	○	○	○
Try to intimidate me	○	○	○	○	○
Throw objects at me	○	○	○	○	○
Heckle me	○	○	○	○	○

	Never	Rarely	Sometimes	Very Often	Most Days
Curse obscenities at me	○	○	○	○	○
Cause chaos on my bus	○	○	○	○	○
Try to distract me	○	○	○	○	○
Verbally abuse me	○	○	○	○	○

Block 3

Q34.

The following will allow you an opportunity to tell more about your prior student behavior management training and school administration support for your bus route(s). (Please answer openly and truthfully)

Q35.

Have you had any training to deal with student behavior management on your school bus?

- ◯ Yes
- ◯ No

Q36.

Was the student behavior management training this school year?

- ◯ Yes
- ◯ No

Q37.

Have you been made aware of any special behavior needs for your students on your bus? (ex: Behavior Intervention Plans, or specific strategies to use with them while riding the bus)

- ◯ Yes
- ◯ No

Q38.

Do you feel the teachers/school staff trained you adequately to implement the students' behavior need(s) during your bus route(s)?

- ○ Yes
- ○ No

Q39.

Do you feel you need more training to deal with challenging student behavior on your bus route(s)?

- ○ Yes
- ○ No

Q40.

Rank the order in which you would prefer the training to be presented to you (Drag and drop them in order of 1 being your most preferred):

In person

Virtually through a computer program

Modules you can watch at your own pace

A mix of both in person and virtual

Q41.

Rank the order of preferred time of day you would want training presented to you (Drag and drop them in order of 1 being most preferred):

After the morning route

After the afternoon route

In between the morning and afternoon routes

Get a sub and all day training

On a Saturday

On a school workday with no students

Other

Q42.

How interested do you feel your school administrators are in student behavior on your bus?

- ○ Not interested at all
- ○ Somewhat interested
- ○ Often interested

- ◯ Always interested

Q43.

Do you feel your school administrators make an effort to ask you more details about the student behavior you report to them?

- ◯ Yes
- ◯ No

Q44. **Do you feel the communication needs improvement between yourself and your school administrators about student behavior on the bus?**

- ◯ Not at all
- ◯ Somewhat
- ◯ Often times
- ◯ Definitely

Q45. **Have you ever stopped submitting discipline reports because you felt you had no administration support?**

- ◯ Yes

- ○ No

Q46. **When you file a discipline report are you provided with follow-up from the administration about the results of the report?**

- ○ Yes
- ○ No

Q47.

Do you feel your school administrators are supportive of your efforts to control behavior on your bus route(s)?

- ○ Not at all
- ○ Somewhat
- ○ Often times
- ○ Always

Q48.

Do you feel school administrators take action when there is behavior reported on your bus route(s)?

- ○ Not at all

- ◯ Sometimes
- ◯ Often times
- ◯ Always

Q49.

Do you think the administration's action taken reduces the student behavior incidents on your bus route(s)?

- ◯ Yes
- ◯ No

Q50.

Have you been included in your district's planning efforts to reduce student behavior on school buses?

- ◯ Yes
- ◯ No

Q51.

Does your school district implement PBIS (Positive Behavior Interventions and Supports) on your school bus route(s)?

- ○ Yes
- ○ No
- ○ Unsure

Q52.

Are you included in meetings with the school administration, or other school staff, to plan for PBIS (Positive Behavior Interventions and Supports) or any other positive reinforcement program on your school bus?

- ○ Yes
- ○ No

Q53.

Would you like to be included in meetings with the school administration, or other school staff, to plan for PBIS (Positive Behavior Interventions and Supports) or any other positive reinforcement program on your school bus?

- ○ Yes
- ○ No

Block 4

Q54.

Here is an additional opportunity for you to give information about your job and how the school system could support your work. Remember your input will help to plan for other supports for transportation employees within your school system. Thanks for answering openly and truthfully.

