

**The Effect Professional Development Opportunities for School Transportation
Personnel Has on Student Bus Misconduct Referrals at the Elementary Level**

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Department of Education

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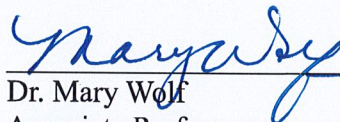
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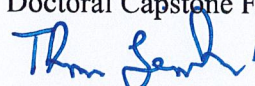
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Dedication

I would like to dedicate this doctoral journey to my amazing husband, children, family, and friends. Thank you for your continual support and encouragement over the last three years. I love you all unconditionally and couldn't have done this without you!

To my husband Nick, and my children, Logan and Caleigh. All three of you have been by my side while I worked late into the night, as well as on the weekends supporting me and encouraging me to keep going. Without your love and support, I never would have been able to get to this point.

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Abstract

School buses are responsible for transporting millions of children to and from school each year. The drivers of these buses have accepted a huge responsibility and must ensure the safety of all students on the bus; however, this is not always an easy task, especially when students exhibit negative or unsafe behaviors on the bus and create distractions for the driver. To address this concern, the researcher developed a mixed-methods action research project that would utilize the perceptions of school transportation personnel, elementary school parents, and school transportation administrators on student bus behaviors to create professional development opportunities for school transportation personnel. The goal of these trainings was to provide additional support and knowledge for school transportation personnel and decrease negative behaviors on their buses and vans, which would then decrease the number of bus misconduct referrals submitted to the elementary school. Qualitative data was collected in the form of survey responses and analyzed to guide the two days of professional development trainings for school transportation personnel. Quantitative data, in the form of bus misconduct referrals, was then collected from the 2022 – 2023 school year and compared to the number referrals from the 2023 – 2024 school year. When compared, the researcher found that the desired affect was achieved and there was a decrease in bus misconduct referrals from one year to the next.

CHAPTER I

Introduction

Student safety is one of the top priorities of educators, parents, and the community. However, it is usually discussed in relation to school safety, not school bus safety. According to the National Highway Traffic Safety Administration (NHTSA, n.d.-b), millions of children ride on school buses each day, suggesting that school bus safety is just as important as school safety. This statistic and the researcher's background in dealing with student bus misconducts has led to the focus of this action research project, which is to examine how professional development for bus drivers affects student behaviors and safety.

Background

The Punxsutawney Area Elementary School serves approximately 1060 students in kindergarten through sixth grade. The district is in western Pennsylvania and, according to the Future Ready PA Index (2024), the school district covers 274.03 square miles. All transportation services within the district are subcontracted through Tri-County Transportation, with a district-employed transportation director serving as a liaison between the company and the district.

The twelve-year contract with Tri-County Transportation is in effect until 2032. Through this contract Tri-County Transportation is responsible for purchasing and maintaining all buses and vans. Additionally, they are responsible for hiring and evaluating all drivers, and for ensuring they are certified to drive a school bus in the state of Pennsylvania. Finally, the school district and the transportation company work

collaboratively to create bus routes, discipline matrixes, and expectations for all students that utilize transportation services within the district.

The researcher has been an assistant principal within the Punxsutawney Area School District since 2019. From the fall of 2019 until the spring of 2023, the researcher was assigned to the elementary school and was responsible for processing all bus misconducts. Bus misconducts addressed by the researcher and the consequences given were assigned in accordance with the discipline matrix provided in the student handbook. These consequences were punitive in nature and did not help to decrease the number of bus misconducts that were issued. By the end of the 2022-2023 school year, bus misconducts accounted for the highest number of discipline referrals within the school.

Based on this information, the researcher decided to examine the number of bus misconducts being processed at the elementary school and determine a way to help lower the number of referrals. The researcher determined that one way to accomplish this was to work with the transportation company and its drivers to provide them with professional development opportunities centered around managing student behaviors.

Capstone Focus

To ensure the drivers receive training that will meet their needs, a school transportation personnel survey, parent survey, and semi-structured interviews were created by the researcher. These instruments and the data collected were used by the researcher to guide professional development trainings for all drivers. Therefore, the focus of this capstone project is to provide bus and van drivers with training opportunities related to managing student behaviors in the hopes of reducing the number of student bus misconducts at the elementary level.

Research Questions

The following research questions will help determine the perceptions of school transportation personnel and parents, as well as examine the effects that professional development opportunities have on student bus misconducts.

1. What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?
2. What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?
3. What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?

Expected Outcomes

The goal of this capstone project is to lower the number of bus misconducts at the elementary level. This goal will be achieved by providing the bus and van drivers with two days of professional development trainings that have been created for them based off survey and interview results collected by the researcher. The researcher will also collect and compare the total number of bus misconducts from the 2022-2023 and 2023-2024 school years to determine if these trainings helped to lower the total number of referrals submitted. Finally, the researcher will administer a post-survey for all school transportation personnel and parents to determine if any perceptions have changed because of the trainings provided.

Fiscal Implications

This project will not have any direct fiscal implications on the district. However, if the desired outcome of reducing the number of bus misconducts is achieved, it will provide the administration at the elementary school with more time to focus their attention on other tasks and responsibilities within the building. Additionally, by training the bus drivers and providing them with the supports they need, it is the hope of the researcher that there will be less driver turnover, which will help the bus company and school district create more consistency for the elementary school students.

Summary

Student behaviors on school transportation not only impact the students, but also the drivers and administration. This is because many times these misbehaviors cause the drivers to take their attention away from the road to correct the students. Additionally, the consequences assigned by building level administration tend to be punitive in nature and do not help to correct the behaviors from happening again. Therefore, it is the goal of the researcher to create training opportunities for bus and van drivers that will guide them in handling student misbehaviors and thus reduce the number of bus referrals issued to students and improve student safety.

To gain a better understanding of this topic, the next chapter of this capstone project will examine the literature associated with bus driver training programs and the certifications necessary to drive a bus in Pennsylvania, the importance of supporting school transportation personnel, commonly reported student misbehaviors on buses, and programs that have been utilized to reduce misbehaviors on school transportation. Chapters III and IV of the project will discuss the methodologies utilized by the

researcher, as well as the analysis of the data and the results obtained from that data.

Finally, Chapter V will provide recommendations for future studies and any limitations the researcher encountered.

Chapter II

Literature Review

For more than 100 years students have been required to attend school due to compulsory attendance laws. However, getting students to school has not always been an easy task due to varying limitations, such as: the distance between the school and the students' homes, the road conditions in which the transportation had to travel, and a lack of appropriate vehicles to safely transport students to and from school. These concerns and limitations have since been resolved with the advancement of school buses, as well as with the development of both federal and states laws that regulate the manufacturing of school buses, school bus safety, and the transportation of students.

In addition to the advancements in bus production and safety, driver training programs have been developed that are tailored to the needs of becoming a school bus driver. These programs focus on the requirements for obtaining the licensing for driving a bus, as well as the needs associated with transporting children of various ages, needs, and abilities. However, even with these resources and programs in place, many drivers still feel overwhelmed and unable to address major disciplinary concerns. Additionally, there is limited research that explores the perceptions of drivers and how they address these disciplinary concerns, and if they feel properly equipped to handle these situations.

Therefore, this literature review will not only discuss the history of school transportation and current driver training programs, but also the concerns and benefits related to safety, driver-student relationships, bus misbehaviors, possible interventions that aim at reducing negative bus behaviors, and how parental involvement is necessary for successful change.

School Transportation

School transportation is at the center of ensuring students attend school regularly with almost 50% of all U.S. students riding the bus to and from school each day (Edwards, 2022). This percentage translates into millions of students riding the school bus each day (NHTSA, n.d.-b). With so many parents and students relying on school transportation the question becomes, “How safe is the school bus?” According to the NHTSA (n.d.-b), “less than 1% of all traffic fatalities involve children on school transportation vehicles” (Overview section). And while this may be true today, this has not always been the case. At the inception of school transportation there were not any regulations regarding the vehicles that transported students to and from school, nor were there vehicles large enough to transport large numbers of students safely. Over time, this has changed, with the school bus has becoming one of the safest forms of transportation for school children.

History of School Transportation

Compulsory education laws in the late 1800s and early 1900s required that all children attend school; however, these laws left many rural families wondering how they would get their children to school. To alleviate this concern schools used horse-drawn wagons, better known as Kid Hacks or School Wagons to transport their students. According to Lenz (2022), these wagons were used for decades; however, they were not the best form of transportation and received much criticism from parents. In 1892 the invention of the School Car was introduced by Wayne Works. Works’ School Car was originally pulled by horses and had a back entrance that led to two long wooden benches on each side of the vehicle. This horse drawn version of the School Car was used until

1914 when Works created a motorized version that resembled a combination of a Model T and a trolley car. This new School Car became a popular form of school transportation and was used throughout the Depression. In 1925, Albert Luce Sr., the owner of two Ford dealerships, started developing his own version of the school bus (Lenz, 2022).

According to Lenz (2022), Luce's updated version of the school bus was constructed using a steel frame with a wooden body. While this new vehicle was better than Works' School Car, there were still safety concerns which resulted in numerous accidents. Due to these accidents, Luce decided in 1935 that he needed to convert to all-steel bodies for his school buses to increase safety. This change did not address all safety concerns for school transportation; however, it was an improvement to his original design. This new company and the school buses created by Luce was the start of Blue Bird busing company, a popular and still widely used bus manufacture today (Lenz, 2022).

As motorized school buses became a staple in transporting students to and from school, so did concerns over safety. To address these growing safety concerns, representatives from forty-eight states gathered in 1939 to develop standards and recommendations for school buses. This meeting became known as the National Conference on School Transportation and has met several times since 1939 to continue developing safety guidelines for transporting students, including those students with disabilities (National Association of State Directors of Pupil Transportation Service [NASDPTS], 2000). During this time, these representatives also set the standard for school bus colors with their National Chrome Yellow standard (American School Bus Council, 2016).

In addition to the development of the National Conference on School Transportation, the Federal Government also started developing standards related to school buses and school transportation in the 1960s and 1970s. According to The NASDPTS (2000), these federal standards include the National Traffic and Motor Vehicle Safety Act of 1966 and the School Bus Safety Amendments of 1974. NASDPTS (2000) also explains that NHTSA has issued thirty-six Federal Motor Vehicle Safety Standards (FMVSS) specific to school buses. Examples of these standards include:

- FMVSS No. 111, “Review Mirrors,” requires outside mirrors that provide the seated driver with a view in front of and along both sides of the bus.
- FMVSS No. 108, “Lamps, Reflective Devices, and Associated Equipment,” requires amber and red warning lights when the bus is stopped, or is about to stop, to load or unload passengers.
- FMVSS No. 220, “School Bus Rollover Protection,” specifies the minimum structural strength of buses in rollover-type accidents.
- FMVSS No 131, “School Bus Pedestrian Safety Devices,” requires school buses be equipped with an automatic stop signal arm on the left side of the bus to help alert motorists that they should stop their vehicles because children are boarding or leaving a stopped school bus. (para. 3)

In addition to federal standards, states have also adopted codes and regulations related to school transportation. These codes and regulations not only ensure the safety of

students traveling to and from school each day, but also address district requirements regarding transportation.

School Codes and Regulations

According to Keagy and Piper (2016), there are many factors that govern the transportation operations within a school district. These factors include federal laws and regulations, state laws and regulations, local laws and regulations, school board policy, and administrative discretion. Each of these areas are dependent upon the other and build upon one another according to a specific hierarchy that ensures the transportation company and school district are following all codes, regulations, and laws at all levels. For example, the federal government sets the minimum standard and each governing area below it must meet that standard. Figure 1 shows this hierarchy and the structure for the system.

Figure 1*Factors Governing Transportation Operations*

Federal Law and Regulations	Primary governing areas: bus construction and safety features; fuel and emission standards
State Law and Regulations	Primary governing areas: driver qualifications; required services to students; traffic laws; background clearances
Local Law and Regulations	Primary governing areas: local traffic patterns; traffic laws
School Board Policy	Primary governing areas: level of service, disciplinary policy
Administrative Discretion	Primary governing areas: interpretation of board policy; administrative procedure; decisions affecting economy and efficiency within the framework of law and policy

Note. Figure 1 shows the four governing factors that govern school transportation operations within a school district. From “The Hierarchy of Law and Board Policy,” by D. R. Keagy & D. M. Piper, D. M., 2016, *Pennsylvania School Business: A Guide for Educational Administrators (4th ed.)*, p. 198. Copyright 2016 by Pennsylvania Association of School Business Officials.

For example, while federal law does not regulate vehicle use or how students are to be transported, the NHTSA (n.d.-a) suggests within Highway Safety Program Guideline No. 17 that students should be transported to and from school on school buses. Therefore, based on this information, states have developed laws and regulations regarding transporting students. An example of this is seen in the in the Transportation of Pupils Act (1949/1979):

the board of school directors in any school district may, out of the funds of the district, provide for the free transportation of any resident pupil to and from

kindergarten, an elementary school, or a secondary school in which he is lawfully enrolled... (Section 1).

Additionally, according to Public School Code, “elementary school students may not be required to walk more than one and one-half miles along public roadways to get to a school bus stop (24 P.S. 13-1362),” or travel along hazardous roadways with no sidewalks to get to school (Keagy & Piper, 2016, pp. 198 - 199). Thus, ensuring that all students have access to safe and appropriate transportation to attend school and remain in compliance with compulsory attendance laws.

With these laws and regulations in place to ensure students have appropriate access to transportation to attend school, additional laws and regulations have also been created to properly train and prepare school bus drivers. These laws also fall within the Transportation of Pupils Act (1949/1979). According to section three of this statute, “The State Board of Education shall adopt regulations, including qualifications for school bus drivers, to govern the transportation of school pupils” (Transportation of Pupils Act 1949/1979). These regulations and qualifications have been developed in conjunction with the Pennsylvania Department of Transportation (PennDOT) and must be followed by all local governing boards within the state, as previously explained in Figure 1.

Drivers

The requirements for school bus drivers have changed drastically over the years, with various requirements being added to ensure the safety of children riding the bus. These changes include the development of driver training programs, the requirement of a Commercial Driver’s License (CDL), and federal regulations regarding drug and alcohol testing. According to the American School Bus Council (2016), Commercial Driver’s

Licenses (CDLs) became a requirement for all school bus drivers in 1992, with federal drug and alcohol testing becoming a requirement in 1996. These requirements and the training programs associated with obtaining a school bus license are more detailed than most realize and have attributed to the safety of school children across the county.

Driver Training Programs

According to the PennDOT (2021), there are several requirements that a prospective school bus driver must meet to obtain the commercial licensing necessary to drive a school bus. First, the driver must be at least 18 years of age and have a valid driver's license. Then, based on this primary requirement, the driver must obtain a commercial learner's permit. To get this permit the driver must submit a DL-31CD permit application, a "Self-Certification" form (DL-11CD), a "School Bus Driver's Physical Examination" form (DL-704), and pay the appropriate fees associated with each. Additionally, any driver that will be engaging in "non-excepted" transportation must submit a valid Medical Examiner's Certificate before their learner's permit is issued. The areas included in the physical examination include:

1. A vision screening and a check for hearing loss.
2. A check for physical impairment(s)
3. A semi-annual test for drivers with diabetes mellitus.
4. An annual stress test for drivers with cardiovascular conditions.
5. A check for uncontrolled hypertension and respiratory dysfunction.
6. A check for rheumatic arthritic, orthopedic, muscular, neuromuscular, or vascular disease.
7. A check for seizure disorder(s).

8. A check for drug or alcohol abuse.
9. A check for mental, emotional, or psychiatric disorder(s).
10. A check for tuberculosis in a transmittable stage.
11. A check for any other condition likely to impair the ability to drive a school bus safely. (PennDOT, 2021, p.1)

Additionally, PennDOT (2021) states that each driver must also comply with any regulations regarding communicable diseases that the Pennsylvania Department of Health and/or the local school district has in place.

In addition to the permit application requirements, all drivers must also pass and obtain an FBI federal criminal history check, a Pennsylvania State Police criminal history check, and a child abuse history check through the Pennsylvania Department of Public Welfare. Finally, all drivers must be drug and alcohol free when driving and should not consume any alcoholic beverages eight hours prior to driving a school bus (PennDOT, 2021).

Once a driver has obtained the general requirements for a learner's permit, they must also obtain a school bus endorsement and participate in a 20-hour training program that includes school bus operation and safety. The 20-hour training program includes 14-hours of classroom instruction and six hours of practical, in-bus training. After passing all knowledge exams and completing the 20 hours of instruction, a driver may take their road test with PennDOT or a third-party tester to obtain their official school bus endorsement on their license (PennDOT, 2021, p. 2; ybwAdmin, 2021).

Driver Training Materials

PennDOT (2022) has created a training manual for all certified instructors to use as a guide when training new school bus drivers. This training manual is also used to recertify drivers every four years to ensure they keep their school bus endorsements. Additionally, this manual and the training that corresponds with it ensure that Pennsylvania remains in compliance with the U.S. Department of Transportation's Federal Standard 17, which "requires each state to develop plans to reduce, as much as possible, the danger of death or injury to school children while being transported to and from school" (PennDOT, 2022, Forward section).

Within this manual there are nine units. These units include:

- Unit A – The School Bus Driver: Role, Responsibilities and Requirements
- Unit B – Student Management and Discipline
- Unit C – Student Loading and Unloading
- Unit D – Transportation of Students with Disabilities
- Unit E – Preventive Maintenance; Unit F – Safe Driving
- Unit G – Fundamentals of Driving a School Bus
- Unit H – Crash and Emergencies Procedures; and
- Unit I – Student Emergencies. (PennDOT, 2022, pp. iii – iv)

Each unit has several subsections that provide the drivers with detailed information related to the topics being discussed.

Safety

School buses are one of the safest forms of transportation for school children; however, negative student behaviors that occur on school buses and the safety concerns they pose have been a source of concern for drivers, administrators, and parents for many years. Furthermore, each time a student engages in a negative behavior, such as bullying, it takes away from the driver's ability to focus on the road, thus creating a safety concern.

How Student Behavior Effects Drivers. According to the NHTSA (2023), “driver distraction is a specific type of driver inattention that occurs when drivers divert attention from the driving task to focus on some other activity” (p. 1). This may include using a cellphone, attempting to use the stereo or navigation system within the vehicle, eating or drinking while driving, or talking to the passengers in the vehicle. Distractions such as these were responsible for 3,211 fatal motor vehicle accidents and 3,522 total fatalities across the nation in 2021 (NHTSA, 2023). Knowing that distracted driving increases a driver's likelihood for an accident, we must consider how student misbehaviors on a school bus affects the bus driver and their ability to safely transport children to and from school daily.

A study conducted by Zohar and Lee in 2016 examined the effect disruptive children had on school bus drivers' performance. Their study included school bus drivers from 34 rural school districts in Israel where questionnaires, interviews, and video recordings from buses were pulled and reviewed. Based on the data collected it was determined that student misbehaviors increased safety shortcuts by drivers and supported the fact that conversations with passengers is as disruptive as phone use and affects the bus driver's performance.

This study also examined how the driver's approach to dealing with negative student behaviors affected their ability to drive the bus. The two primary strategies utilized by the drivers were defined as "approach-oriented" and "avoidance coping." According to the study when drivers utilized the "approach-oriented" coping strategies, the driver was more distracted because this method involved looking in the review mirror and/or getting on the speaker to address student misbehaviors. This forces the driver to take their eyes off the road more. This was in comparison to the "avoidance coping" strategy where the driver ignored the students' misbehaviors, which allowed them to keep their eyes on the road (Zohar & Lee, 2016). This study's findings correlate with the information gathered by NHTSA's National Center for Statistics and Analysis (2023) on the importance of limiting the number of distractions for school bus drivers to ensure the safety of students, the drivers, and other passengers on the road.

In addition to the previous study on student behaviors and distracted driving Goodboy et al. (2016) analyzed the effect of school bus bullying on bus drivers. This study not only analyzed student-to-student bullying, but also student-to-driver bullying and how it affected their driving abilities. Their findings showed that while student-to-student bullying caused stress for the drivers, student-to-driver bullying had a "larger and more consistent effect" (p. 445). Some of the effects included anxiety while driving, dissatisfaction with their jobs, exhaustion, and the inability to perform their job duties (Goodboy et al., 2016). These factors and the factors presented in Zohar and Lee's 2016 study, show that change is needed in how we train and support bus drivers. Their priority is to safely transport students of all ages to and from school; yet, without additional support from school districts, administrators, and parents their jobs become increasingly

more complicated and difficult to do. It is imperative that the following research on the importance of the student-driver relationships, student behaviors, and intervention programs be examined and utilized in bus driver training programs.

Building Positive Relationships and Its Effect on Behaviors

Little to no research has been conducted on the effect bus driver and student relationships have on student behavior. At the same time, there is much research related to student-teacher relationships and how those relationships affect students' behaviors in the classroom. Therefore, it is being recommended by the researcher that this research can be utilized and applied to the school bus in its most general form and show how students' relationships with adults effect their behaviors.

According to Cook et al. (2018), "relationships [are] a core construct of human well-being..." (p. 227). Consequently, it is important for bus drivers to build positive relationships with the students on their buses, as bus drivers are the first school-related adult interactions a student has each morning. For many students, these interactions will determine how the student's day will go.

To ensure that drivers understand the importance of these interactions, the Pennsylvania School Bus Driver's Manual has devoted a portion of their instruction to this topic. According to the manual, drivers are encouraged to develop relationships with their students, as many times the drivers will be responsible for taking the students to and from school for several years. Additionally, it is recommended that drivers learn about their riders' behaviors and reactions, as well as build trust and respect with them by being fair and consistent, and by avoiding favoritism (PennDOT, 2022, p. B-6).

These recommendations are further supported by the research conducted by Claessens et al. (2017), who suggests that “relationships are based on repeated interactions” and that “hostile relationships are formed due to repeated unfriendly interactions and once a hostile relationship has been formed, one will be less inclined to show friendly behavior on a subsequent encounter” (p. 478). Accordingly, by training and encouraging bus drivers to build positive relationships with students while avoiding negative or hostile situations like showing favoritism or shouting, we are encouraging a positive and safe environment where students feel welcomed on the bus.

Cook et al. (2018) also discusses the importance of building positive relationships and creating a sense of connectedness. And, while his example is specific to the social setting of a classroom, it can be argued that the school bus is also a social setting where this is just as important. School buses, much like a classroom, have a variety of students on them at any given time that range in age, gender, and background. Therefore, it is important for drivers to create a sense of belonging where students will strive to promote positive behavior and work towards meeting the high expectations that have been set for them. To build these positive relationships, drivers must first understand student behaviors and the interventions that can be utilized to create a positive bus culture.

Bus Discipline

Student bus misconducts range in severity from minor to major offenses. Some examples of minor offenses may include talking loudly, switching seats, or eating on the bus. Major offenses are more severe and will likely cause more disruptions on the bus, taking the driver’s attention away from the road. Examples of major offenses include bullying, fighting, harassment, or inappropriate sexual language.

These negative student behaviors, regardless of which category they are placed into, are a cause for concern that must be addressed quickly and efficiently to ensure the safety of all students on the bus. Additionally, it is important that these behaviors and how to handle them are made clear to drivers, to not only create a positive and safe bus culture, but also to ensure that the drivers feel prepared and supported as they work to correct negative behaviors. Furthermore, the processes and procedures implemented on the school bus cannot rest solely on the drivers, but must be a joint effort that includes administrators, students, and parents.

Student Behaviors

There are various social settings related to a student's educational experience. These settings include formal and informal structures that take the form of classrooms, the school bus, and the playground. Of these settings, the two that can be the most challenging and that often lead to behavioral concerns for students are the bus and playground due to their lack of formal supervision (Washington & Zandvakili, 2019). Within these informal structures, the bus can be one the most challenging spaces to supervise due to the driver's position at the front of the bus and their need to always watch the road.

This poses two questions: What behaviors are most prevalent on buses, and what interventions can be used to support bus drivers as they transport children of all ages to and from school? The first question has been answered by Hendrix and Kennedy (2021) when they cite "bullying, harassment, sexually charged language, and general defiance" as the most frequent behavioral concerns on buses (p. 79). deLara (2008) further supports this claim by stating that the drivers in her study observed "verbal bullying, psychological

intimidation, physical bullying, fights, and sexual harassment on their buses.” With 90% of the drivers in her study reporting that they observed verbal bullying, 70% reporting psychological intimidation, and 20% observing sexual harassment (p. 57). To better understand these behaviors and the concerns they pose for students we must define each and apply them to the context of the school bus.

The first behavior reported in both studies was bullying. Bullying is defined by the Centers for Disease Control and Prevention (CDC, 2023) as, “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” (What is Bullying section). The effects of bullying range in severity; however, the CDC (2023) cites there is the potential for physical injury, self-harm, depression, anxiety, and lower academic achievement among those students that are bullied. Brown et al. (2021) expands upon this assertion from the CDC and explains that bullying has also been shown to increase a student’s risk for truancy and dropping out of school. And while bullying can be verbal or physical, and can take place anywhere and at any time, the bus is a major area of concern due to the lack of direct adult supervision.

The second behavioral concern cited by Hendrix and Kennedy (2021) and deLara (2008) is harassment and psychological intimidation. According to the United States Department of Labor (n.d.), “psychological intimidation or harassment includes making statements which are false, malicious, disparaging, derogatory, rude, disrespectful, abusive, obnoxious, insubordinate, or which have the intent to hurt others’ reputations” (“Intimidating” section). deLara (2008) further explains that this may include “group

exclusion, starting rumors, or sexual gestures” (p. 51). These behavioral concerns also pose a major concern for students on the bus, especially when considering the varying ages of students riding the bus, with younger elementary school students posing the greatest concern and risk.

The final two areas of concern included fighting and sexual harassment. First, the Merriam Webster (n.d.), defines fighting as “having or showing a readiness to fight” or “to strive to overcome a person by blows or weapons.” On a school bus students engaging in a fight may hit, punch, and/or kick each other, while the driver is at the front of the bus. This potentially leaves no one to stop the fight until the driver can pull over. Due to this lag in response time the chance for injuries increases, as does the increase for an accident due to the driver’s attention being taken away from the road.

The last area of concern as cited by Hendrix and Kennedy (2010), and deLara (2008), is sexual harassment. According to the CDC (2021), sexual harassment is “unwanted and unwelcome advances of a sexual nature. It could be touch, written note, joke, picture, etc. It can be intentional or unintentional” (Sexual Harassment section). The potential for this type of behavior is also a major concern because of the nature of the contact and the content that may be exchanged by students, and the fact that it may not be easily observed by the driver.

To better understand these behaviors and their ability to affect students on the bus, drivers, school officials, and parents must also understand the structure of the school bus. As Galliger et al. (2008) explains, the school bus is an unstructured setting where “children may encounter a diverse group of peers. [Where] the ride to school becomes an opportunity for unmonitored children to explore the possibilities of new friendships,

victimization of other children, [and] hierarchies among peers” (p. 45). This increases the possibility of problematic and concerning behaviors such as bullying, psychological intimidation/harassment, fighting, and sexual harassment.

To combat these behavioral concerns and to help create a safer, more structured setting on the school bus, there must be more attention given to bus drivers and their needs. Additionally, there must be better systems put into place that train drivers on how to identify and handle these behaviors, and what interventions can be used to promote positive behaviors among students.

Interventions

There are various possibilities to consider when looking at interventions and intervention programs on a school bus. Some of these interventions are part of a larger, school-wide program, where others are specific to the school bus. Before starting a program, a district must look at their specific areas of concerns and the goals they wish to meet by implementing a program. One way to gather this data and determine areas of need is to look to various research studies related to school bus discipline and model their procedures. Examples of research studies districts may wish to model their data collection after include Hirsch et al. (2004) study that compared the patterns of building specific school bus office discipline referrals to the patterns present in district-wide school bus office referrals. Another study conducted by Hendrix and Kennedy (2021) surveyed and interviewed school transportation officials to determine student misconduct issues and the “implementation and challenges of behavioral management strategies” (p. 80). Finally, in Brown et al. 2021 study, the researchers conducted semi-structured

interviews with drivers to determine their experience in addressing bullying and harassment.

While different, each research study led to data that provided the researchers with valuable information regarding student behaviors, the varying perceptions related to school bus behaviors and discipline, and the needs of school transportation personnel. Then, based on this information and the data collected, the researchers were able to create goals and intervention programs that appropriately met their stakeholders' needs, while improving the overall culture and student behaviors on the bus.

General Needs Within an Intervention Program. In addition to major discipline concerns such as bullying, fighting, intimidation, and harassment, there are also smaller yet just as disruptive behaviors. According to Tucker et al. (1998) these behaviors include students jumping from seat to seat, yelling out the windows, pulling each other's hair, using profanities, and screaming at the driver. These behaviors, in combination with the more severe behaviors that have been reported on school buses, can leave drivers feeling overwhelmed and anxious as they try to safely transport children to and from school. As a result, interventions that support bus drivers must be integrated into the school system. However, these interventions and systems cannot be a stand-alone method that the driver or the transportation department is solely responsible for. These interventions must be a priority for all administrators, teachers, parents, and students.

Before looking at systems and interventions that encourage positive bus behavior, the basic elements of discipline must first be addressed. This means defining what constitutes effective and ineffective discipline. According to Greenspan (2012), "to be an effective disciplinarian is to find a method that satisfies the needs of both the child and

the adult caregiver” (p. 12). To do this, Greenspan (2012) suggests finding a way to avoid causing conflict that will escalate the child’s behavior while not damaging their well-being. Adults are also cautioned against giving in to the child and their behaviors to keep them happy. Greenspan (2012) recommends that limits and structure need to be created because when a child is not provided with these supports, they are more likely to have negative interactions with their peers which can lead to rejection and unhappiness (p.12).

A child’s socioemotional development is also connected to their behavior and the discipline techniques used to correct them. As Greenspan (2012) explains, “children that are exposed to skilled discipline are generally better prepared to deal with life’s challenges than children exposed to inept or chaotic discipline” (p. 12). Furthermore, social competence affects a child’s success in school. This, however, goes beyond academic success and includes respect for authority and compliance with school rules, which are directly tied to a student’s behavior and the outcomes that result from these behaviors. Examples of the outcomes that result from this deficient in social competence include dropping out of school or being suspended or expelled (Greenspan, 2012, pp. 12 - 13).

Therefore, knowing the importance of developing students’ social competency related to behaviors, and knowing the need for a system and structure that sets limits, we must look at interventions for the school bus that provide drivers with the trainings and supports they need to be successful. Tucker et al. (1998) suggests a set of basic rules must be created that all students can follow. Additionally, these rules need to be consistent with the rules at school to ensure continuity. This is further supported by King et al. (2019), who also studied the effects of applying behavioral interventions on the bus to decrease

misbehaviors. According to King et al. (2019) not only does consistent rules create consistency for the students, but also “mitigates potential barriers to acceptance among students and staff” (p. 119).

As intervention programs and supports are created for the bus, King et al (2019) suggests that schools use a range of data to determine the specific needs for the program. This data may include discipline referrals and partnering with the drivers to determine what works and what does not. It is also suggested that specific goals be created for specific drivers, routes, and/or students. This individualized attention and intervention will ensure that each driver and students’ needs are being met. Additionally, this will help drivers as they work with students and find ways to approach them in a way that gains their respect (PennDOT, 2022, p. B-6).

Once specific goals are created, King et al. (2019), suggests that an initial training take place with the bus drivers. During this training the goals of the program are presented, along with the steps necessary for implementation. These steps and the interventions must include explicit behaviors and the consequences for each, as well as the reminder that a referral must be completed for major infractions. Finally, drivers must be provided with support in reinforcing positive student behaviors as well as how to correct minor infractions that do not reach the level of a discipline referral.

Intervention Programs. While intervention programs vary, Positive Behavioral Intervention and Support programs or PBIS programs have become very popular. In addition to PBIS programs, there are other intervention programs and systems that may also be utilized to address student behaviors on the school bus. To determine which system or program works best, each district must evaluate their needs and develop a

program that meets those needs. Furthermore, it must be mentioned that when looking into any intervention system or program, it cannot operate in isolation. As Keagy and Piper (2016) explain, “too often, the educational administration and transportation administration see their operations in isolation, with many problems created by their mutual failure to consider the “law of unintended consequences” (p. 197). This suggests that transportation operations and school operations are intertwined and that a decision in one area will affect the other (p. 198). All are reminded that parents, administrators, teachers, school transportation personnel, and students must all work together and communicate with each other to ensure the success of any program that is implemented.

General Interventions. A study conducted by Putman et al. (2003) examined the need for improving bus behavior by implementing a whole-school intervention. According to this study and the research surrounding intervention programs, Putman et al. (2003) suggests that to improve bus behaviors the following must be done: students must have acceptable behaviors defined and taught to them; drivers need training in how to monitor student activity while driving; incentives should be in place to motivate performance; and there must be support and participation from administration.

Using this information as a foundation, Putman et al. (2003) created a whole-school intervention program to improve bus riding behaviors. Their program utilized the following interventions:

- A list of safe bus-riding behaviors (“bus rules”) was generated and explained to the students. They were quizzed on these behaviors and were requested to demonstrate them using role-play scenarios.

- The bus drivers were taught how to monitor students more effectively during transportation and to provide positive reinforcement by giving them “caught being good” (CBG) cards when they adhered to the safe behavior expectations. This training occurred during 45 to 60 min session[s] attend by all drivers.
- The CBG cards included the name of the student, his or her grade, identified positive behavior, date of receipt, and respective bus. Awarded cards were collected each day and entered into a weekly school lottery. Lottery winners received small prizes and activity privileges...
- Each week, the school bus that has the fewest office referrals and suspensions received a “bus of the week” acknowledgement.
- With guidance from the consultant, school administrators tracked data systematically to verify the outcome of the interventions... (pp. 585 – 586)

This program, which became a collaborative effort, not only decreased the number of discipline referral on the bus, but also decreased the overall number of bus suspensions (Putman et al., 2003).

PBIS Programs. As previously mentioned, there are many types of intervention programs that can be utilized when trying to address and correct negative behaviors. In addition to a general intervention program, a Positive Behavioral Intervention and Support program or PBIS program must also be taken into consideration. These programs, while different and unique to each school district, all follow a similar structure.

First, these programs follow a tiered structure that is based on three levels of support. Within these tiers, the level of support and interventions increase as the student moves through each tier. Additionally, to encourage and reinforce positive behavior, a token system is typically utilized within these programs. Below is an explanation of what a typical PBIS program looks like and an example of how it has been utilized in school transportation.

According to Goldin and McDaniel (2018), positive behavior programs or PBIS Programs are defined as a “three-tiered prevention model with increasing supports designed to be implemented at each tier” (p. 99). The tiers within a PBIS model include tier 1, tier 2, and tier 3 interventions. In tier 1, all students take part in universal interventions which include school-wide expectations, explicit instruction in these expectations, and reinforcement of the expectations. In tier 2, students receive additional support if they do not respond to the tier 1 expectations. Then, if tier 2 supports do not work, a student will receive tier 3 individualized interventions to correct their behaviors (Goldin & McDaniel, 2018). Therefore, a Positive Behavioral Intervention and Support (PBIS) program is one way to establish this structure.

An example of a school bus specific PBIS program is seen in Galliger et al. 2008 study. Within this study the researchers worked with a district-level coach to implement a PBIS program in three elementary schools and two high schools. The steps for implementation are as follows:

1. Establish data-based goals for the program using a needs assessment.
2. Describe what PBIS is to stakeholders (bus drivers) and established their commitment to the program.

3. Develop a PBIS plan.
4. Step up training sessions and follow-up “booster” sessions with the bus drivers.
5. Evaluate the programs progress through data analysis and meetings with stakeholders (bus drivers and district level administration). (pp. 23 – 26)

Then, within these steps, various key components of the program were determined. This included the development of the plan for teaching all bus drivers about the PBIS program and the development of the tier 1 expectations that all students and drivers were expected to be learn.

The Tier 1 expectations, as provided by Kennedy and King (2019) include:

- Be Safe
 - Remain seated
 - Keep your hands, head, and objects in the bus
 - Cross in front of the bus and never behind
 - Make sure all traffic is stopped before crossing
- Be Respectful
 - Be courteous
 - Use respectful language
 - Take care of bus property
 - Follow your driver’s expectations
- Be Responsible
 - Keep the bus clean

- Avoid conflict
- Only get off at your stop
- Go directly to your home
- Ride your assigned bus. (p. 24)

This list, while simple, ensures that all bus drivers and students are aware of what the behavior expectations are in tier 1. These expectations, along with the plan in Figure 2, would be given to the drivers in step 4.

Figure 2

Sample PBIS Implementation Plan

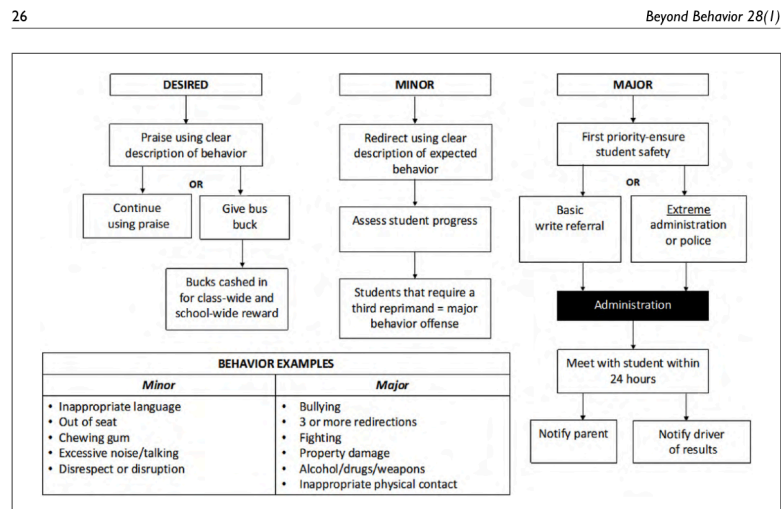
School Bus Driver Introduction and Training Fidelity Checklist	
PBIS Introduction	
✓	Use environment familiar to drivers
✓	Provide data that identifies the need for intervention
✓	Introduce and provide a brief overview of Positive Behavioral Interventions and Supports (PBIS) while avoiding technical jargon
✓	Provide pictures and examples of PBIS from within the drivers' serving schools (if applicable)
✓	Allow drivers to ask questions and provide feedback
School Bus Driver Training	
✓	Define PBIS
✓	Introduce 3-5 school bus expectations
✓	Describe methods and driver/school responsibilities for teaching bus expectations
✓	Explain the reward system and model a variety of correct and incorrect methods for rewarding students
✓	Discuss and model the use of immediate and behavior-specific praise
✓	Provide the discipline process in graphic format and discuss appropriate responses to major and minor behaviors

Note. Figure 2 illustrates a sample PBIS implementation plan. From “All Aboard: Using Positive Behavior Supports on the School Bus,” by K. J. Kennedy, K. J. and S. A. King, 2019, *Beyond Behavior*, 28(1), p. 25 (<https://doi.org/10.1177/1074295618797272>).

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As Figure 2 explains, this training would provide the drivers with the information they need to implement the program on their buses. It would also provide the drivers with a plan that explains what constitutes minor and major infractions, along with how to proceed when an expectation is not met. Additionally, it would address what the process is for moving a student from tier 1 to tier 2 and 3 supports.

An example of this plan would be a flowchart, like the one created by Kennedy and King (2019). This chart includes examples of minor and major behaviors as well as interventions for desired, minor, and major behaviors. Figure 3 illustrates the flowchart created by Kennedy and King (2019) and provides specific information regarding their program.

Figure 3*Kennedy and King PBIS Flowchart*

Note. Figure 3 illustrates a sample behavior and intervention plan flowchart that could be utilized within a PBIS program. From “All Aboard: Using Positive Behavior Supports on the School Bus,” by K. J. Kennedy, K. J. and S. A. King, 2019, *Beyond Behavior*, 28(1), p. 26 (<https://dio.org/10.1177/1074295618797272>). Copyright 2018 by the Hammill Institute on Disabilities.

As seen in the flowchart, depending upon which behaviors is being exhibited, an intervention is identified. These interventions include, “Praise using clear description of behavior” for desired behaviors; “Redirect[ion] using clear description of expected behavior” for minor behaviors; and a “[Written] referral” for major behaviors (Kennedy & King, 2019, p. 26). By setting up a system like this, there are expectations and a structure set up for the students, drivers, administrators, and parents, which helps to create a culture of accountability for all.

In addition to the use of a flowchart, Collins and Ryan (2016) suggest that small group social skill instruction is provided, as well as instruction that reviews the

expectations with students when they reach tier 2 interventions. Then, should these interventions and support not work, tier 3 intervention should be used, which includes, instruction and intervention that is directly related to the student's needs.