Q55.

What strategies do you use to reduce challenging student behavior on your bus route(s)? (Please type in any you may use (ex: assigned seating))

Q56.

Why did you become a transportation employee?

Q57.

What are the incentives for you to continue working as a transportation employee?

Q58. **What additional training do you need/want to increase your success in your current job working on the school bus?**

Q59.

What additional support do you feel you need from the school system to perform your daily job during your school bus route(s)?

Q60.

If you have any additional comments regarding your job on the school bus, please feel free to add them here:

Block 5

Q61.

Thank you for participating in this survey. I want to Thank You for being such an essential part of your school system daily. Remember, your answers will benefit the entire transportation department and your community. Have a great rest of your day!

Please click on the words "Amazon Gift Card" below to enter the drawing for one of five Amazon Gift Cards:

Amazon Gift Card

This link is separate from the survey responses and none of the personal identification you provide for the gift card can be linked to you. Your responses to the survey will remain confidential.

Appendix B

Demographics Questionnaire Permission

I have attached my survey. As the sample was small I don't have psychometrics for it. Please feel free to use it; I would be very interested in how you incorporate it and in the results of your work.

Best of luck!

Ellen deLara

Ellen deLara, PhD, LCSW-R, ACSW
Board Certified Diplomate
Associate Professor Emerita
Syracuse University
(607) 257-2644

Appendix C

Student-on-Staff Victimization

Student-on-Staff Victimization:
Check all that apply:
My student passengers:

1. Call me names
2. ~~Hit me*~~
3. ~~Push me*~~
4. Threaten me
5. Damage my property
6. ~~Make sexual comments directed at me*~~
7. Spread rumors about me
8. Make rude gestures at me
9. Play pranks on me
10. Rally other passengers against me
11. ~~Sexually harass me*~~
12. Spit on me
13. Taunt me
14. Try to intimidate me
15. Throw objects at me
16. Heckle me
17. Curse obscenities at me
18. Cause chaos on my bus
19. Try to distract me
20. Verbally abuse me

*This item was taken out of this study in the survey presented to participants.

Interval Measure:

(1) Never
(2) Rarely
(3) Sometimes
(4) Very Often
(5) Most days

Goodboy, A.K., Martin, M.M., & Brown, Elizabeth (2016). Bullying on the school bus: deleterious effects on public school bus drivers. *Journal of Applied Communication Research*, 44(4), 434-452. http://dx.doi.org/10.1080/00909882.2016.1225161

Appendix D

Short Version of the Occupational Self-Efficacy Scale

Workplace Outcome:

Occupational Self-Efficacy:

1. I can remain calm when facing difficulties in my job because I can rely on my abilities.
2. When I am confronted with a problem in my job, I can usually find several solutions.
3. Whatever comes my way in my job, I can usually handle it.
4. My past experiences in my job have prepared me well for my occupational future.
5. I meet the goals that I set for myself in my job.
6. I feel prepared for most of the demands in my job.

**Change "in my job" to "as a bus staff member (driver/driver assistant)"

Interval Measure:

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. Journal of Career Assessment, 16, 238– 255. doi:10.1177/1069072707305763

Appendix E

Job Stress Measure

Workplace Outcome:

Job Stress:

1. My job tends to directly affect my health.
2. At the end of the day, my job leaves me "stressed out."
3. Problems associated with work have kept me awake at night.
4. I feel fidgety or nervous because of my job

Interval Measure:

(1) Strongly Disagree
(2) Disagree
(3) Neutral
(4) Agree
(5) Strongly Agree

Netemeyer, R. G., Maxham, J. G. III, & Pullig, C. (2005). Conflicts in the work-family interface: Links to job stress, customer service employee performance, and customer purchase intent. *Journal of Marketing*, 69, 130–143. doi:10.1509/jmkg.69.2.130.60758

Appendix F

Brief Index of Affective Job Satisfaction (BIAJS)

Workplace Outcome:

Job Satisfaction: Brief Index of Affective Job Satisfaction (BIAJS)

Thinking specifically about your current job, do you agree with the following?