The results of a study by Kennedy and King (2019) were interesting. First, both high schools that participated in the study showed a decrease in the number of bus referrals. According to Figure 4 in the study, High School 1 had a 51% decrease, with High School 2 not far behind with a 49% decrease. The elementary schools, however, did not see the same results. Elementary School 1 saw a 71% increase in referrals, with Elementary School 2 seeing a decrease of 6%, and Elementary School 3 seeing a decrease of 10%. These varying results created a discussion among the leadership team, where it was decided that the "overall results justified the expansion of the program throughout the district" and that there be closer monitoring of implementation of the program in Elementary School 1 due to the increased number of referrals (p. 26).

Token Systems. Many intervention programs include a token system within them. The tokens included within these systems vary depending upon the school and the program that it is being implemented. However, some examples include the "Bus Bucks" as used in Kennedy and King's 2019 study, "Poker Chips" as used in Provencal and Mac Cormak's 1971 study, and "Star Bus Bucks" that were used in Goldin and McDaniel's 2018 study. A token system, when used in conjunction with an intervention program, provides a tangible reward for students meeting the expectations in tier 1. Some examples of rewards that students may earn because of receiving a token or multiple tokens (used here to describe any physical item received by a student) are school supplies, snacks, toys, free time, homework passes, etc. (Goldin & McDaniel, 2018). These tokens, while

considered to be an effective part of any PBIS program, can become overwhelming for drivers. According to Kennedy and King (2019), 25% of drivers had difficulty handing out the tickets. However, Provencal and Mac Cormak (1971) found the use of tokens to be useful as they provided the parents of the student with an indication of their child's daily performance on the bus.

Peer Mentoring. A final intervention program that schools may consider implementing involves peer mentoring. A program like this was implemented by a school counselor in Texas. In this program older students (4th and 5th graders) were assigned the role of “flight attendant” on their buses. These students went through a brief training on the roles and responsibilities of being a flight attendant on a plane. Then, once they had learned these roles and responsibilities, they became “flight attendants” on their buses for the younger students. This job included helping younger students get to their seats with their lunch boxes and backpacks, as well as reminding them that they must remain seated for the duration of the ride to and from school. Finally, the “flight attendants” ensured that the students took turns when getting on and off the bus. The counselor worked with these older students for a few weeks and had staff meetings with them once a week to work through any potential issues or concerns they may encounter (Carns, 1996).

This intervention provided students with a leadership role on the bus and helped to decrease the negative behaviors that were previously taking place. Additionally, Carns (1996) reported that because of this intervention, students started arriving at school smiling and happy, rather than frowning with hands clinched in fists. This program helped to reinforce the importance of creating a system on the school bus where the students feel safe and welcomed.

As the research presented suggests, intervention programs can take on many forms, and each school district should evaluate their needs and determine which program they feel will work best to meet their needs. Additionally, it is suggested that schools create a program that meets the needs of all stakeholders, including the students, bus drivers, administration, teachers, and parents (Carns, 1996). Each of these stakeholders are valuable members of the school community and affect the overall success of any program that is implemented within the school system.

Parental Involvement

Parental involvement is a key factor in ensuring student success. Therefore, it is important that administrators include parents in the school transportation process. As Tucker et al. (1998) explains parental involvement is a key factor in preventing discipline problems and many times “set[s] the stage and establishes the reality of negative consequences” (p. 28). Thus, parents must become part of the solution. Additionally, when parents are involved in their child’s education, it leads to higher success rates for the child (Houri et al., 2019).

Effects of Parental Engagement on Student Outcomes

Parental engagement is an important factor to consider when looking at student success, both academically and behaviorally. According to Houry et al. (2019), a major component within parental engagement is school-home communication. However, for this communication to be effective it must be a “two-way exchange of information in which the school communicates information to the parents and invites parents to share information back...” (p. 422). In addition to communication, Houry et al. (2019), also suggests that trust must be established between the school and the parents to increase

parental engagement. This concept is further supported by Ogg et al. (2021), who explains that trust is “confidence that another person will act in a way to benefit or sustain the relationship to achieve positive outcomes for students” (p. 143). Therefore, as educators, we must work with parents to create a culture where two-way communication related to busing concerns is taking place, and parents must work to have an active role in supporting a safe busing program for their child/children.

Perceptions on Busing

Based on the suggestions of the research studies discussed within this literature review, it is imperative to examine the perceptions of parents. While there are few studies available regarding parent perceptions on busing, one study conducted in 2005 by Ramage and Howley interviewed parents to gain their perspective on busing concerns. According to this study, parents revealed that there were three major bus concerns that needed to be addressed. These concerns included: the atmosphere on the bus, the length of the ride, and safety (Ramage & Howley, 2005).

Within the area of atmosphere, parents reported that their children were exposed to “adult” topics that were discussed among the older students. They also identified concerns with students using profanity and discussing sexual content. Other parents reported that the lack of supervision on the bus resulted in their children experiencing sexual and physical harassment, as well as vulgar language, and “personality conflicts with other students” (Ramage & Howley, 2005, Findings section).

The second area of concern reported by parents related to the length of the bus ride. Parents reported that their children had early departure times which resulted in them

being tired at school. They also reported that the long rides were “boring” and that “they [the students] get restless” (Ramage & Howley, 2005, Findings section).

Finally, in the area of safety parents reported concerns regarding the “rough roads” their children traveled on, and concerns that people drive too fast on the roads they live on. Additionally, they reported that this has led to the bus being hit while it was stopped to pick up children (Ramage & Howley, 2005).

Unfortunately, many of the concerns expressed in this study are like those previously mentioned by Hendrix and Kennedy (2021) and deLara (2008). These concerns further support the need for more structure on the school bus and more extensive bus driver training programs that focus on student behaviors/student management.

Overall Effect of School Transportation on Students

As discussed in this literature review school transportation does more than simply transport a student to and from school each day. It can also attribute to how a student interacts with their peers, as well as their teachers. However, does it have an overall effect on students? Also, does it affect a student’s attendance rates in school and affect their family? According to a recent study by Edwards (2022), the answer to these questions is yes, school transportation can have an effect in various areas of a student’s life.

Effects on Attendance Rates

Edwards (2022) reveals that school bus eligibility for economically disadvantaged students increases their rate of attendance in school by two-thirds of a percentage point and decreases their probability of being chronically absent by nearly 4 percentage points. While these factors have not been found to affect the students’ achievement in school,

they do reduce the likelihood that they will drop out of school. These factors and the fact that compulsory attendance laws require that students attend school validate the need for free school transportation for all students, regardless of their socio-economic status and geographical distance from their school building.

Effects on Family

Edwards (2022) further explains that school transportation not only ensures that students get to school, but that it also provides students with a daily routine, which helps to eliminate stress for parents and students alike. This reduction in stress is due to the reliability of having a consistent mode of transportation, as well as the removal of the financial burden parents may experience should they have to find a way to get their children to school on their own. Finally, the school bus provides a safe transportation option for families living in a dangerous area. Therefore, based on this information, we must consider the detrimental consequences that may occur if a student's behaviors prevent them from riding the bus and we must ensure that systems and supports are in place to avoid these disruptions.

Summary

School transportation has changed dramatically since its inception in the 1890s. What was once a way to transport students to school that lived in rural areas has now become the primary way that students get to and from school each day. This meant that school buses had to become one of the safest forms of student transportation and that several changes would have to take place.

A major change was related to the physical make-up of a bus and how it was constructed. A second change was related to the rules and regulations that specified

qualifications for those driving the bus. These qualifications have continued to be changed and adapted over the years and now account for more than how to drive the bus, but also how to handle student behaviors and discipline.

Within the area of student behaviors and discipline, drivers are now expressing the need for more training in how to handle specific student behaviors, such as bullying and fighting. As stated in the research by Goodboy et al. (2016), these behaviors have gone beyond a student concern, and are now affecting the drivers as well. More research and training needs to take place to reduce the number of drivers quitting due to job-related stress and anxiety caused by negative student behaviors and a lack of support from upper management (Goodboy et al., 2016). Thus, the goal of sharing this research is to help educators see where we are and what is still needed to provide school bus drivers with the supports and training programs they need.

CHAPTER III

Methodology

This action research project has been designed to examine the effect professional development for school transportation personnel has on the number of student bus misconducts at the elementary level. After an extensive review of literature, the researcher was able to determine that the following must be considered when designing a research plan that supports school transportation personnel:

1. Student misbehaviors on the school bus have a direct effect on school bus driver performance and their ability to drive the bus safely (Zohar & Lee, 2016).
2. Building positive relationships and having positive interactions with students is vital for bus drivers, because it helps to create a sense of trust and respect between the driver and student, which in turn affects student behavior (PennDOT, 2022, p. B-6).
3. School bus intervention programs must be intertwined into transportation operations, as well as school operations because they affect each other equally. Thus, supporting the idea that all stakeholders are responsible for ensuring any program's success (Keagy & Piper, 2016, p. 198).
4. Various forms of data must be utilized to help guide the specific needs and goals of an intervention program (King et al., 2019).
5. Parent perceptions and concerns on busing relate to the atmosphere on the bus, the length of the ride, and safety (Ramage & Howley, 2005).

These key findings within the literature review supported the researcher's goal of developing professional development opportunities for school transportation personnel

and helped to guide the trainings that were provided within the research plan of this study.

Purpose

This action research project was pursued by the researcher due to her previous role as the assistant principal at the Punxsutawney Area Elementary School. As the assistant principal, the researcher was responsible for the student discipline referrals, both in the building and on school transportation. The researcher found that student bus misconducts consistently accounted for the highest number of referrals each month. Based on this knowledge, the researcher decided that further research was needed to determine potential causes for these high numbers, as well as possible interventions that may be implemented to lower the number of referrals. Moreover, the researcher wanted to find ways to support the bus drivers in their daily operations of the bus and to ensure the safety of all students and drivers.

This rationale led the researcher to investigate the perceptions of elementary school parents/guardians, school transportation personnel, and school transportation administrators on student bus behaviors. These perceptions were then utilized to help guide professional development opportunities for the school transportation personnel at Tri-County Transportation (TCT). These opportunities helped to support personnel in their understanding of student behaviors and taught them how to address these behaviors on their buses and vans.

A mixed-method research approach was utilized by the researcher to collect data for this action research project. Qualitative data was collected using a parent/guardian survey and a school transportation personnel survey. These surveys gathered the

perceptions of the participants regarding both student behaviors and potential needs/supports on buses and vans. These surveys are considered pre-surveys and were administered to participants prior to providing school transportation personnel with any professional development trainings.

A third form of qualitative data was utilized by the researcher to gain school transportation administrators' perceptions on student behavior on buses and vans. This data was collected through interviews with six school transportation administrators. The results of the interviews were then compared to the results of the pre-surveys, and utilized by the researcher to guide the two professional development trainings that were provided to school transportation personnel in November of 2023 and January of 2024.

Once all pre-surveys and interviews were administered the researcher created two days of professional development trainings for school transportation personnel. The topics presented during these two training days included:

- Building Relationships with Students
- Setting Expectations
- Behavior Management
- Major vs. Minor Infractions, and
- Communication with Parents

The purpose of these trainings days was to provide the school transportation personnel with information that would support them in their daily interactions with students, while potentially helping decrease the number of negative student behaviors on their buses.

Prior to analyzing and comparing the bus misconduct referrals from the 2022-2023 and 2023-2024 school years, the researcher administered a post-survey to the

parents/guardians and school transportation personnel. The purpose of this post-survey was to compare its results to the results of the pre-survey to see if participants' perceptions changed since the pre-survey was administered at the beginning of the study.

The final form of data collected for this action research project is related to the overall number of bus misconduct referrals at the Punxsutawney Area Elementary School for the 2022-2023 and 2023-2024 school years. This quantitative data was taken from the district's student management system and analyzed to determine if the professional development opportunities provided for school transportation personnel affected the overall number of bus misconduct referrals at the elementary school. Bus misconduct data from the 2022-2023 and 2023-2024 school years were compared for this part of the study.

Research Questions

This action research project was centered around three research questions. The research questions are:

1. What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?
2. What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?
3. What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?

The three research questions created for this action research project were designed to guide the development of the research instruments utilized within the study. Furthermore, the researcher found that the research questions support the findings of the literature review. These findings include King et al. (2019) research that various forms of data must be utilized to help guide the specific needs and goals of an intervention program, and Keagy and Piper (2016) findings that all stakeholders are responsible for ensuring an intervention program's success (p. 198).

Setting

According to the Future Ready PA Index (2024), the Punxsutawney Area School District is 274.03 square miles and serves 1925 students. The district has one elementary school that serves students in kindergarten through sixth grade, and one high school that serves students in seventh through twelfth grade. Among the 1925 students served within the district, 68.2% are considered economically disadvantaged and 22.6% receive special education services (Future Ready PA Index, 2024). Both the elementary school and the high school receive Title I federal funding and are designated as school-wide Title I buildings.

This action research project is focused on the elementary school and the students' behavior on school transportation. All the following demographic information is related specifically to the elementary school. According to the Future Ready PA Index (2024), there are 1079 students enrolled in the elementary school. Within this population, 71.6% of the students are economically disadvantaged and 25.4% of the students receive special education services. To provide historical data related to the student enrollment

percentages, Figure 4 illustrates the percentage enrollment by student group for the last five years.

Figure 4

Enrollment Percentage for Student Groups from 2018 – 2023

Student Group	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Economically Disadvantaged	61.5%	65.1%	70.5%	54.5%	68.2%
English Learner	0.9%	0.8%	0.5%	0.2%	0.3%
Special Education	20.1%	21.3%	21.2%	21.9%	22.6%
Foster Care	1.5%	1.6%	1.6%	0.8%	1%
Homeless	1.3%	1.4%	1.6%	1.9%	1.5%
Military Connected	0.1%	0.2%	0.2%	0.3%	0.3%

Note. Figure 4 shows the percentage enrollments of each student group reported to the state from 2018 to 2023. From “Punxsutawney Area Elementary School,” by Future Ready PA Index, 2023,

<https://futurereadypa.org/District/FastFacts?id=111227183243149068040041017218021155177250038150#>. Copyright 2024 by the Commonwealth of Pennsylvania.

Of these 1079 students, 95.7% are white, 2% are more than one race, 1.3% are Hispanic, 0.8% are Black, and 0.2% are Asian. Figure 5 illustrates the elementary school’s historical data related the race and ethnic demographics of the elementary school for the last five year.

Figure 5*Race and Ethnicity Percentages from 2018 – 2023*

Student Group	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
American Indian/Alaska Native	0.2%	0.2%	0.2%	0.1%	0%
Asian	0.5%	0.3%	0.3%	0.3%	0.2%
Black	0.5%	0.9%	1%	1.1%	0.8%
Hispanic	1.2%	1.4%	1.3%	1.6%	1.6%
White	95.8%	95.7%	95.5%	94.9%	95.3%
2 or More Races	1.8%	1.7%	1.8%	2.1%	2.1%

Note. Figure 5 illustrates the race and ethnicity percentages that were reported to the state from 2018 to 2023. From “Punxsutawney Area Elementary School,” by Future Ready PA Index, 2023,

<https://futurereadypa.org/District/FastFacts?id=111227183243149068040041017218021155177250038150#>. Copyright 2024 by the Commonwealth of Pennsylvania.

Each student within the district has access to transportation services through TCT. This contracted service includes bus transportation and van services. Many students within the district ride buses; however, vans are also utilized to transport students with transportation accommodations included in their individualized education plans. These contracted services with TCT are in effect until 2032.

The transportation services provided to the district school include 51 buses. Of these 51 buses, 23 are utilized by the elementary school each day. The maximum capacity of each bus is 72 passengers; however, the average number of passengers on an elementary bus run is 45 students.

Van services are also provided by TCT. These services include transportation for students who utilize a wheelchair and/or walker, as well as transportation for students with a transportation accommodation written into their individualized education plan (IEP). The number of students utilizing these services varies from year to year; however, the elementary school has around 35 students that ride on a van each day.

A final requirement stated within the transportation contract relates to the age of all buses and vans utilized by the district. According to the contract, all buses had to be purchased brand new for to the start of the 2020-2021 school year, making the current fleet around four years old. All vans had to be at least a 2017 model year or newer for the start of the 2020-2021 school year, making the oldest vans around seven years old.

As a contracted service, TCT is responsible for all hiring, employee supervision, and vehicle maintenance; though, a district-employed transportation director acts as a liaison between the transportation company and the school district. This district-level employee works closely with TCT to ensure that the district and TCT are working together to provide the students and their families with safe and appropriate transportation.

Participants

This action research study focused on three groups of stakeholders: elementary school parents/guardians, school transportation personnel, and school transportation administrators. These stakeholders were selected by the researcher due to their perceptions and insight on school transportation and student behavior. Additionally, the researcher felt that by gaining three different perspectives, she would be able to ensure

the professional development trainings offered would address concerns that may have been overlooked otherwise.

The first group of stakeholders that participated in this study were the elementary school parents/guardians. Within this group, 88 kindergarten through sixth-grade parents/guardians participated in the pre-survey and 31 participated in the post-survey. The second group of stakeholders included school transportation personnel. This group included bus and van drivers, monitors, and dispatchers. Within this group, nine participants completed the pre-survey, and 10 participants completed the post-survey. The third, and final, group of participants for this study included school transportation administrators. This group included six participants that completed an interview with the researcher via Zoom. The researcher will not elaborate further on the titles of these participants to ensure their anonymity and confidentiality.

Informed consent was obtained by the researcher for all participants of this study. All potential elementary school parent/guardian participants were provided with an informational letter that detailed the purpose of the action research project (Appendix E). Each potential school transportation personnel participant was also provided with an informational letter detailing the purpose of the study (Appendix F). In addition to providing potential participants with detailed information regarding the study, these letters included informed consent statements, and QR codes that directed potential participants to the appropriate, anonymous Google Survey for completion. The researcher included an additional informed consent statement at the top of each survey.

In addition to an anonymous survey, the researcher also conducted six interviews with school transportation administrators. The researcher selected the participants of the

interview based on their role within the organization and provided them an informed consent form (Appendix G). The informed consent forms included key information regarding the study, as well as information regarding the security of the data collected because of the interview.

Research Plan

Findings within the literature review revealed that distracted driving directly affects school transportation personnel's ability to safely transport students to and from school. Specifically, a study conducted by Zohar and Lee (2016), determined that student misbehaviors on school transportation not only increased safety shortcuts by drivers, but also leads to driver distraction. According to their study, when drivers use an "approach-oriented" method for dealing with students' misbehaviors, they are forced to take their eyes off the road to look in the rearview mirror, and/or address the students via the bus's speaker. This method creates a distraction from their driving and increases their likelihood of an accident. This research supports a study by the NHTSA's National Center for Statistics and Analysis (2023) that found that distracted driving accounted for 3,211 fatal motor vehicle accidents and 3,522 total fatalities in the nation in 2021. These findings in the literature review supported the researcher's claim that effective professional development for school transportation personnel is necessary to help drivers address negative student behaviors on school transportation, while maintaining everyone's safety and well-being.

These key findings led the researcher to examine additional research regarding student-driver relationships and interventions that support school transportation in managing student behaviors. According to the Pennsylvania School Bus Driver's Manual,

drivers are encouraged to develop relationships with students, as well as build trust and respect with them (PennDOT, 2022, p. B-6). These positive interactions are important to relationship building because they help create a sense of connectedness, which will in turn build trust and respect between the students and drivers (Cook et al., 2018). To help foster these relationships and build trust research has suggested creating an intervention program that creates consistent rules, and specific goals for students and drivers, to help remove potential barriers and create acceptance from both the students and staff (King et al., 2019).

Based on these key findings and additional research conducted by the researcher, a mixed-method research plan was created. This plan included conducting a pre and post survey with elementary school parents/guardians, a pre and post survey with school transportation personnel, interviews with school transportation administrators, two professional development trainings for school transportation personnel, and a comparison of bus misconduct data from the 2022-2023 school year and the 2023-2024 school year. Each of these research instruments provided the researcher with data that guided the content presented to school transportation personnel during their two days of training in November of 2023 and January of 2024.

The first day of professional development was offered to school transportation personnel on November 29, 2023. This training was conducted in conjunction with TCT's monthly safety meeting and included all bus and van drivers, dispatchers, and monitors. The district-hired transportation director and a member of the elementary school administrative team were also present during this training to ensure they were familiar with the content that was shared with the school transportation personnel.

The initial training provided the participants with an overview and rationale of the trainings that were setup between the researcher and the bus company. The researcher also started the session by explaining that she determined the content of the sessions based on the results of the surveys and interviews that she conducted. Then, once all introductory information was concluded, the researcher presented content related to building relationships with students and setting expectations on school transportation. Initially the researcher planned to have the school transportation personnel participate in a few activities to address these topics; however, once the training started, it was determined that an open discussion with the participants was a more appropriate approach.

Once each topic was discussed, the researcher concluded the training by providing each participant with a training evaluation. This evaluation asked the participants to provide feedback to the researcher on which topics they would like more information about at the next training in January. A detailed agenda with the topics and original activities planned for this training are in Appendix K.

The second day of training was provided to all drivers, dispatchers, and monitors on January 24, 2024. This training, like the first training, was offered in conjunction with TCT's monthly safety meeting; however, the district-hired transportation director was the only additional participant in attendance at this training. A representative from elementary school administration was not able to attend.

During this training the researcher started by reviewing the concepts discussed at the November training and asked the participants if they were able to make any new connections with the students on their buses/vans based on the suggestions that were

provided to them during the first training session. Once this discussion was concluded, the researcher then transitioned into the new content selected for this training. This training was conducted in a discussion format, like the first training, and covered the topics of behavior management, completing bus misconduct referrals, and communicating with parents. An open discussion was facilitated by the researcher for roughly 30 to 45 minutes. At the end of the discussion, the researcher concluded the training by reviewing the topics discussed each day and thanking TCT and the school transportation personnel for their time. A detailed agenda that shows the topics for this training are in Appendix L.

Fiscal Implications

There were no fiscal implications associated with this research plan and intervention. The researcher coordinated and designed each aspect of this research plan in conjunction with the Punxsutawney Area School District and TCT. Specifically, regarding the professional development opportunities for school transportation personnel, the researcher met with supervisors from both organizations and determined times that would be appropriate for the participants to engage in trainings without adding additional time to their workdays. Therefore, these trainings were incorporated into TCT's previously scheduled monthly safety meetings.

Research Methods & Data Collection

According to Mertler (2022), "the major characteristic of mixed-methods research is that it combines quantitative and qualitative approaches by including both quantitative and qualitative data in a single research study" (p. 139). Mertler (2022) further explains

that there are six core characteristics that researchers should consider when utilizing a mixed-methods research design. These core characteristics are:

- Collecting and analyzing persuasively and rigorously both qualitative and quantitative data, *based on research questions* [emphasis added]
- Mixing – or integrating or linking – the two forms of data either concurrently by combining or merging them, sequentially by having one build on the other, or embedding one within the other
- Giving priority to one or both forms of data, *again based on the research questions and the emphasis of the research* [emphasis added]
- Using these procedures in a singular research study or in multiple phases of a program research
- Framing these procedures within philosophical worldviews and theoretical lenses, [and]
- Combining the procedures into specific research designs that direct the plan for conducting the study. (p. 140)

Therefore, based on this information, the researcher determined that utilizing a mixed-methods research design would provide an opportunity for comprehensive data collection that addressed each research question within the study. Table 1 shows the alignment of each research question to the type of data collected, the data sources utilized to collect the data, and the timeline for collecting the data.

Table 1*Alignment of Research Questions, Types of Data Collect, Data Sources, and Collection**Timeline*

Research Question(s)	Type of Data to Collect	Data Sources	Collection Timeline
What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?	Qualitative Data	Parents and school transportation personnel will complete a pre and post survey to gather their perceptions on student behaviors and discipline on buses and vans (Appendices H and I). Interviews with school transportation administrators will gather their perspectives on student behaviors and discipline on buses and vans (Appendix J).	Pre-surveys October/ November 2023. Interviews November 2023. Post-surveys May 2024.
What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?	Mixed Data; Qualitative and Quantitative	Parents and school transportation personnel will complete a pre and post survey to gather their perceptions on student behaviors and discipline on buses and vans (Appendices H and I). Interviews with school transportation administrators will gather their perspectives on student behaviors and discipline on buses and vans (Appendix J). Bus misconduct referral data from the 2022-2024 was pulled from the district's student management system.	Pre-surveys October/ November 2023. Interviews November 2023. Post-surveys May 2024. August 2023 and September 2023
What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?	Quantitative Data	The total number of bus misconduct referrals from the 2022-2023 school year will be compared to the total number of referrals from the 2023-2024 school year. This will show if the professional development opportunities provided to the school transportation personnel had its desired effect of lowering the overall number of bus referrals.	May/June 2024

Prior to starting this action research study, the researcher obtained IRB approval from the PennWest University Instructional Review Board. An initial IRB application was submitted to the review board on August 11, 2023, and final approval was received on September 29, 2023 (Appendix A). A request to modify the previously approved interview procedures was submitted and approved on November 8, 2023 (Appendix B). In addition to IRB approval, the researcher also obtained letters of support from the Punxsutawney Area School District (Appendix C) and TCT (Appendix D).

Upon IRB approval, the researcher sent out the Informational Letter for Elementary School Parents (Appendix E) and the Information Letter for School Transportation Personnel (Appendix F). These letters provided potential participants with information about the researcher, as well as with information regarding the study. Each letter also contained an informed consent statement, and a survey specific QR code that directed potential participants to the appropriate survey for completion.

Once both letters were distributed, the School Transportation Parent Survey (Appendix H), and School Transportation Personnel Survey (Appendix I) were activated. All pre-surveys were voluntary and were administered using Google Forms. Although the researcher did not ask that any identifiable information be shared in the survey responses, an additional informed consent statement was added to the beginning of each survey.

Each pre-survey accepted responses until the mid-November. The researcher stopped accepting responses in mid-November in order to analyze the data collected and to prepare for the school transportation personnel trainings that took place on November 29, 2023, and January 24, 2024. The time for each of these trainings was planned with

TCT's administration and was scheduled in conjunction with their monthly safety meetings.

In addition to the pre-surveys, interviews with school transportation administrators were also scheduled by the researcher. Prior to scheduling or conducting any interviews, the researcher obtained signed informed consent from each participant (Appendix G). Additionally, due to the nature of interviews and the researcher's inability to ensure anonymity, the researcher secured each participant's signed, informed consent forms in a private, locked cabinet that only the researcher has access to. Then, once these steps were completed, the researcher scheduled six individual interviews with the school transportation administrators via Zoom.

Each of the six interviews took place over several days during the week of November 20th, 2023 (Appendix J) and provided the participants with an opportunity to expand upon the concepts and themes explored in the pre-surveys. Each Zoom interview was conducted by the researcher in a private room with the door shut. Each interviewee's name was removed from their responses and replaced with a code to ensure their privacy. Once all interviews were completed, the responses were analyzed by looking for themes. These results were combined with the themes that emerged from the pre-survey results to help guide the researcher in planning the school transportation personnel trainings.

A final post-survey was administered to elementary school parents/guardians and school transportation personnel in May of 2024. These surveys asked the participants the same questions as the pre-survey. The rationale for this was to provide the researcher with an opportunity to compare responses and perceptions. The data from these surveys also served as a measure of determining the effectiveness of the professional development

opportunities provided in November and January. The goal of this post-survey was to see if there was a positive change in the perceptions of the participants.

The last piece of data that was collected was the total number of bus misconduct referrals for the 2023-2024 school year. This data was compared to the total number of bus misconduct referral from the 2022-2023 school year. The researcher utilized this data, in conjunction with the post-survey responses, to determine if the professional development trainings affected the total number of referrals received by the elementary school office.

There were no fiscal implications associated with the research methods conducted or the data collection process. The researcher utilized a private Google Suite account, which is free of charge for all users, to administer all surveys and record all survey and interview responses. The researcher also utilized the Basic Plan within the Zoom platform to conduct all interviews. This plan is free of charge and met the needs of the researcher; however, it should be noted that other paid plans are available, should future researchers find their needs differing from the needs of the researcher implementing this research plan. Finally, the two, one-hour trainings that were provided to school transportation personnel were scheduled in conjunction with TCT's monthly safety meeting.

Validity

According to Hendricks (2017), validity is an essential component to any action research project because it refers to the trustworthiness of the study. To determine the validity of a study, Hendricks (2017) recommends that researchers evaluate their research against a Lincoln and Grube's trustworthiness criterion (p. 64). Hendricks (2017), explains that this trustworthiness criterion includes:

- Credibility: The plausibility of the research findings for the context that was studied.
- Transferability: The extent to which results of a study are applicable to other contexts and other individuals.
- Dependability: The degree to which research results would replicate with the same or similar participants and/or contexts.
- Confirmability: Showing that results are an accurate representation of what occurred rather than the results of the researcher's bias, motivation, or interest. (p. 64)

The researcher was able to ensure validity of this action research project by meeting each of the four-trustworthiness criterion described by Hendricks (2017). First, credibility was achieved through accurate data recording and peer debriefing. Accurate data recording was accomplished by obtaining and maintaining informed consent for all participants and maintaining participant anonymity on all surveys and interviews. Anonymity on surveys was ensured by not collecting participants' names and/or emails addresses. For each interview, the researcher ensured anonymity by conducting private Zoom interviews in a room with the door shut. Participant names were also coded to ensure confidentiality. Finally, all survey and interview responses are recorded in the researcher's private Google account. This account is password protected and only the researcher has access to it.

In addition to accurate data recording, the researcher also utilized peer debriefing as way to ensure credibility. According to Hendricks (2017), "peer debriefing involves discussing your study with a colleague, peer, or critical friend who is not invested in the

study (not a collaborator)” (p.65). The researcher utilized this strategy, while maintaining the confidentiality of participants, to help plan the school personnel trainings. Together, the researcher and her peer were able to discuss the concepts and topics that emerged from the data collected, and how they could be addressed/incorporated into the upcoming trainings.

The next two areas of validity that were achieved were transferability and dependability. The researcher accomplished this by providing an in-depth description of the setting, study, and participants (Hendricks, 2017, pp. 67-68). The description of the setting included in-depth information regarding the school district, and more specifically, the Punxsutawney Area Elementary School. The researcher also included detailed information about TCT and the contracted services the district receives from them. Regarding the study and participants, the researcher specified the purpose of the study, how each research question correlated with each instrument, and the rationale for why the participants were selected. This information, coupled with the description of the setting, provides an opportunity for a future researcher to transfer and replicate the study.

The final area of validity utilized within the trustworthiness criterion is confirmability. Hendricks (2017) explains that for confirmability to take place, the research must focus on “evidence that [the] results are accurate and not a result of researcher bias” (p. 68). The researcher achieved this through accurate data recording. Specifically, the researcher collected anonymous data from parents/guardians, as well as school transportation personnel on pre and post surveys administered through Google Forms. Furthermore, the questions asked on these surveys were created based on previous

discipline data and the researcher's experience as an elementary school assistant principal.

The triangulation of data also increased the validity of this action research project. Hendrick (2017) explains that triangulation is "a method in which multiple forms of data are collected and compared to enhance the validity and credibility of a research study" (p. 71). This process was achieved by collecting and comparing data from four different data sources. Table 2 shows the alignment between Research Questions 1 and 2 and the questions asked to participants on surveys and interviews. It also shows how the data collected for Research Question 3 correlates with the data collected for Research Questions 1 and 2.

Table 2*Triangulation of Data Sources*

Research Questions	Data Source Questions
What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?	<ul style="list-style-type: none"> • Transportation personnel survey questions addressing this research question include: 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, and 13. • Parent survey questions addressing this research questions include: 1, 2, 3, 4, and 5. • Interview questions addressing this research question include: 1, 2, 3, 5, and 6.
What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?	<ul style="list-style-type: none"> • Transportation personnel survey questions addressing this research question include: 8, 9, and 14. • Question 6 on the parent survey addresses this research question. • Interview questions addressing this research question include: 4, 7, and 8. • School transportation survey question number 14, parent survey question number 6, and interview question number 7 were based on the referrals submitted during the 2022-2023 school year.
What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?	<ul style="list-style-type: none"> • The number of bus misconduct referrals from the 2022-2023 school year will be compared to the referrals from the 2023-2024 school year. This will show if the professional development opportunities provided to the school transportation personnel had the desired effect of lowering the overall number of bus referrals. ^a

Note. ^a The content of the professional development opportunities were based off of the data collected from both surveys and the interviews conducted by the researcher.

Summary

This mixed-methods study was designed to explore the effect professional development for school transportation personnel has on student bus misconducts at the elementary level. The Punxsutawney Area Elementary School and TCT are the setting for this study and include various stakeholders as participants. The participants include:

- elementary school parents/guardians
- school transportation personnel, and
- school transportation administrators

Participation in this study was voluntary and provided the researcher with insights on student behavior and what supports drivers need. The research instruments utilized by the researcher to collect data included pre and post surveys from parents/guardians, pre and post surveys from school transportation personnel, and interviews with school transportation administrators. IRB approval was obtained from PennWest University prior to starting this research study, as was informed consent for all participants.

The research questions and research plan for this study are supported by the findings from an extensive literature review conducted by the researcher. Additionally, the researcher utilized this research and the data collected to guide the professional development opportunities that were provided to all school transportation personnel. A final data source, which answers Research Question 3, is the comparison of bus misconduct referral data from the 2022-2023 and 2023-2024 school years. This final data source and comparison will show if the professional development trainings that were presented to all school transportations personnel were effective is changing the number of referrals received by the elementary school office.

There were no fiscal implications associated with this study due to the researcher utilizing free software for survey development and collection. Additionally, the researcher utilized a free version of Zoom to conduct all interviews and recorded all interviewee responses in a private Goggle Drive, which is also free. Finally, the validity of the study was established using Lincoln and Grube's trustworthiness criterion (Henricks, 2017, p. 64), as well as through the triangulation of data. The following chapter, Chapter IV, will analyze and explain the results of the data collected throughout the study.

CHAPTER IV

Data Analysis and Results

This action research project is centered around the effects professional development for school transportation personnel has on the number of bus misconduct referrals submitted at the elementary level. The researcher utilized qualitative and quantitative data to study this topic using surveys, interviews, and discipline referral data. The participants for this study include school transportation personnel, school transportation administrators, and elementary school parents. A pre and post survey was anonymously administered to the school transportation personnel and parents for this study, while school transportation administrators participated in interviews that further explored the topics addressed in the surveys.

This chapter focuses on the collection of data, the data analysis process, and the results of the data collected by the researcher. Each piece of data collected is connected to one or more of the three research questions posed by the researchers. The following are the posed research questions:

1. What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?
2. What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?
3. What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?

Furthermore, the data collected by the researcher was utilized to develop and deliver two days of professional development for school transportation personnel at TCT, the contracted bus company of the Punxsutawney Area School District.

Data Analysis

A mixed-methods research design was used to conduct this action research project. Qualitative data was collected utilizing pre and post surveys for school transportation personnel and elementary school parents. Pre-surveys were administered to both groups of participants in October/November of 2023, and post-surveys were administered in May of 2024. Qualitative data was also utilized to collect data from school transportation administrators. This data was collected by conducting interviews in November of 2023. Finally, the researcher collected quantitative data in the form of bus misconduct referrals. This data included the total number of bus misconduct referrals processed by the elementary school during the 2022-2023 and 2023-2024 school years.

The researcher's rationale in collecting this data was two-fold. First, the researcher utilized the perceptions of the pre-survey data and interview responses to guide the professional development opportunities that were provided to school transportation personnel in November of 2023 and January of 2024. The researcher hypothesized that the impact of the content covered during these trainings would then lower the total number of bus misconduct referrals submitted to the elementary school. All survey results were collected utilizing Google Forms, and all interview responses were recorded in Google Docs. Finally, all bus misconduct referral data was collected from CSIU, the district's student information management system.

Survey Analysis

Pre survey responses from both elementary school parents and school transportation personnel were analyzed for common themes. The researcher looked for these themes by analyzing the response percentages recorded for each question. The responses with the highest percentages were prioritized as an area of need and were addressed at the professional development trainings provided for school transportation personnel. Additionally, the researcher compared the perceptions and priority areas from the parent pre-survey to the results of the school transportation personnel pre-survey. This allowed the researcher to ensure that all areas of need were addressed during the professional development trainings. The results of these surveys is explained in detail in the results section of this chapter.

Post survey responses were analyzed and compared to the pre-survey responses. This was done to determine if the parent and school transportation personnel perceptions changed from October/November of 2023 to May of 2024.

Interview Analysis

The researcher interviewed six school transportation personnel administrators in November of 2023. These interviews included eight questions and elaborated upon the topics covered in the survey questions. The researcher conducted each interview via Zoom and recorded all answers in Google Docs utilizing a code in place of the interviewee's name. Each interview took on average 10 – 15 minutes to complete and provided the researcher with additional information regarding the topics needing addressed during the professional development opportunities provided to school transportation personnel in November of 2023 and January of 2024. Interviewee

responses and the themes that emerged from the interviews are explained in detail in the results section of this chapter.

Discipline Data Analysis

Student discipline data was retrieved from CSIU, the district's student information management system, for the 2022-2023 and 2023-2024 school years. The discipline data was filtered to contain only bus misconduct referrals at the elementary school for each school year and provided the researcher with a total number of referrals proceed by the elementary school administration. Upon initial analysis the researcher determined that breaking down the discipline data further would help to provide a better overview of the changes that occurred from one year to the next.

The additional analysis and breakdown in data provided the researcher with the number of discipline referrals for each grade level, kindergarten through sixth grade. The researcher then identified the following information for each grade level:

1. The number of students with an IEP and the number of referrals attributed to this category.
2. The number of students with 504 Plans and the number of referrals attributed to this category.
3. The number of female students that generated a referral and the total number of referrals attributed to female students.
4. The number of male students that generated a referral and the total number of referrals attributed to male students.
5. The total number of students that generated referrals for the grade level.

6. The number of repeat offenders within the grade level that had two or more referrals attributed to them.

The researcher then compared this data and created grade level cohorts of students to determine changes from one year to the next. The results of this data analysis is explained in the following results section.

Results

Research Question One: What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?

The results for research question 1 were collected from the responses of the parent survey, school transportation personnel survey, and school transportation administrator interviews. The participants' responses on the pre-survey administered in October/November of 2023 were analyzed to determine common themes that would guide the researcher in developing the professional development trainings for school transportation personnel. Figure 6 shows the parent survey question and responses regarding how their child is transported to school.

The responses in Figure 6 provided the researcher with a guideline as to which form of transportation the students take to school. According to this data 94.3% of parents reported that their student rides a bus, and 5.7% ride a van. This data is important to the researcher because buses transport more students and therefore have the potential for different behaviors than that of a van.

Figure 6

Parent Pre-Survey Question One Responses

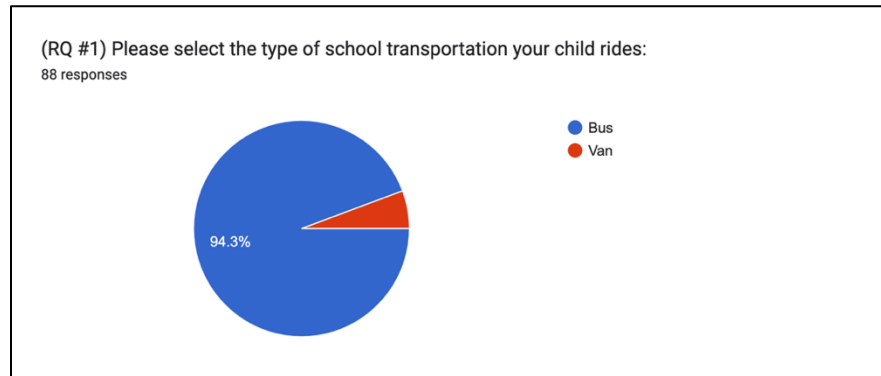
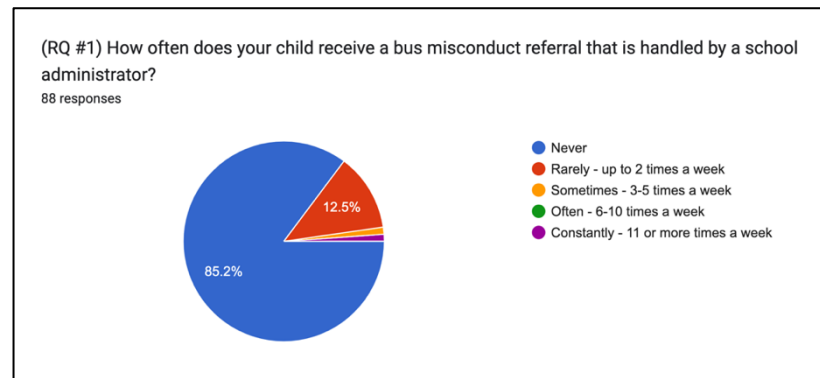
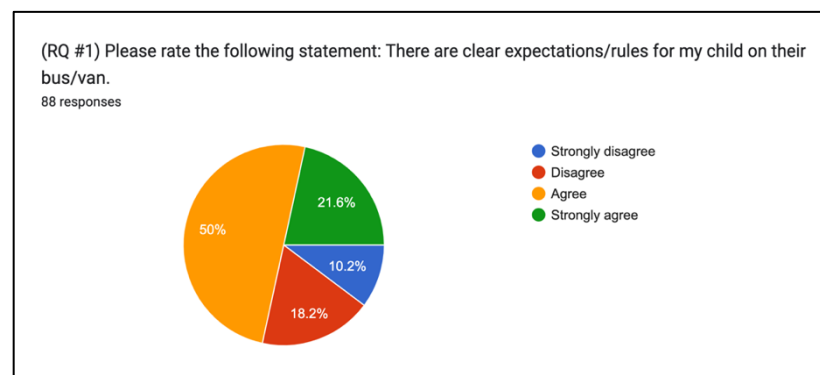


Figure 7 shows how often the participants' child received a bus misconduct referral. Figure 7 also provides the researcher with background knowledge regarding the number of referrals and discipline that has been issued to the participants' child.