1. I find real enjoyment in my job.
2. I like my job better than the average person.
3. Most days I am enthusiastic about my job.
4. I feel fairly well satisfied with my job.

Interval measure: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Distracter items: These are used to help attenuate method variance and are removed from analyses: My job is unusual (insert between Items 1 and 2); My job needs me to be fit (insert between Items 2 and 3); My job is time consuming (insert between Items 3 and 4).

Thompson, E. R., & Phua, F. T. T. (2012). A brief index of affective job satisfaction. Group & Organization Management, 37(3), 275–307. doi:10.1177/1059601111434201

Appendix G

Oldenburg Burnout Inventory (OLBI)

Workplace Outcome:

Burnout: Oldenburg Burnout Inventory (OLBI)

Instructions: Below you find a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting the number that corresponds with each statement.

1. I always find new and interesting aspects of my work.
2. There are days when I feel tired before I arrive at work.
3. It happens more and more often that I talk about my work in a negative way.
4. After work, I tend to need more time than in the past in order to relax and feel better.
5. I can tolerate the pressure of my work very well.
6. Lately, I tend to think less at work and do my job almost mechanically.
7. I find my work to be a positive challenge.
8. During my work, I often feel emotionally drained.
9. Over time, one can become disconnected from this type of work.
10. After working, I have enough energy for my leisure activities.
11. Sometimes I feel sickened by my work tasks.
12. After my work, I usually feel worn out and weary.
13. This is the only type of work that I can imagine myself doing.
14. Usually, I can manage the amount of my work well.
15. I feel more and more engaged in my work.
16. When I work, I usually feel energized.

1=Strongly agree, 2=Strongly Disagree, 3=Disagree, 4=Strongly Disagree

Note. Disengagement items are 1, 3(R), 6(R), 7, 9(R), 11(R), 13, 15. Exhaustion items are 2(R), 4(R), 5, 8(R), 10, 12(R), 14, 16. (R) means reversed item when the scores should be such that higher scores indicate more burnout.

Demerouti, E., Mostert, K., & Bakker, A.B. (2010). Burnout and work engagement: a thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology*, 15(3), 209-222.

Appendix H

Local School System Approval Letter

Request for Permission to Conduct Research in Schools
Dear Sir/Madam,

My name is Meg McDuffie, and I am a Doctoral Candidate student at the University of Georgia. I am seeking permission to conduct research within your school system. This study will be conducted under the supervision of Dr. Cynthia Vail with the UGA Department of Communication Sciences and Special Education. Through this department, my committee has approved to approach school systems regarding approval for my research. The research has been presented to the IRB committee through the University of Georgia IRB Portal and is awaiting approval pending permission to conduct research from each local school system.

The research will involve contact with all transportation employees currently employed by the school system, as either a bus driver or bus support staff who hold part-time or full-time positions. The purpose of the study will be to gain insight into the perspectives of transportation employees regarding student behaviors within the bus setting and how it can impact their specific workplace outcomes. In addition, the information obtained will help further develop professional learning for these invaluable employees within each school system.

The survey would be distributed to the employees via email and completed via phone or computer. The survey should take each employee approximately 20-25 minutes of their time to complete. Participation in the survey is entirely voluntary, and there are no known or anticipated risks to participation in this study. All information provided will be kept confidential and used for research purposes only. No identifying information from participants will be linked to their responses or the schools/school systems they serve.

Attached you will find a copy of the proposed survey, which each participant will be given. A final copy of the final UGA IRB approval will be sent to you before any surveys are distributed to staff.
Upon completing the study, I will provide the county with the full research report upon request. If you require further information, please do not hesitate to contact me.