According to the responses 85.2% of parents stated that their child has "never" received a referral; however, 12.5% reported their child has "rarely" received a referral. This means that their child has received a referral up to two times a week. One parent stated their child received referrals "often" or 6 – 10 times a week, and one parent responded with "constantly" or 11 or more times a week. Each of these pieces of data are important, as they may guide the remaining responses gathered from the parents and their perceptions on school bus misconduct.

Figure 7*Parent Pre-Survey Question 2 Responses*

Pre-survey parent question 3 provided the researcher with information regarding the parents' perceptions on the expectations set forth on their child's bus or van. Figure 8 shows these perceptions. According to the responses illustrated in Figure 8, while a total of 71.6% of parents "agree" or "strongly agree" that there are clear expectations/rules on their child's bus or van, 28.4% of parents "disagree" or "strongly disagree" with this statement.

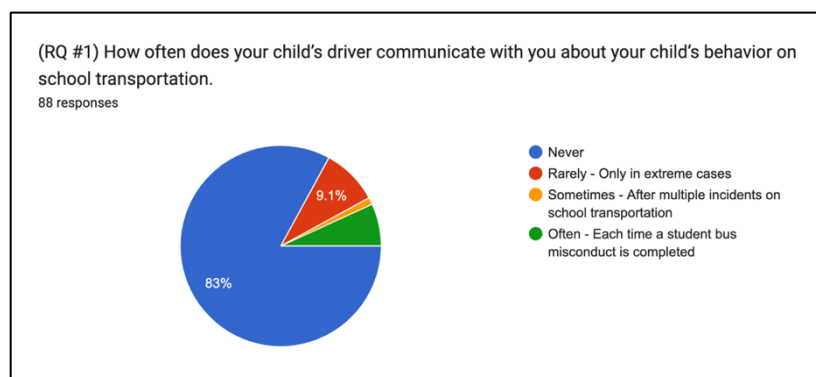
Figure 8*Parent Pre-Survey Question 3 Responses*

The final two questions from the parent pre-survey that address research question 1 are related to communication. Specifically, question 4 asks, "How often does your

child's driver communicate with you about your child's behavior on school transportation?" Figure 9 illustrates the parents' responses to question 4. These responses indicate that communication between the parents and drivers is lacking with 83% of parents stating that their child's driver "never" communicates with them.

Figure 9

Parent Pre-Survey Question 4 Responses



As a follow-up to question 4, question 5 asks, "If a driver were to communicate with you about behaviors, how would you prefer that they communicate with you?" Figure 10 shows the parents' responses to this question and indicates that they would prefer that drivers speak to them in-person at the bus stop about their child's behavior.

Figure 10

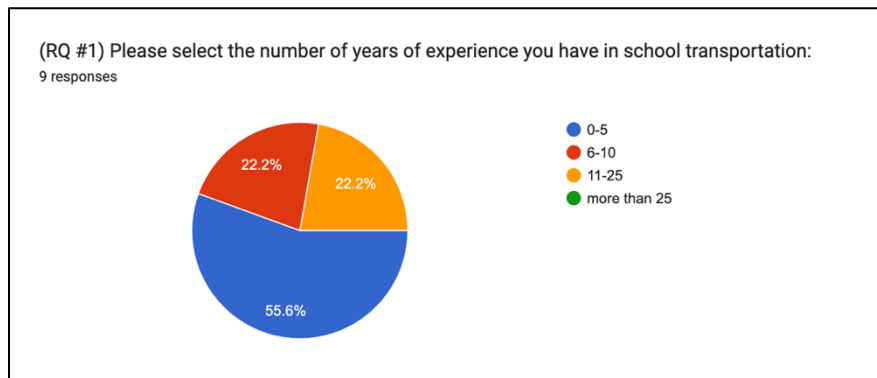
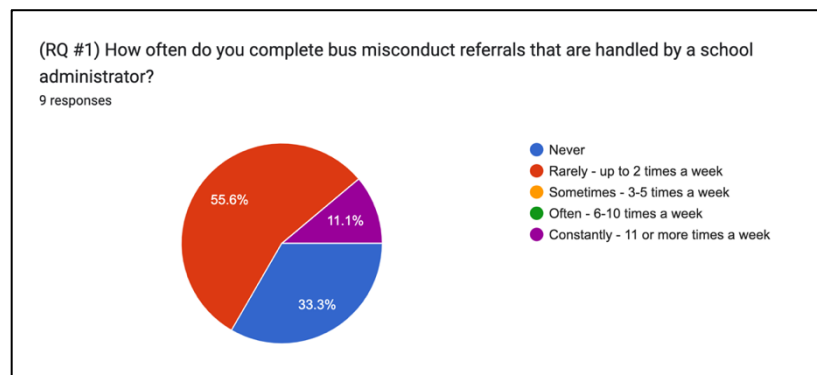
Parent Pre-Survey Question 5 Responses



Upon deeper analysis, the researcher found that 11 of the 16 parents that reported that they “disagree” that their driver provides their child with clear expectations/rules also do not receive any communication from their child’s driver. Additionally, of the nine parents that reported that they “strongly disagree” that their driver provides their child with clear expectations/rules, seven parents also reported that they “never” receive communication from their child’s driver.

To further answer research question 1, school transportation personnel gave the following answers to pre-survey questions. Of the nine participants that completed the pre-survey, five participants reported that they have 5 or less years of school transportation experience; two participants reported that they have 6 – 10 years of experience, and two participants reported having 11 – 25 years of experience. Additionally, five participants reported that they “rarely” complete bus misconduct referrals that must be handled by a school administrator. Three participants reported that they “never” complete referrals, and one participant reported that they “constantly” complete referrals, which means that they submit 11 or more referrals a week to school administration.

Figure 11 shows the number of years of experience, and Figure 12 shows the number of referrals submitted each week. This data provided background knowledge of the potential audience for the professional development opportunities that were being planned for the school transportation personnel.

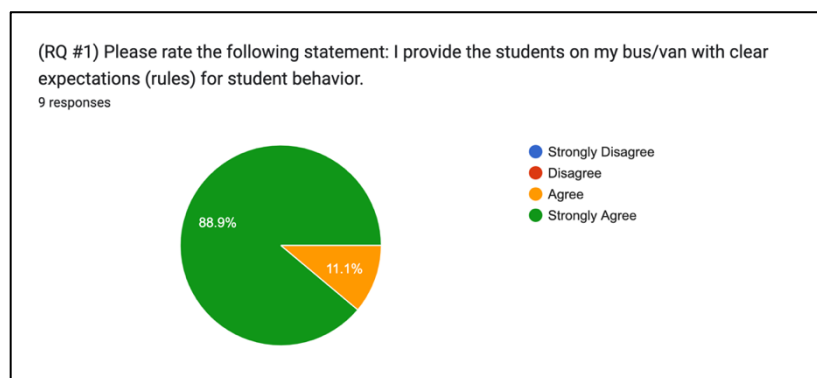
Figure 11*School Transportation Personnel Question 1 Responses***Figure 12***School Transportation Personnel Pre-Survey Question 2 Responses*

In addition to questions 1 and 2, questions 3 – 7 answer research question 1.

These questions not only ask the participants their perception regarding a topic, but also ask if they would like additional training on that topic. Figure 13 shows the responses submitted for question 3. According to the data in Figure 13, 100% of school transportation personnel agree on some level that they can set clear expectations for their students.

Figure 13

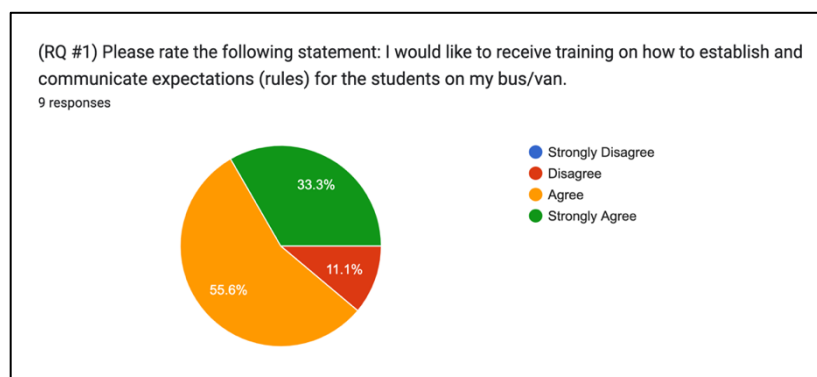
School Transportation Personnel Pre-Survey Responses for Question 3



Subsequently, Figure 14 shows the responses for question 4, which asks school transportation personnel if they would like to receive training on setting clear expectations and rules on the bus/van. According to the responses found in Figure 12, 88.9% of school transportation personnel “strongly agree” or “agree” that they would like training in this area, with only one participant stating that they “disagree” with wanting to receive training in this area.

Figure 14

School Transportation Personnel Pre-Survey Responses for Question 4



Another set of school transportation personnel survey questions that addressed research question 1 are questions 5, 6, and 7. Each of these questions address the topic of

managing student behaviors on the bus/van. Figure 15 shows the responses from question 5 regarding school transportation personnels' perceptions related to redirecting student misbehaviors. According to this figure, all participants "strongly agree" or "agree" that they can redirect student misbehaviors on their bus/van.

Figure 15

School Transportation Personnel Pre-Survey Responses for Question 5

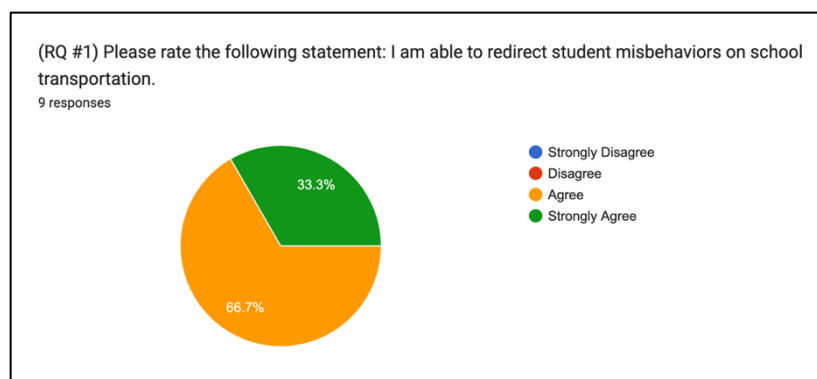


Figure 16 shows the responses to question 6, "I am able to de-escalate or calm down escalated students on school transportation." According to the data reported in Figure 16, 88.8% of participants "strongly agree" or "agree" with this statement, and 11.1% or one participant "disagree" with this statement.

Figure 16

School Transportation Personnel Pre-Survey Responses for Question 6

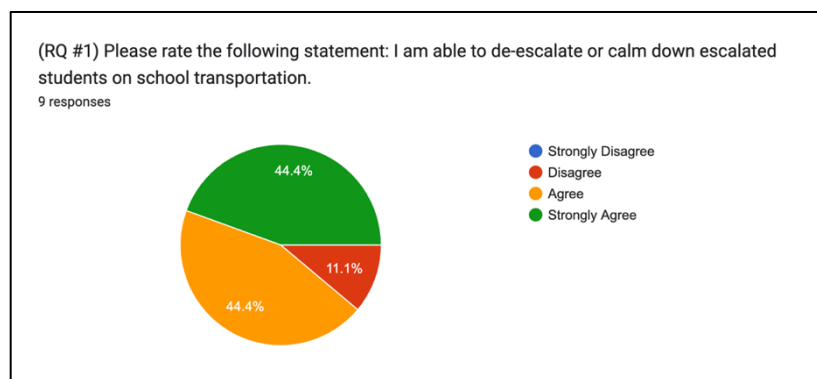
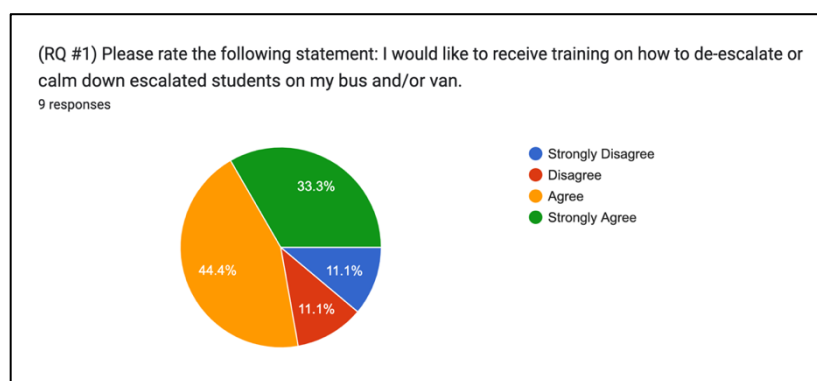


Figure 17 shows the responses from question 7, which asked participants if they would like to receive training in de-escalation. Of the nine participants that participated in the survey, seven participants agreed to some degree that they would like training in this area, and two participants “disagreed” or “strongly disagreed” that they would like training in this area.

Figure 17

School Transportation Personnel Pre-Survey Responses for Question 7



The next set of questions from the school transportation personnel survey that address research question 1 are questions 10, 11, and 12. Questions 10 – 12 relate to communication with parents. Figure 18 addresses question 10 and shows how often school transportation personnel communicate with parents regarding behaviors on their bus/van. According to Figure 18, there is little communication between parents and drivers, with only two participants responding that they communicate with parents “often” or after each bus misconduct referral that is submitted.

Figure 18

School Transportation Personnel Pre-Survey Responses for Question 10

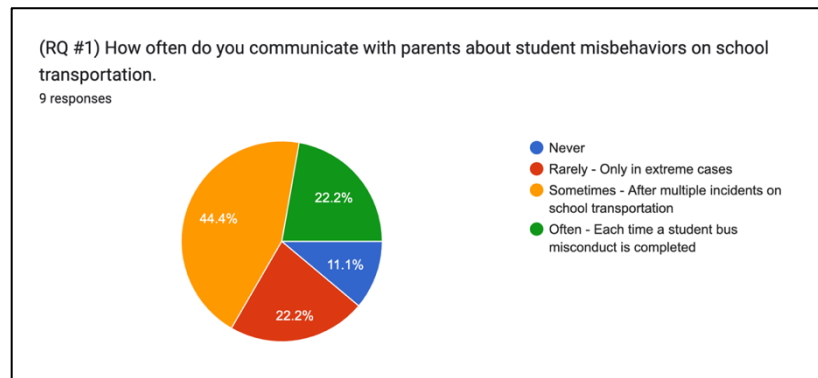


Figure 19 shows school transportation personnel's responses to question 11. According to this figure the primary method for communication for drivers has been to speak directly with parents at the bus stop.

Figure 19

School Transportation Personnel Pre-Survey Responses for Question 11

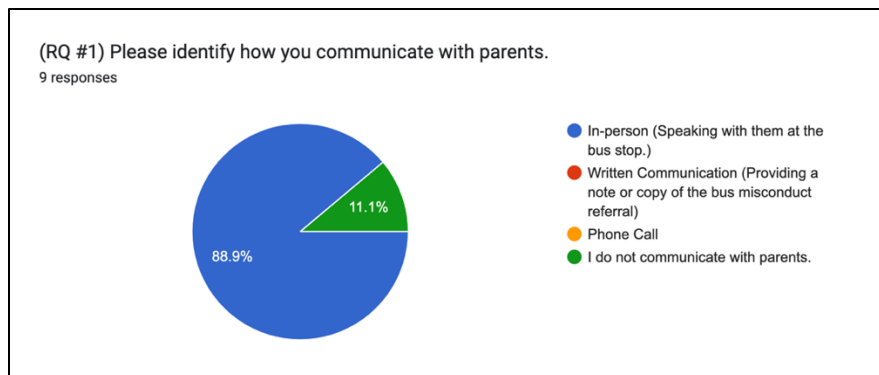


Figure 20 show the responses to survey question 12. According to this figure, while five of the nine participants would like additional training in communicating with parents, there are four of the nine participants that either “disagree” or “strongly disagree” with this statement.

Figure 20

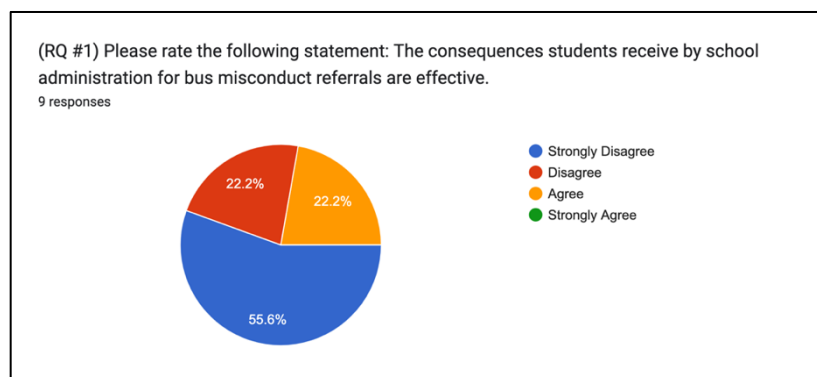
School Transportation Personnel Pre-Survey Responses for Question 12



The final question from the school transportation personnel pre-survey that addresses research question 1 is question 13. This question relates to the drivers' perceptions regarding the effectiveness of the consequences issued for a bus misconduct referral. Figure 21 shows the drivers' responses to this question. According to this figure the overall perception of drivers is that the consequences issued by the school administration is not effective, with 55.6% of participants reporting that they "strongly disagree" with this statement. Additionally, 22.2% of participants report that they "disagree" with this as well. Overall, that is 77.8% or seven of the nine participants that feel this way.

Figure 21

School Transportation Personnel Pre-Survey Responses for Question 13



The final instrument utilized by the researcher to answer research question 1 was the school transportation personnel interviews. Specifically, questions 1, 2, 3, 5, and 6 were utilized to answer this research question and expand upon the topics addressed in the pre-surveys administered to the parents and school transportation personnel. Six school transportation administrators participated in these interviews. A school transportation administrator may include any supervisor or administrator of students and/or transportation employees. A summary of their responses is provided below.

Interview Question #1. Do you find the bus misconduct referral form easy to complete? If not, what changes need to be made to this form to make it more effective in reporting student misconducts?

All six participants stated that they felt the referral form is easy to complete. Two participants also stated that the open space on the referral for the drivers to explain what happened during the incident is beneficial. One participant also stated that they liked that the drivers were able to specify the number of notices the student has received at the top of the referral. Finally, while all participants felt the referral was easy to complete, two participants explained that they felt the drivers need more training on driver responsibility related to completing referrals, and on how to fill out the form correctly. These recommendations were made due to some drivers writing referrals for behaviors that can be handled by them on the bus, and for not marking the correct infraction in relation to the reported misbehavior. An example of a behavior the participant felt can be handled by the driver without a referral is “talking too loud.”

Interview Question #2. What are the expectations or rules that you have for the students on your bus/van?

There were various responses from the participants for this question. The following is a list of all expectations and rules provided by the participants:

- Be good
- Stay in your seat
- Follow the rules
- Keep hands and feet to yourself
- No eating or drinking
- No loud music
- No swearing
- No fighting
- Sit in your assigned seat
- Buckled in (vans only)
- Safe to and from school
- Be respectful
- No jumping or hopping from seat to seat
- No acting up – can be a little loud but must stay in your seat
- Nothing out of backpacks – no toys
- No screaming/yelling (Inside Voices)
- School rules apply on the bus/van

Interview Questions #3. What is your current procedure for dealing with an escalated or unruly student?

The following is a summary of the participants' responses to this question; however, please note that the individual responses received have been mixed and merged to ensure the confidentiality and privacy of the participants.

Dependent upon the situation, the driver may have to pull the bus or the van safely off the road to gain control and talk to the students. The driver may also have to ask the unruly student to move to the front of the bus to remove them from the situation. If the situation is "really bad" the driver may also have to ask that a school building administrator and/or special education administrator come to where they are pulled over and remove the student from the bus or van. In extreme cases 911 may need to be called as well.

Additional responses to an unruly/escalated student include having the school's crisis team/school counselors ready to intervene when the child gets to the school. The situation may also require a bus suspension or that different transportation must be utilized for the student, which may include having the child's parent drive them to and from school. For situations involving students with an IEP, it may be necessary to adjust the student's goals through an IEP meeting or implement a positive behavior plan. Certain situations may also require that an adult monitor ride the bus or van with the students. Finally, in all situations, the parents must be called and notified of the concerns.

Interview Question #5. Please explain your preferred method for communicating with parents.

All six participants stated that making a phone call home to the parents is their preferred method of communication. This method of communication helps to ensure that the parents are made aware of the situation immediately. One participant stated that they will also speak with a parent at the bus stop, if possible. Another participant stated that if they feel phone conversations are not helping with the situation, they will ask for a meeting face-to-face to get everyone on the “same page.” Finally, another participant stated in addition to phone calls, if a parent emails them about a situation, they will email them back and utilize written communication.

Interview Question #6. What are your thoughts on the consequences the students receive from school administration related to bus misconducts? Do they effectively change the student’s behavior?

There were varying thoughts and opinions that emerged in the participants’ answers to this question; however, bus suspensions were mentioned by five of the six participants. Of these five participants, only one participant was against bus suspensions and mentioned wanting to find an alternative consequence. Their reasoning was related to the perception that bus suspensions tend to remove the student from school completely, and that the suspension typically affects the parents more than the child. The other four participants in favor of bus suspensions felt they make the students and the parents more responsible and show a stern consequence for the student’s behavior. In response to the second part of the question, the participants stated that parental support is important in changing the student’s behavior and that, unfortunately, some students do not change

their behavior regardless of the consequences they receive. Finally, a participant explained the importance of ensuring others know and understand how hard the job of a bus driver is, and that the consequences given affect the drivers as well.

A second post survey was administered in May of 2024 to parents and school transportation personnel. The results of this survey were compared to the pre-survey results to determine if there was a change in perceptions. Table 3 shows the comparison of the results from the pre and post parent survey questions that answer research question 1.

Table 3*Comparison of Pre and Post Parent Survey Results*

Parent Survey	Pre-Survey Results (October/November 2023)	Post-Survey Results (May 2024)
1. Please select the type of school transportation your child rides:		
	94.3% - Bus	93.5% - Bus
	5.7% - Van	6.5% - Van
2. How often does your child receive a bus misconduct referral that is handled by a school administrator?		
Never	85.2%	90.3%
Rarely (up to 2 times a week)	12.5%	6.5%
Sometimes (3-5 times a week)	1.1%	3.2%
Often (6-10 times a week)	0	0
Constantly (11 or more times a week)	1.1%	0
3. Please rate the following statement: There are clear expectations/rules for my child on their bus/van.		
Strongly Disagree	10.2%	6.5%
Disagree	18.2%	12.9%
Agree	50%	58.1%
Strongly Agree	21.6%	22.5%
4. How often does your child's driver communicate with you about your child's behavior on school transportation.		
Never	83%	90.3%
Rarely (only in extreme cases)	9.1%	6.5%
Sometimes (after multiple incidents)	1.1%	0
Often (After each bus misconduct)	6.8%	3.2%
5. If a driver were to communicate with you about behaviors, how would you prefer that they communicate with you.		
In-person	50%	41.9%
Written Communication	12.5%	12.9%
Phone Call	35.2%	45.2%
I do not wish for driver communication.	2.3%	0

Note. There were 88 pre-survey participants and 31 post survey participants.

Table 4 shows the comparison of results from the pre and post school transportation personnel survey questions that answer research question 1.

Table 4*Comparison of Pre and Post School Transportation Personnel Survey Results*

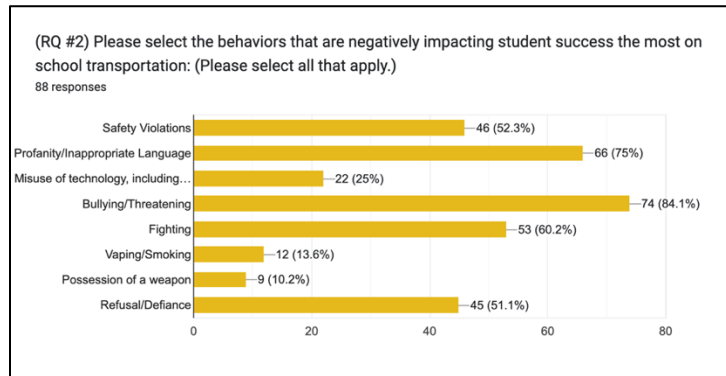
School Transportation Personnel	Pre-Survey Results (October/November 2023)	Post Survey Results (May 2024)
1. Please select the number of years of experience you have in school transportation:		
0-5 years	55.6%	50%
6-10 years	22.2%	30%
11-15 years	22.2%	10%
More than 25 years	0	10%
2. How often do you complete bus misconduct referrals that are handled by a school administrator?		
Never	33.3%	30%
Rarely (up to 2 times a week)	55.6%	70%
Sometimes (3-5 times a week)	0	0
Often (6-10 times a week)	0	0
Constantly (11 or more times a week)	11.1%	0
3. I provide the students on my bus/van with clear expectations (rules) for student behavior.		
Strongly Disagree	0	0
Disagree	0	0
Agree	11.1%	10%
Strongly Agree	88.9%	90%
4. I would like to receive training on how to establish and communicate expectations (rules) for the students on my bus/van.		
Strongly Disagree	0	20%
Disagree	11.1%	10%
Agree	55.6%	60%
Strongly Agree	33.3%	10%
5. I am able to redirect student misbehaviors on school transportation.		
Strongly Disagree	0	0
Disagree	0	10%
Agree	66.7%	50%
Strongly Agree	33.3%	40%
6. I am able to de-escalate or calm down escalated students on school transportation.		
Strongly Disagree	0	0
Disagree	11.1%	0
Agree	44.4%	60%
Strongly Agree	44.4%	40%
7. I would like to receive training on how to de-escalate or calm down escalated students on my bus and/or van.		
Strongly Disagree	11.1%	10%
Disagree	11.1%	30%
Agree	44.4%	60%
Strongly Agree	33.3%	0
10. How often do you communicate with parents about student misbehaviors on school transportation.		
Never	11.1%	30%
Rarely (only in extreme cases)	22.2%	10%
Sometimes (after multiple incidents)	44.4%	50%
Often (after each misconduct)	22.2%	10%
11. Please identify how you communicate with parents.		
In-Person	88.9%	70%
Written	0	0
Phone Call	0	0
I do not communicate with parents	11.1%	30%
12. I would like to receive training on how to communicate with parents.		
Strongly Disagree	11.1%	20%
Disagree	33.3%	40%
Agree	44.4%	40%
Strongly Agree	11.1%	0
13. The consequences students receive by school administration for bus misconduct referrals are effective		
Strongly Disagree	55.6%	40%
Disagree	22.2%	30%
Agree	22.2%	30%
Strongly Agree	0	0

Note. There were 9 pre-survey participants and 10 post survey participants.

Research Question Two: What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data, that are impacting student success on school transportation?

The results for research question 2 were collected from parent and school transportation personnel surveys, school administrator interviews, and bus misconduct referrals from the district's student information management system. Specifically, question 6 from the parent survey addresses this research questions, along with questions 8, 9, and 14 from the school transportation personnel survey. Questions 4, 7, and 8 on the school transportation administrator interview also addresses this research question. Finally, it must be noted that the researcher based the behaviors listed in these research instruments from the bus misconduct referrals that were submitted during the 2022-2023 school year.

The researcher utilized the results collected from these survey and interview questions, in conjunction with the topics and themes that emerged from the results of research question 1, to determine the areas addressed during the school transportation personnel professional development trainings. Figure 22 shows the results from parent pre-survey question 6.

Figure 22*Parent Pre-Survey Responses for Question 6*

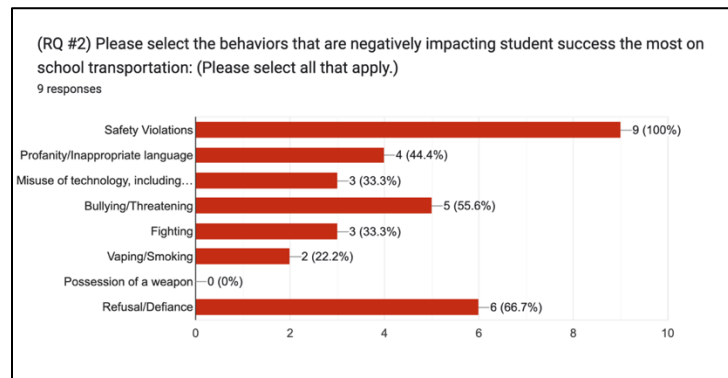
Based on these results, the following are the parents' areas of concern listed in order from greatest to least:

1. Bulling/threatening
2. Profanities/inappropriate language
3. Fighting
4. Safety violations
5. Refusal/defiance
6. Misuse of technology
7. Vaping/smoking
8. Possession of a weapon

In comparison, Figure 23 shows the results of the school transportation personnel pre-survey areas of concern.

Figure 23

School Transportation Personnel Pre-Survey Responses for Question 14



The following were the results of question 14 show that school transportation personnels' areas of concern:

1. Safety violations
2. Refusal/defiance
3. Bullying/threatening
4. Profanities/inappropriate language
5. Fighting
6. Misuse of technology
7. Vaping/smoking
8. Possession of weapons

The top five areas of concern identified by both participant groups include safety violations, bullying/threatening, profanities/inappropriate language, fighting, and refusal/defiance.

Additional survey questions that answered research question 2 were questions 8 and 9 of the school transportation personnel pre-survey. Figure 24 shows the results of

question 8, with 88.9% of school transportation personnel saying they either “strongly agree” or “agree” that they are knowledgeable of various disabilities

Figure 24

School Transportation Personnel Pre-Survey Responses for Question 8

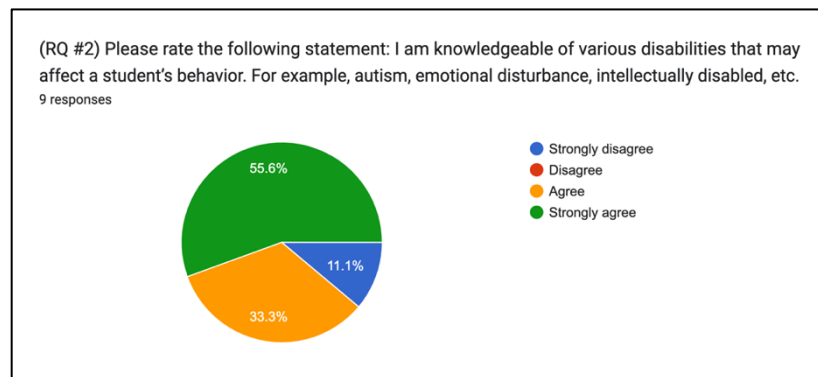
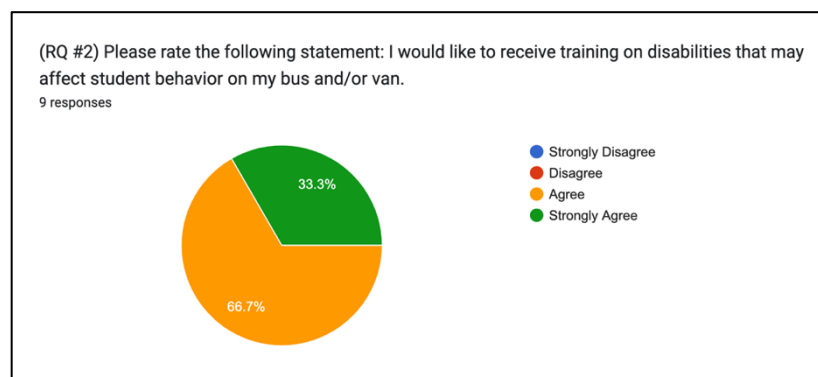


Figure 25 shows the results of question 9 and indicates that school transportation personnel would all like to receive additional training on disabilities that may affect student behaviors on their buses/vans.

Figure 25

School Transportation Personnel Pre-Survey Responses for Question 9



The third research instrument utilized to gather data for research question 2 was questions 4, 7, and 8 of the school transportation administrator interviews. Below is a summary of the responses received for interview question 4.

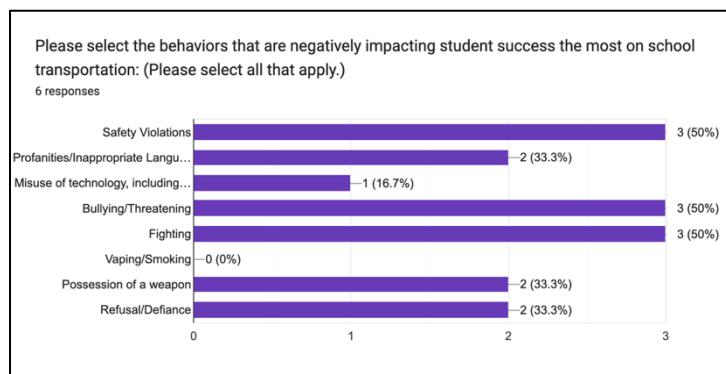
Interview Question #4. What information is provided to you regarding the various disabilities that may affect a student’s behavior on school transportation?

Six of the seven participants stated that they do not receive any information regarding the disabilities of students riding on school transportation. However, when a behavioral concern arises, information is shared with them. Additionally, one participant explained that when concerns arise for a student with an IEP, they will help create a plan to support that child. Another participant explained that while there is a “need to know” for this information, this area is concerning due to needing to maintain the confidentiality of students with a disability.

A second interview question that addresses research question two is interview question 7. Question 7 asked the participants, “What is your biggest concern related to student behaviors?” The researcher guided the responses to this question by providing all of participants with the list of the behaviors identified in parent survey questions six and school transportation personnel survey question 14. The researcher then added the participants’ responses into a Google Form. The results of this question are provided in Figure 26.

Figure 26

School Transportation Administrator Interview Question Seven Responses



The following are the results of question 7 that show school transportation administrators areas of concern:

1. Safety violation, bullying/threatening, and fighting
2. Profanities/inappropriate language, possession of a weapon, and refusal/defiance
3. Misuse of technology

In addition to stating these areas of concern, two participants expressed additional concerns surrounding the possession of weapons. Their responses were, “we don’t know what is in their backpacks” and that weapons includes “things that can be used as weapons.”

The third interview question that addresses research question 2 is question 8, “What type of professional development training do you feel would help improve student behaviors and success on school transportation?” The following topics were provided to the researcher:

- Management development – techniques and strategies that get students to listen
- Communication with students – how to talk to the students
- Differentiating infraction/prioritizing concerns – understanding what needs addressed immediately on the bus/van and knowing a major vs. minor infraction
- De-escalation
- PBIS for the bus

- Disabilities – general information to help them better understand the behaviors that may be associated to a specific disability.
- Working with students – how to work with and understand students better, including some of the challenges they may be facing (i.e. home-life).
- Building relationships – how to interact with students and show they care.

The researcher combined the interviewee responses with the responses from the surveys to help guide the topics and content presented during the professional development days in November and January.

The final piece of data utilized to answer research question 2 was the parent and school transportation personnel post surveys. These surveys were utilized to determine if participant perceptions changed because of the professional development opportunities provided for school transportation personnel. Table 5 shows the comparison of the results from the pre and post parent survey questions that answer research question 2.

Table 5*Comparison of Pre and Post Parent Survey Results*

Parent Survey	Pre-Survey Results (October/November 2023)	Post-Survey Results (May 2024)
1. Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply).		
Safety Violations	52.3%	35.5%
Profanity/Inappropriate language	75%	77.4%
Misuse of technology	25%	29%
Bullying/Threatening	84.1%	80.6%
Fighting	60.2%	32.3%
Vaping/Smoking	13.6%	9.7%
Possession of a weapon	10.2%	6.5%
Refusal/Defiance	51.1%	61.3%

Note. There were 88 pre-survey participants and 31 post survey participants.

Table 6 shows the comparison of results from the pre and post school transportation personnel survey questions that answer research question 2.

Table 6*Comparison of Pre and Post School Transportation Personnel Survey Results*

School Transportation Personnel	Pre-Survey Results (October/November 2023)	Post Survey Results (May 2024)
8. Please rate the following statement: I am knowledgeable of various disabilities that may affect a student's behavior. For example, autism, emotional disturbance, intellectually disabled, etc.		
Strongly Disagree	11.1%	0
Disagree	0	20%
Agree	33.3%	30%
Strongly Agree	55.6%	50%
1. Please rate the following statement: I would like to receive training on disabilities that may affect student behavior on my bus and/or van.		
Strongly Disagree	0	0
Disagree	0	30%
Agree	66.7%	50%
Strongly Agree	33.3%	20%
14. Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply).		
Safety Violations	100%	100%
Profanity/Inappropriate language	44.4%	90%
Misuse of technology	33.3%	30%
Bullying/Threatening	55.6%	100%
Fighting	33.3%	50%
Vaping/Smoking	22.2%	40%
Possession of a weapon	0	0
Refusal/Defiance	66.7%	80%

Note. There were 9 pre-survey participants and 10 post survey participants.

Research Question Three: What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?

Bus misconduct referral data was utilized to answer research question 3. To do this the researcher analyzed and compared the total number of bus misconduct referrals from the 2022-2023 and the 2023-2024 school years. Table 7 shows the overall bus misconduct data for the 2022-2023 and 2023-2024 school years. This table shows that there was a 33% decrease in referrals from 2022-2023 to 2023-2024. Additionally, there was a 28% decrease in the number of repeat offenders, or students that were attributed to two or more referrals.

Table 7

Overall Bus Misconduct Data for 2022-2023 and 2023-2024 School Years

Overall Comparison				
	22/23	23/24	Change	Percentage
Total Referral	426	286	- 140 referrals	-33%
Total Repeat Offenders	81	58	- 23 students	-28%

The researcher then broke the overall data down further to analyze what changes occurred within the cohorts of students at the elementary school to create the overall decrease in bus misconduct referrals. Table 8 shows the cohort data for the students that moved from kindergarten to first grade and Table 9 shows the data for first to second grade.

Table 8*Kindergarten to First Grade Cohort Discipline Data*

Kindergarten to 1st Grade			
	22/23	23/24	% Change
Total Referrals	54 referrals	34 referrals	-37% referrals
IEPs	19 referrals	11 referrals	-42% referrals
504s	0	0	Null
Female	18 referrals	8 referrals	-56% referrals
Male	36 referrals	26 referrals	-28% referrals
Students Responsible for Referrals	26 students	25 students	-4%students
Repeat Offenders	11 repeat offenders	6 repeat offenders	-45% repeat offenders

Table 9*First to Second Grade Cohort Discipline Data*

1st Grade to 2nd Grade			
	22/23	23/24	% Change
Total Referrals	77 referrals	29 referrals	- 62% referrals
IEPs	17 referrals	15 referrals	-12% referrals
504s	7 referrals	0 referrals	-100% referrals
Female	41 referrals	8 referrals	-80% referrals
Male	36 referrals	21 referrals	-42% referrals
Students Responsible for Referrals	35 students	13 students	-63% students
Repeat Offenders	14 repeat offenders	7 repeat offenders	-50% repeat offenders

According to the data presented in Table 8 and Table 9, the first-grade cohort had the largest overall decrease in referrals in all but one category, referrals that were attributed to students with an IEP. In this category, the kindergarten cohort had a 42% decrease, where the first-grade cohort had a 12% decrease.

The next cohorts of students included students that went from second to third grade and third to fourth grade. Table 10 shows the data for the second-grade cohort, and Table 11 shows the data for the third-grade cohort.

Table 10*Second to Third Grade Cohort Disciple Data*

2nd Grade to 3rd Grade			
	22/23	23/24	% Change
Total Referrals	66 referrals	39 referrals	-41% referrals
IEPs	34 referrals	12 referrals	-65% referrals
504s	2 referrals	1 referral	-50% referrals
Female	10 referrals	3 referrals	-70% referrals
Male	56 referrals	36 referrals	-36% referrals
Students Responsible for Referrals	30 students	23 students	-23% students
Repeat Offenders	12 repeat offenders	8 repeat offenders	-33% repeat offenders

Table 11*Third to Fourth Grade Cohort Disciple Data*

3rd Grade to 4th Grade			
	22/23	23/24	% Change
Total Referrals	46 referrals	46 referrals	Null
IEPs	10 referrals	13 referrals	+30% referrals
504s	9 referrals	7 referrals	-22% referrals
Female	12 referrals	9 referrals	-25% referrals
Male	34 referrals	37 referrals	+9% referrals
Students Responsible for Referrals	26 students	27 students	+4% students
Repeat Offenders	7 repeat offenders	11 repeat offenders	+57% repeat offenders

The second-grade cohort data shows a decrease in all categories, with the biggest change taking place in the percentage of female students receiving a referral. This category had a 70% decrease in referrals. The third-grade cohort, however, did not see a decrease in all categories like the kindergarten, first, or second grade cohorts. This cohort had increases in four areas, while maintaining the same number of overall referrals from one year to the next. The highest increase occurred in the number of “repeat offenders” with a 57% increase from one year to the next.