Sincerely,
Meg McDuffie, M.P.A
University of Georgia
706-201-8805 (c)
Email: mmcduffie@pioneerresa.org

_____

___ I am hereby giving consent to conduct the study entitled: “Public School Transportation Employees on the Bus: Impacts of Student Behavior on Job Stress and Workplace Outcomes” within **_____** County.
___ I am not hereby giving consent to conduct the study entitled: “Public School Transportation Employees on the Bus: Impacts of Student Behavior on Job Stress and Workplace Outcomes” within **_____** County.
___ Please contact _____ for further permission within _____ County for consent to conduct research.
This permission is granted by:
_____ _____ _____ Signature Title Date

Appendix I

Institutional Review Board (IRB) Approval

UNIVERSITY OF GEORGIA

Tucker Hall, Room 212
310 E. Campus Rd.
Athens, Georgia 30602
TEL 706-542-3199 | FAX 706-542-5638
IRB@uga.edu
http://research.uga.edu/hso/irb/

Human Research Protection Program

EXEMPT DETERMINATION

November 12, 2021

Dear Cynthia Vail:

On 11/12/2021, the Human Subjects Office reviewed the following submission:

Title of Study:	Public School Transportation Employees on the Bus: Impacts of Student Behavior on Job Stress and Workplace Outcomes
Investigator:	Cynthia Vail
Co-Investigator:	Meg McDuffie
IRB ID:	PROJECT00004408
Funding:	None
Review Category:	Exempt 2(ii)

We have determined that the proposed research is Exempt. The research activities may begin 11/12/2021.

Since this study was determined to be exempt, please be aware that not all future modifications will require review by the IRB. For more information please see Appendix C of the Exempt Research Policy (https://research.uga.edu/docs/policies/compliance/hso/IRB-Exempt-Review.pdf). As noted in Section C.2., you can simply notify us of modifications that will not require review via the "Add Public Comment" activity.

A progress report will be requested prior to 11/12/2026. Before or within 30 days of the progress report due date, please submit a progress report or study closure request. Submit a progress report by navigating to the active study and selecting Progress Report. The study may be closed by selecting Create Version and choosing Close Study as the submission purpose.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103).

Appendix I

Participant Email

Hello Everyone,

My name is Meg McDuffie. I am a student in the Communication Sciences and Special Education Department at the University of Georgia under the supervision of Dr. Cynthia Vail. I am inviting you to participate in a research study that will provide you with an opportunity to answer questions about your job working in public school transportation.

I am interested in understanding a transportation employee's job experience during your daily bus routes. I will do this by asking you questions about your regular bus routes, activity routes, challenging student behavior, school support, and additional professional learning you may want to assist you in performing your daily job duties. The intent is to use the information from the survey to develop future support for transportation employees, like designing professional learning specifically for challenging student behavior on the bus.

Your participation in this survey is voluntary, and your decision to participate or not participate will not affect your employment. Furthermore, the survey results will not identify your personal information once you answer the questions, and your responses will be kept entirely confidential.

The survey can be done at your convenience and should take you approximately 20 – 25 minutes or less to complete. You can get to the survey through the link provided in this email and use a computer, Chromebook, or phone to complete it, whichever you prefer.

You will also have the opportunity to enter into a drawing for one of five $25 gift cards to Amazon. You do not have to participate in the study to enter the gift card drawing. Once you open the survey attached to this email, there will be a prompt to accept or decline participation. Once you select, the survey will direct you to another site to enter your information for the gift card drawing.

If you have any questions about this research, please feel free to contact the project coordinator for this study through the following email: Meg McDuffie -XXXXX@uga.com. Also, if you have any complaints or questions about your rights as a research volunteer, contact the IRB at 706-542-3199 or by email at IRB@uga.edu.

Thanks in advance for your support with this project, and I look forward to hearing from all of you!

Survey Link Below:
Or you can also scan the following QR code for access:

Thanks,
Meg McDuffie