The final cohorts examined by the researcher included data for the students moving from fourth to fifth grade, and fifth to sixth grade. Table 12 shows the data for the fourth to fifth grade cohort, and Table 13 shows the data for the fifth to sixth grade cohort.

Table 12*Fourth to Fifth Grade Cohort Disciple Data*

4th Grade to 5th Grade			
	22/23	23/24	% Change
Total Referrals	97 referrals	64 referrals	-34% referrals
IEPs	39 referrals	28 referrals	-28% referrals
504s	0	0	Null
Female	23 referrals	15 referrals	-35% referrals
Male	74 referrals	49 referrals	-34% referrals
Students Responsible for Referrals	39 students	38 students	-3% students
Repeat Offenders	22 repeat offenders	12 repeat offenders	-45% repeat offenders

Table 13*Fifth to Sixth Grade Cohort Disciple Data*

5th Grade to 6th Grade			
	22/23	23/24	% Change
Total Referrals	46 referrals	31 referrals	-33% referrals
IEPs	9 referrals	14 referrals	+55% referrals
504s	0	0	Null
Female	17 referrals	12 referrals	-29% referrals
Male	29 referrals	19 referrals	-34% referrals
Students Responsible for Referrals	28 students	20 students	-29% students
Repeat Offenders	9 repeat offenders	7 repeat offenders	-22% repeat offenders

According to the cohort data, the fourth-grade cohort had decreases in all categories, with the largest decrease taking place in the number of “repeat offenders.” Specifically, this category had a 45% decrease from the previous year. The fifth-grade cohort, however, did not have similar results and had an increase in referrals attributed to students with and IEP. According to the data, this area had a 55% increase from one year to the next.

Triangulation of Data

Multiple forms of data were collected and analyzed to answer each research question. This data included perceptions from three groups of participants, which included parents, school transportation personnel, and school transportation administrators. Data from the parent pre-survey, school transportation personnel pre-survey, and school transportation administrator interviews were analyzed to determine

common themes and topics for professional development trainings that would support school transportation personnel with student behaviors on their buses and vans. A post survey was also administered to parents and school transportation personnel to determine if their perceptions changed due to the professional development opportunities that were provided to bus and van drivers. Finally, the number bus misconduct referrals for 2022-2023 and 2023-2024 were also analyzed and compared to each other to determine if the professional development opportunities provided had their desired effect on lowering the number of referrals submitted to the elementary school. By utilizing multiple forms of data, the researcher increased the validity and credibility of the study by removing the potential for researcher bias.

Discussion

This action research study utilized a mixed methods approach to collecting and analyzing data. The goal of utilizing this research method was to answer three research questions using the results from surveys, interviews, and discipline data. Based on the results of the survey and interview data collected for research questions 1 and 2, the researcher determined themes to focus the school transportation personnels' professional development trainings on. These themes included building relationships, setting expectations, and behavior management. The researcher then assigned subtopics within these themes. These topics were determined based on survey and interview results.

The first theme, building relationships, included information regarding how to build positive relationships with students through positive interactions. This theme and sub-topic are directly correlated to the responses the researcher received from question 8 on the school transportation administrator interview. These responses reflected a need for

school transportation personnel to not only build positive relationships with students, but also learn ways to development and encourage daily positive interactions between the drivers and students.

The second theme, setting expectations, emerged from the school transportation personnel survey results. This theme emerged from the responses received for question 4 of the school transportation personnel pre-survey. According to the results 55.6% of participants agreed that they would like more training in this area, and 33.3% of participated strongly agreed to wanting more training in this area. The researcher then utilized the responses received from question 2 of the school transportation administrator interviews to help guide the development of the content presented during the professional development training.

The researcher created day one of the school transportation personnel professional development trainings centered around these two themes. This training took place on November 29, 2023, and included all TCT employees. A comprehensive agenda for this training day is in Appendix K and details the discussion points and activities presented during this professional development training.

The third theme that emerged from the results of question 8 of the school administrator interview and question 7 of the school transportation personnel pre-survey was related to behavior management, including how to de-escalate students. Within this theme the researcher included the topics of safety, profanities/inappropriate language, bullying, fighting, and defiance and refusal. These topics emerged from the responses received from question 6 of the parent pre-survey, question 14 of the school

transportation personnel pre-survey, and question 7 of the school transportation administrator interview.

Two subtopics that were added within this theme were differentiating between major and minor discipline infractions and parent communication. These topics were added based on the results of questions 5 and 8 of the school transportation administrator interview, questions 4 and 5 of the parent pre-survey, and questions 10, 11, and 12 of the school transportation personnel pre-survey.

The researcher utilized this data to create day two of training for school transportation personnel. This training focused on behavior management as it relates to school bus safety, bullying, fighting, refusal/defiance, and the use of inappropriate language. The researcher also included information related to differentiating the level of an infraction and if it needs to be written up as a formal write-up. Furthermore, information related to how to properly fill out a referral was added to this subject. Finally, the researcher reviewed the importance of parent communication and provided suggestions on how to effectively communicate with parents. A comprehensive agenda for the trainings that took place on January 24, 2024, is in Appendix L.

Research question 3 was answered utilizing the 2022-2023 and 2023-2024 referral data that was collected from the district's student information management system. The overall referral numbers were collected, analyzed, and compared by the researcher. The researcher further analyzed this data and created cohorts for the students within the elementary school. This data analysis revealed that the total number of bus misconduct referrals decreased by a total of 140 referrals. This is a 33% decrease from one year to the next, thus suggesting that the professional development opportunities provided to school

transportation personnel had a positive effect on lowering the number of bus misconduct referrals submitted to the elementary school administration for processing.

Summary

Chapter IV highlighted and discussed the data that was collected for this mixed-methods action research project. The data and results that were collected within this chapter provided the researcher with answers to three research questions and proved that effective professional development opportunities for school transportation personnel affects the overall number bus misconduct referrals submitted at the elementary level. Chapter V will provide additional discussion related to the study, as well as the researcher's conclusions and recommendations for future studies.

CHAPTER V

Conclusions and Recommendations

According to NHTSA (n.d.-b), school buses are responsible for transporting millions of students to and from school each year, making school transportation a key component in ensuring that students attend school regularly and have an opportunity to be successful. However, the job of a school bus driver is more complicated than simply driving students to and from school each day. It is also about ensuring the safety of all the children on the bus, as well as the safety of everyone around them. This task becomes increasingly difficult when students become unruly and exhibit unsafe behaviors on the bus, causing the driver to take their attention away from driving the bus to address the misbehaviors taking place. Knowing these challenges and seeing the impact they have had at the elementary level, the researcher determined that an action research project aimed at supporting school transportation personnel was necessary.

With this goal in mind, the researcher developed a mixed-methods research study. This approach allowed the researcher to gather qualitative data in the form of surveys and interviews and quantitative data in the form of the number of disciplinary referrals submitted at the elementary school. The perceptions gathered from the surveys and interviews provided the researcher with common themes that could be utilized to guide professional development opportunities for school transportation personnel. The referral totals were then utilized to determine if the professional development opportunities affected the total number of referrals submitted from one year to the next.

To guide this study and the data collected, the researcher developed the following three research questions:

1. What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?
2. What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?
3. What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?

Chapter V will discuss the researcher's conclusions associated to each research question, as well as provide recommendations for future research. It will also provide future researchers with information regarding the limitations they may face, as well as the fiscal implications associated to the study.

Conclusions

The participants for this action research project were school transportation personnel, school transportation administrators, and elementary school parents. School transportation personnel included bus and van drivers, as well as bus and van monitors from TCT. Parent participants included the parents/guardians of the students that attend the Punxsutawney Area Elementary School. The school encompasses students in kindergarten through sixth grade. Lastly, school transportation administrators included any administrator or supervisor that is responsible for drivers and/or students within both organizations.

Each participant group provided the researcher with their perceptions related to school bus discipline at the elementary level. Specifically, school transportation personnel

and parents responded to a pre and post survey regarding bus behaviors and areas of concern, while school transportation administrators participated in interviews related to similar topics. Then, based on these perceptions, the researcher provided two days of professional development trainings for all school transportation personal. A final piece of data that was collected was the total number of bus misconduct referrals submitted during the 2022-2023 and 2023-2024 school years. The researcher compared this data to determine if the professional development opportunities provided affected the number of referrals submitted at the elementary school from one year to the next.

Research Question One

Research question one asked, “What are the perceptions of school transportation personnel and parents on student behavior and discipline on district buses and vans?” The answer to this research question was based on responses to several questions from the school transportation personnel and parent surveys, as well as the school transportation administrator interviews. Table 14 shows the questions/statements from the parent survey that answer research question one.

Table 14

Parent Questions/Statements Answer Research Question One

Parent Survey Questions/Statements
1. Please select the type of school transportation your child rides.
2. How often does your child receive a bus misconduct referral that is handled by a school administrator?
3. Please rate the following statement: There are clear expectations/rules for my child on their bus/van.
4. How often does your child’s driver communicate with you about your child’s behavior on school transportation.
5. If a driver were to communicate with you about behaviors, how would you prefer that they communicate with you.

Table 15 shows the questions/statements from the school transportation personnel survey that answer research question one.

Table 15

School Transportation Personnel Questions/Statements Answer Research Question One

School Transportation Personnel Survey Questions/Statements
1. Please select the number of years of experience you have in school transportation.
2. How often do you complete bus misconduct referrals that are handled by a school administrator?
3. I provide the students on my bus/van with clear expectations (rules) for student behavior.
4. I would like to receive training on how to establish and communicate expectations (rules) for the students on my bus/van.
5. I am able to redirect student misbehaviors on school transportation.
6. I am able to de-escalate or calm down escalated students on school transportation.
7. I would like to receive training on how to de-escalate or calm down escalated students on my bus and/or van.
10. How often do you communicate with parents about student misbehaviors on school transportation?
11. Please identify how you communicate with parents.
12. I would like to receive training on how to communicate with parents.
13. The consequences students receive by school administration for bus misconduct referrals are effective.

Table 16 shows the questions/statements from the school transportation administration interviews that answer research question one.

Table 16*School Transportation Administration Questions/Statements Answering Research**Question One*

School Transportation Administration Interview Questions/Statements
1. Do you find the bus misconduct referral form easy to complete? If not, what changes need to be made to this form to make it more effective in reporting student misconducts?
2. What are the expectations or rules that you have for the students on your bus/van?
3. What is your current procedure for dealing with an escalated or unruly student?
5. Please explain your preferred method for communicating with parents
6. What are your thoughts on the consequences the students receive from school administration related to bus misconducts? Do they effectively change the student's behavior?

The researcher analyzed the results of each of these questions and compared them to determine common themes among participant groups. The themes that emerged from research question one were communication, setting expectations, and de-escalation.

Research Question Two

Research question two asked, "What behaviors are identified through school transportation personnel and parent perceptions, as well as referral data that are impacting student success on school transportation?" This question was answered by responses from several questions/statements on the school transportation and parent surveys, as well as the school transportation interview. Table 17 shows the questions/statements from the parent survey that answer research question two.

Table 17

Parent Survey Questions/Statements Answering Research Question Two

Parent Survey Questions/Statements
1. Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply).

Table 18 shows the school transportation personnel survey questions/statements that answer research question two.

Table 18

School Transportation Personnel Questions/Statements Answering Research Question Two

School Transportation Personnel Survey Questions/Statements
8. Please rate the following statement: I am knowledgeable of various disabilities that may affect a student's behavior. For example, autism, emotional disturbance, intellectually disabled, etc.
9. Please rate the following statement: I would like to receive training on disabilities that may affect student behavior on my bus and/or van.
14. Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply).

Table 19 shows the school transportation administrator interview questions/statements that answer research question two.

Table 19*School Transportation Administration Questions/Statements Answering Research**Question Two*

School Transportation Administration Interview Questions/Statements
4. What information is provided to you regarding the various disabilities that may affect a student's behavior on school transportation?
7. What is your biggest concern related to student behaviors?
8. What type of professional development training do you feel would help improve student behaviors and success on school transportation?

Question 9 from the school transportation personnel survey revealed that the drivers would like more information regarding student disabilities. This was supported by the school transportation administration responses to interview question 8, which stated that they feel drivers need more information regarding the behaviors that are associated with specific disabilities.

In addition to more information regarding disabilities, participants also revealed their perceptions on which behaviors they feel are negatively impacting student behaviors on the bus/van. The areas of potential impact were identified by the researcher based on referral data from the 2022-2023 bus misconducts. These areas include:

- Safety Violations
- Profanity/Inappropriate Language
- Misuse of Technology
- Bullying/Threatening
- Fighting
- Vaping/Smoking

- Possession of a Weapon
- Refusal/Defiance

Participant responses revealed that safety violations, profanities/inappropriate language, bullying/threatening, refusal/defiance, and fighting are the most common behaviors negatively impacting bus behavior.

Interventions. Based on the data collected for research questions one and two, the researcher created two days of professional development trainings for school transportation personnel. The first day of training on November 29, 2023, addressed building relationships with students through positive interactions. This training also helped drivers learn how to set expectations on their buses/vans. The content presented during this professional development day was connected to and supported by the work of Galliger et al. (2008) who found that unstructured settings, such as the school bus, increase the potential for problematic behaviors. Thus, creating a need for school transportation personnel to set clear expectations for their buses and vans. Literature from PennDOT (2022) also supported the theme of building positive relationships, stating that building positive relationships and having positive interactions between students and drivers is vital, because it helps create trust and respect, which can have an impact on student behavior (p. B-6).

The second day of professional development training was held on January 24, 2024. This training was centered around behavior management. The researcher utilized this overarching theme to encompass discussions regarding disabilities, de-escalation, completing referrals, and communication with parents. Additionally, the researcher connected setting clear expectations. The first training also discussed behavior

management and the effect it has on student behavior. Lastly, the researcher explained that a literature review supported the participants' responses that profanities/inappropriate language, refusal/defiance, and bullying are frequent behavioral concerns on school transportation (Kennedy, 2021).

Research Question Three

Research question three examined the effect the two days of professional development training had on discipline referrals. Specifically, this question asked, "What effect does incorporating professional development opportunities for school transportation personnel have on the number of student bus misconduct referrals at the elementary level?" This question was answered by analyzing the number of bus misconduct referrals submitted during the 2022-2023 school year and comparing it to the number of referrals submitted during the 2023-2024 school year. This data revealed that the professional development opportunities provided to the drivers had its desired effect by decreasing the total number of referrals by 33%. Additionally, the data revealed that five of the six cohorts of students had a decrease in the overall number of referrals they had from one year to the next. The only exception to this was the third to fourth grade cohort that saw no change and remained at a total of 46 referrals during the 2022-2023 and 2023-2024 school years.

School Level Improvements

The goal of this action research project was to decrease the number of student bus misconduct referrals at the elementary school. This goal was developed to not only help decrease misbehaviors on school transportation, but also to provide support to school transportation personnel. These goals were achieved; however, they led to additional

improvements and supports for the stakeholders of the Punxsutawney Area Elementary School and TCT.

First, by asking for the insights of parents, school transportation personnel, and school transportation administrators, the researcher was able to show the connection between the school district, parents, and the transportation company. This emphasized that all voices and perceptions are important when trying to make a change within the organization. Secondly, it provided the district with an opportunity to work more closely with the transportation company. As a contracted service, the transportation company and its employees are a separate entity from the district; however, their services are a vital component to the daily operations of the district and student success. This collaboration showed a joint effort in trying to improve student behaviors on school transportation, while considering the needs of the employees that interact with students daily on their buses and vans.

Another improvement is related to the amount of time spent addressing student misbehaviors. A decrease in the number of referrals shows that drivers are spending less time addressing student misbehaviors, which as Zohar and Lee (2016) explained leads to increased safety shortcuts and distracted driving by the drivers. Consequently, this change provides the drivers with the ability to be more focused as they transport students to and from school.

The decrease in referrals also indicates less disruptions within the elementary school, as students are not being called to the office for disciplinary consequences as often. When a student is called to the office to have a bus misconduct referral addressed the student is being removed from the classroom and the teacher's instruction.

Disruptions such as this may not only impede their learning, but also removes the student from their peers.

A final improvement is related to the increased knowledge for school transportation personnel. The content presented during the two days of professional development will continue to help and support the employees at TCT as they continue to work with students and face potential misbehaviors on their buses and vans. Furthermore, it has helped to create the potential for future collaborations between the school district and TCT.

Fiscal Implications

There were no fiscal implications associated with this action research study. The researcher utilized Google Forms to administer and collect data for each survey and all interviews were conducted via a free version of Zoom. Furthermore, all data gathered for this study was stored in the researcher's free Google account. Lastly, all professional development content was curated by the researcher and was based on the data collected from the surveys, interviews, and review of literature. This content was then presented to school transportation personnel during their previously schedule safety meetings in November and January.

Limitations

This mixed-methods action research study utilized multiple sources to triangulate data and avoid potential biases; however, limitations still exist and must be considered when looking at the results presented in this study. The prevalent limitation is the addition of two new principals at the elementary school and the potential impact that had on how bus behaviors and bus misconducts were handled during the 2023-2024 school year. An

additional limitation that must be considered is potential changes in the employees at TCT. Much like the school district, changes in staffing have the potential of affecting how bus misconducts are handled.

The first limitation in this study was the introduction of two new principals at the elementary school. These new administrators filled the positions of building principal and assistant principal, and while they followed the discipline hierarchy previously established in the school handbook, they also made some adjustments to bus expectations. One change they implemented was the requirement of seating charts on all buses. This change has the potential to affect student behaviors due to the strategic nature of creating a seating chart and the placement of where a child sits. Furthermore, this placement may affect the children's behaviors as they may be removed from children that do not support positive behavior choices.

A second factor related to the introduction of new principals was the implementation of a new incentive program that rewarded students for positive bus behaviors. This program tracked the number of referrals submitted on each bus. After a set amount of time, all the students on a bus with no referrals received a reward for their positive behavior. As the literature review of this study explained, the use of a "token system" or "reward system" has the potential to impact student behavior in a positive manner, which would also lower the number of bus misconduct referrals submitted to the elementary school during the 2023-2024 school year.

A final limitation to consider within this study is the changes in employees at TCT from one year to the next. The most influential change in employees would be with the drivers of the buses and vans. Additionally, there may also be changes in which routes the

drivers are assigned to from one year to the next. When a driver leaves the company, and a new driver is hired, changes are unavoidable to not only the routes, but also the driver-student relationships and interactions on the bus. Lastly, new drivers bring with them varying levels of experience. This change may also affect how they manage student behaviors on their bus/van.

First, when a driver is assigned a new bus route the students on their bus changes. This change has the potential to affect the students in a positive or negative way. If positive relationships were established with the previous driver, the driver and the students will need time to adjust and get to know each other. Additionally, at this point, not every bus is required to have the same rules/expectations. Therefore, the new driver's rules and expectations will take time for the students to adjust to.

Second, when a new driver is hired, they may or may not have any previous experience as a bus/van driver. This factor must be considered because it may affect how they interact with the students and how comfortable they are with handling student misbehaviors. Additionally, being a new employee implies that a learning period will take place in which the new driver will need time to learn about the policies and procedures that have been implemented and established by the bus company and the school district. Therefore, this factor must be considered when looking at the number of referrals submitted from one year to the next.

Recommendation for Future Research

The goal of this mixed-methods action research project was to analyze the effect professional development opportunities for school transportation personnel had on the number of bus misconduct referrals submitted at the elementary level. To develop these

professional development opportunities, the researcher analyzed the data collected from a parent survey, school transportation personnel survey, and school transportation administrator interviews. Specifically, the researcher looked for common themes among the three research instruments and developed two days of professional development trainings for school transportation personnel. Then, at the end of the 2023-2024 school year, the researcher compared the total number of bus misconduct referral submitted during the school year to those submitted in 2022-2023 school year. The desired effect of the professional development trainings was to see a decrease in the total number of bus misconduct referrals. The desired affect was achieved; however, future researchers should consider the following recommendations:

1. **Add parental trainings to increase knowledge of school transportation, as well as encourage support for administrators and school transportation personnel.** Providing the parents with an opportunity to participate in a training related to school bus behaviors would be beneficial in further supporting and strengthening the collaboration between the school district, parents, and transportation company. Additionally, this training could provide an opportunity for the parents to meet their child's driver, much like parents meeting their child's teacher during an open house or meet the teacher night.
2. **Increase the number of collaborative professional development opportunities for school transportation personnel.** Increasing the professional development opportunities by adding two more sessions would provide additional time for trainings with the school transportation personnel. Specifically, if one day was added prior to school beginning and one day was added after school was over, it

would allow for more collaboration and reflection with the transportation company. The session before school would serve as a review of the topics discussed the previous year, as well as provide a time for the drivers to collaborate and determine a consistent set of rules and expectations for all buses and van. The session after school has ended would encourage reflection and provide the drivers with an opportunity to make suggestions for the next school year.

3. **Include teachers in helping teach bus behaviors and expectations.** Carns (1996) suggests that a bus intervention program meets the needs for all stakeholders, which includes teachers. Therefore, it is recommended that the teachers should take an active role in helping support positive behavior on school transportation by teaching and reinforcing the rules and expectations of the bus and van within their classrooms. This would be possible by providing the teachers with a list of bus and van rules and expectations at the beginning of the school year and having them review the list with the students in their classrooms.

Table 20 shows a recommended timeline and implementation plan with the recommendations for future research included.

Table 20*Recommendations for Future Research - Timeline and Implementation Plan*

Month of Implementation	Activities To Be Completed	Participants
August	<u>Monthly Transportation Meeting:</u> <ul style="list-style-type: none"> - Review information on setting expectations. <ul style="list-style-type: none"> • Collaboratively create one set of rules/expectations for all buses. • Collaboratively create one set of rules/expectations for all vans. - Review information regarding building relationships and behavior management. 	School Transportation Personnel, including Administration School District Administration
	<u>Teach Rules/Expectations:</u> <ul style="list-style-type: none"> - Explicitly teach rules and expectations to all students in the classroom. 	Classroom Teachers
September/October	<u>Research Study Requirements:</u> <ul style="list-style-type: none"> - IRB Approval <ul style="list-style-type: none"> • Development of research instruments • Informed Consent - Administer research instruments and gather data. 	Researcher
	<u>Parent Night in September:</u> <ul style="list-style-type: none"> - Have a parent night specific to school transportation. <ul style="list-style-type: none"> • Review and discuss the bus/van rules and expectations. • Provide time for parents to meet their child's driver. 	School Transportation Personnel, including Administration School District Administration Parents/Guardians
November	<u>Monthly Transportation Meeting:</u> <ul style="list-style-type: none"> - Professional Development Day 1: <ul style="list-style-type: none"> • Provide professional development for all school transportation personnel that is based off the survey and interview results. 	Researcher School Transportation Personnel, including Administration
January	<u>Monthly Transportation Meeting:</u> <ul style="list-style-type: none"> - Professional Development Day 2: <ul style="list-style-type: none"> • Provide professional development for all school transportation personnel that is based off the survey and interview results. 	Researcher School Transportation Personnel, including Administration
May/June	<u>Research Study Requirements:</u> <ul style="list-style-type: none"> - Gather, analyze, and compare referral data. 	Researcher
	<u>Monthly Transportation Meeting:</u> <ul style="list-style-type: none"> - Reflection and suggestions for the upcoming school year. 	School Transportation Personnel, including Administration School District Administration

Summary

Millions of students rely on transportation services to take them to and from school each day. The drivers of the buses and vans that transport these students have a very complex and important job to do. This requires additional licensing, as well as trainings to ensure they meet the requirements of the state. As a result of this study, the researcher was not only able to decrease the number of bus misconduct referrals, but also bring together various stakeholders within the district. Together, the parents of the elementary school, school transportation personnel, and the administration were able to work collaboratively and provide professional development trainings that were meaningful and aimed at the needs identified through survey and interview responses. Lastly, the results of this study and the collaboration it has created have the potential to create a positive and lasting effect that will go beyond the participants of this study and support future collaborations with stakeholders within the district.

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APPENDICES

Appendix A

IRB Approval Letter



Institutional Review Board
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.

Dear Sheena Smelko,

Please consider this email as official notification that your proposal titled "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level" (Proposal #PW23-027) has been approved by the Pennsylvania Western University Institutional Review Board as submitted.

The effective date of approval is 09/29/2023 and the expiration date is 09/28/2024. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 09/28/2024, you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.
Chair, Institutional Review Board

Appendix B

Updated IRB Approval Email

Re: Smelko_Updated Interview Procedures



InstReviewBoard
To: Sheena Smelko



Reply



Reply all



Forward



Wed 11/8/2023 7:22 AM

Start reply with:

Great, thank you so much!

Thank you for your confirmation.

Thank you!

Sheena,

Thank you for your updates, they have been approved by a reviewer. Thank you!

Lindsay Pegg
IRB Graduate Assistant

Get [Outlook for iOS](#)

From: Sheena Smelko <sme7152@pennwest.edu>
Sent: Thursday, October 26, 2023 10:11:48 PM
To: InstReviewBoard <InstReviewBoard@pennwest.edu>
Subject: Smelko_Updated Interview Procedures

To Whom It May Concern,

Attached is an update I would like to make to my study, "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level." My proposal approval number is #PW23-027. I have also included an updated interview consent form to reflect the updates within the proposal.

Thank you,
Sheena Smelko

Reply

Forward

Appendix C

Punxsutawney Area School District Letter of Support

**PUNXSUTAWNEY AREA SCHOOL DISTRICT**

300 Center Street, Punxsutawney, PA 15767
Phone (814) 938-5151 Fax (814) 938-6677

Dr. Thomas A. Lesniewski, Superintendent
Dr. Curt P. Vasas, Assistant to the Superintendent
Susan H. Robertson, Business Administrator

August 7, 2023

994 Young Road
Punxsutawney, PA, 15767

Dear Sheena Smelko:

I am pleased to write a letter in support of your doctoral capstone project entitled, "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level." The proposed research has significant value as it will provide an opportunity for the school district to work with the transportation company and provide valuable professional development opportunities for all drivers.

I have reviewed the project proposal and understand the following related to participation:

- Participation by school transportation personnel will involve the completion of pre- and post- intervention surveys and interviews, as well as an evaluation at the end of the professional development sessions.
- Participation will be voluntary, and school transportation personnel may withdraw from the study at any time.
- Participation will not affect school transportation employment and/or their evaluations, as the researcher is not the supervisor of potential participants.
- Student bus misconduct referral data will be collected to determine the effect of the professional development opportunities provided for bus and van drivers. This data will include the overall number of referrals from the 2022-2023 school year and the 2023-2024 school year and will not include student specific information.
- Data collection will be kept confidential and kept secure via electronic files.
- Potential risks are minimal and are no more than that of daily risks/daily living.

Please accept this letter as my formal consent and support of the district's participation in the proposed research project.

Sincerely,

Dr. Thomas A. Lesniewski
Superintendent

To learn more about the Punxsutawney Area School District visit us on the web.
www.punxsy.k12.pa.us

Appendix D

Tri-County Transportation Letter of Support

August 3, 2023

994 Young Road
Punxsutawney, PA, 15767

Dear Sheena Smelko:

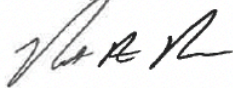
I am pleased to write a letter in support of your doctoral capstone project entitled, "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level." The proposed research has significant value as it will provide an opportunity for the transportation company to work with the school district and provide valuable professional development opportunities for all drivers.

I have reviewed the project proposal and understand the following related to participation:

- Participation by school transportation personnel will involve the completion of pre- and post- intervention surveys and interviews, as well as an evaluation at the end of the professional development sessions.
- Participation will be voluntary, and school transportation personnel may withdraw from the study at any time.
- Participation will not affect school transportation employment and/or their evaluations, as the researcher is not the supervisor of potential participants.
- Data collection will be kept confidential and kept secure via electronic files.
- Potential risks are minimal and are no more than that of daily risks/daily living.

Please accept this letter as my formal consent and support of the district's participation in the proposed research project.

Sincerely,



Vice President at Tri-County Transportation

Appendix E

Informational Letter for Elementary School Parents

Parent Survey Letter

Dear PAES families,

As many of you know I am Mrs. Smelko, the former assistant principal at the elementary school and the new assistant principal at the high school. In addition to being an administrator with the school district, I am also working towards obtaining my educational doctorate from PennWest University's California Campus. I have just started my final year of this program and I am working on my Capstone Action Research Project. For this project I am working with Tri-County Transportation to analyze student bus behaviors and how to best support the drivers in our district. Therefore, I need your help. Below you will find a QR code that will take you to a parent survey related to transportation. If you would like to provide information regarding your perceptions related to transportation, please scan the QR code below and complete the survey questions that follow.

Please note that by completing this survey you are consenting to participate in this study. Additionally, all responses are anonymous and personal information will not be obtained as a result of completing the survey. All data collected by the researcher from this survey will be kept confidential and secure through the use of a password protected Google Account.

Finally, while Dr. Lesniewski and Tri-County Transportation are supporting me in conducting this study, this project is not being funded by Tri-County Transportation and/or the school district, as it is not directly related to district operations.

If you have any additional questions, please reach out to me at sheenasmelko@gmail.com

Thank you,
Mrs. Smelko



Appendix F

Informational Letter for School Transportation Personnel

School Transportation Personnel Survey Letter

Dear TCT Personnel,

As many of you know I am Mrs. Smelko, the former assistant principal at the elementary school and the new assistant principal at the high school. In addition to being an administrator with the school district, I am also working towards obtaining my educational doctorate from PennWest University's California Campus. I have just started my final year of this program and I am working on my Capstone Action Research Project. For this project I am working with Tri-County Transportation Management to analyze student bus behaviors and how to best support you, our drivers. Therefore, I need your help. Below you will find a QR code that will take you to a school personnel transportation survey. This survey will provide you with an opportunity to share with me your perceptions on student behaviors on your buses and van. If you would like to provide information regarding your perceptions related to these concerns, please scan the QR code below and complete the survey questions that follow.

Please note that by completing this survey you are consenting to participate in this study. Additionally, all responses are anonymous and personal information will not be obtained as a result of completing the survey. All data collected by the researcher from this survey will be kept confidential and secure through the use of a password protected Google Account.

Finally, while Dr. Lesniewski and Tri-County Transportation are supporting me in conducting this study, this project is not being funded by the school district and/or Tri-County Transportation, as it is not directly related to district operations.

If you have any additional questions, please reach out to me at sheenasmelko@gmail.com

Thank you,

Mrs. Smelko



Appendix G

Interview Informed Consent Form

Interview Informed Consent

Title of Study: The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level

Key Information

You are being asked by Sheena Smelko to participate in a research study. Participation in this study is voluntary, and you may stop at any time.

The purpose of this study is to gain the perceptions of parents and school transportation personnel regarding student behavior on school buses and vans. Then, based on these perceptions, professional development opportunities are going to be provided for all bus and van drivers with the goal of decreasing the number of student bus referrals being turned into the elementary school office.

For this portion of the study, you will be asked 8 questions related to your perceptions on student behaviors and the needs of the drivers within the district. All interviews for this portion of the study will be conducted by the researcher and will be manually recorded. Audio recording devices will not be used to record responses.

This interview will take about 20 minutes to complete.

The potential risks during this study are no more than that of daily living/daily risks. Please remember you may stop this interview at any time.

The benefits of this study are to help the researcher better understand school transportation personnel perceptions and parent perceptions regarding student discipline on district buses and vans.

Security of Data

By consenting to be interviewed you will be submitting your First and Last Name to the researcher. However, please note that your name will not be used within this study, and you will be given a participant ID number, which only the research will know. To maintain interviewee confidentiality, all interviews will be conducted via Zoom or Google Meet. The researcher will conduct these interviews in a private room to maintain confidentiality. Additionally, all data and consent forms will be destroyed three years after completion of the study.

If you have any questions regarding this consent form or the study, please reach out to Mrs. Sheena Smelko at sheenasmelko@gmail.com.

Please print your first and last name and sign below if you consent to participating in an interview with Mrs. Smelko.

First and Last Name Printed

Signature

Appendix H

Parent/Guardian Survey Questions

School Transportation Parent Survey

Consent Statement: By completing this survey, you are consenting to participate in the study, "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level." Please note that all responses are anonymous, and no personal data will be collected as a result of completing this survey.

1. (RQ #1) Please select the type of school transportation your child rides:

Bus Van

2. (RQ #1) How often does your child receive a bus misconduct referral that is handled by a school administrator?

Never

Rarely – up to 2 times a week

Sometimes – 3-5 times a week

Often – 6-10 times a week

Constantly – 11 or more times a week

3. (RQ #1) Please rate the following statement: *There are clear expectations/rules for my child on their bus/van.*

Strongly disagree

Disagree

Agree

Strongly Agree

4. (RQ #1) How often does your child's driver communicate with you about your child's behavior on school transportation.

Never

Rarely – Only in extreme cases

Sometimes – After multiple incidents on school transportation

Often – Each time a student bus misconduct is completed.

5. (RQ #1) If a driver were to communicate with you about behaviors, how would you prefer that they communicate with you.

In-person (Speaking with you at the bus stop.)

Written Communication (Providing a note or copy of the bus misconduct referral)

Phone Call

I do not wish for the driver to communicate with me.

6. (RQ #2) Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply.)

- ☐ Safety Violations
- ☐ Profanity/Inappropriate language
- ☐ Misuse of technology, including cell phones
- ☐ Bullying/Threatening
- ☐ Fighting
- ☐ Vaping/Smoking
- ☐ Possession of a weapon
- ☐ Refusal/Defiance

Appendix I

School Transportation Personnel Survey

School Transportation Personnel Survey

Consent Statement: By completing this survey, you are consenting to participate in the study, "The Effect Professional Development Opportunities for School Transportation Personnel Has on Student Bus Misconduct Referrals at the Elementary Level." Please note that all responses are anonymous, and no personal data will be collected as a result of completing this survey.

1. (RQ #1) Please select the number of years of experience you have in school transportation:

0 – 5

6 – 10

11 – 25

more than 25

2. (RQ #1) How often do you complete bus misconduct referrals that are handled by a school administrator?

Never

Rarely – up to 2 times a week

Sometimes – 3-5 times a week

Often – 6-10 times a week

Constantly – 11 or more times a week

3. (RQ #1) Please rate the following statement: *I provide the students on my bus/van with clear expectations (rules) for student behavior.*

Strongly disagree

Disagree

Agree

Strongly Agree

4. (RQ #1) Please rate the following statement: *I would like to receive training on how to establish and communicate expectations (rules) for the students on my bus/van.*

Strongly disagree

Disagree

Agree

Strongly Agree

5. (RQ #1) Please rate the following statement: *I am able to redirect student misbehaviors on school transportation.*

Strongly disagree

Disagree

Agree

Strongly Agree

6. (RQ #1) Please rate the following statement: *I am able to de-escalate or calm down escalated students on school transportation.*

Strongly disagree Disagree Agree Strongly Agree

7. (RQ #1) Please rate the following statement: *I would like to receive training on how to de-escalate or calm down escalated students on my bus and/or van.*

Strongly disagree Disagree Agree Strongly Agree

8. (RQ #2) Please rate the following statement: *I am knowledgeable of various disabilities that may affect a student's behavior. For example, autism, emotional disturbance, intellectually disabled, etc.*

Strongly disagree Disagree Agree Strongly Agree

9. (RQ #2) Please rate the following statement: *I would like to receive training on disabilities that may affect student behavior on my bus and/or van.*

Strongly disagree Disagree Agree Strongly Agree

10. (RQ #1) How often do you communicate with parents about student misbehaviors on school transportation.

Never

Rarely – Only in extreme cases

Sometimes – After multiple incidents on school transportation

Often – Each time a student bus misconduct is completed.

12. (RQ #1) Please identify how you communicate with parents.

In-person (Speaking with them at the bus stop.)

Written Communication (Providing a note or copy of the bus misconduct referral)

Phone Call

I do not communicate with parents.

13. (RQ #1) Please rate the following statement: *I would like to receive training on how to communicate with parents.*

Strongly disagree Disagree Agree Strongly Agree

14. (RQ #1) Please rate the following statement: *The consequences students receive by school administration for bus misconduct referrals are effective.*

Strongly disagree Disagree Agree Strongly Agree

15. (RQ #2) Please select the behaviors that are negatively impacting student success the most on school transportation: (Please select all that apply.)

- ☐ Safety Violations
- ☐ Profanity/Inappropriate language
- ☐ Misuse of technology, including cell phones
- ☐ Bullying/Threatening
- ☐ Fighting
- ☐ Vaping/Smoking
- ☐ Possession of a weapon
- ☐ Refusal/Defiance

Appendix J

Interview Questions

Interview Questions

School Transportation Interview Questions

1. (RQ #1) Do you find the bus misconduct referral form easy to complete? If not, what changes need to be made to this form to make it more effective in reporting student misconducts?
2. (RQ #1) What are the expectations or rules that you have for the students on your bus/van?
3. (RQ #1) What is your current procedure for dealing with an escalated or unruly student?
4. (RQ #2) What information is provided to you regarding the various disabilities that may affect a student's behavior on school transportation?
5. (RQ #1) Please explain your preferred method for communicating with parents.
6. (RQ #1) What are your thoughts on the consequences the students receive from school administration related to bus misconducts? Do they effectively change the student's behavior?
7. (RQ #2) What is your biggest concern related to student behaviors? (All participants will have a list of the behaviors provided on the survey for question #15)
8. (RQ #2) What type of professional development training do you feel would help improve student behaviors and success on school transportation?

Appendix K

School Transportation Personnel Training Agenda – November

School Transportation Personnel Training #1

November 29, 2023

9:30AM

- I. Welcome
 - A. Share appreciation for drivers and what they do every day. Briefly share some of the research conducted.
- II. Explain the setup for the training and provide an agenda.
 - A. Day 1 of 2 days of trainings – Meeting again in late January/early February
 - B. Day 1 Area of Focus - Building Relationships & Setting Expectations
- III. Building Relationships
 - A. Introduction
 - B. Dot Activity ***
 1. Place a dot by each student's name you know something about.
 - More than their name. Their favorite color, favorite food, likes/dislikes, etc.
 2. Look at the students without a dot and think about why you may not know a lot about them.
 - Are they shy, quiet, etc.
 3. Think of a way to learn more about your students.
 - Is there time to do an activity with the students before they get off the bus at the school in the morning?
 - If not, can you play a game with the students where they tell you one fact each day as they leave the bus?
 - C. Explain the importance of building positive relationships with students.
 - Compare to the importance of a teacher's role (reference driver's manual)
 - D. Provide general guidelines for positive interactions with students.
 1. Say good morning/good night each day as they board the bus.
 2. Provide compliments to students as they board/exit the bus.
 - E. Watch for changes in moods.
- IV. Setting Expectations
 - Discussion of why one set of expectations is important for all buses.
 - Connect back to building relationships.
- V. Conclusion
 - Training Evaluation

*** This activity was not completed during the training; however, it was explained to the group. It was suggested that all drivers complete this activity on their own.

Appendix L

School Transportation Personnel Training Agenda – January

School Transportation Personnel Training #2

January 24, 2024

9:30AM

- I. Welcome
 - A. Debrief from previous training.
 - Ask if anyone has been able to make more connections with their students based on the suggestions from training in November.
- II. Explain the setup for the training and provide an agenda.
 - A. Training will be centered around Behavior Management based on the results of the evaluation from the previous training.
- III. Behavior Management
 - A. Introduction
 - 1. Explain the top areas of concern are safety, language, bullying, refusal and defiance, and fighting.
 - 2. These are the same areas supported by research with bullying being #1.
 - B. Structure of Buses and how that affects student behavior.
 - 1. School buses are considered an “informal structure” which makes it a more challenging area to supervise.
 - C. Suggestions to help manage behaviors.
 - 1. Have clear rules and expectations from Day 1
 - 2. Set limits and be consistent.
 - 3. Avoid “giving in” to keep them happy.
 - 4. Use positive reinforcement and praise for meeting the expectations/rules.
 - D. Write-Up Major Infractions
 - 1. Must know the difference between major and minor infractions.
 - 2. Write up as soon as it happens.
 - Provide a detailed write up to the principals and avoid personal opinions – state the facts.
 - Be consistent with write-ups.
 - E. Parent Communication
 - 1. Let parents know what is going on.
 - Only state facts and avoid adding opinions.

- Let the admin know if you have spoken with a parent – if you can't let us know that too.

IV. Conclusion

- Wrap-up and thank you.