The Impact of Incentives on the Attendance of Fifth Grade Students

Brittney A. Horan

May 2021

Goucher College

Graduate Programs in Education

Table of Contents

List of Tables

List of Figures

Abstract

The purpose of this study was to determine whether an attendance incentive would positively affect the attendance of selected fifth grade students in their social studies and science classes. The measurement tool was a researcher developed Excel data sheet that was modeled after the elementary school's attendance tracker. This study used a pretest/posttest design to compare attendance data over a six-week period from January 11, 2021-February 19, 2021 (prior to the attendance incentive) and March 1, 2021- April 9, 2021 (during the implementation of the incentive). The results of the study showed a positive increase in attendance with the implementation of an attendance award; however, the data was not statistically significant and may have been affected by various factors. Further research will need to be conducted to determine the effectiveness of an attendance incentive on the attendance of fifth graders.

CHAPTER I

INTRODUCTION

Overview

The goal of education is to prepare students to be globally competitive citizens by promoting educational success and providing equal access to education (U.S. Department of Education, n.d.). However, success and access to quality educational experiences becomes difficult if students are absent. Students miss school for a variety of reasons, including the influence of external factors, negative school experiences, a lack of engagement, and because of the misconception that missing school has no consequences. No matter the reason, being absent from school can have many negative effects. Not only do these students miss out on relationships with teachers and classmates, but they may also fall drastically behind academically in comparison to their peers. Similarly, even missing a few days of school a month can result in a student becoming chronically absent. Chronically absent students miss 10% or more of a school year. In the United States, over 7 million students are considered chronically absent (OCR, 2016). According to Goldstein, this year, during the coronavirus pandemic, the problem continued to grow as teachers across the United States noted an alarming trend of students either not completing work assigned virtually or not attending live sessions at all. Some even reported that as much as half of the students were not logging in or completing assigned work (2020).

The researcher had both personal and professional interest in the topic of attendance and absenteeism. The researcher, with six years of experience as a classroom teacher, noticed the increasing number of students who are absent from school each year. The researcher has also served on an elementary school improvement team, whose goal is to examine how absences

affect the school's quality rating on the Maryland School Report Card. As school absentee rates continue to rise, schools earn fewer points in their overall rating. This increase in absences and decrease in points is a pattern for the researcher's school, and as a member of the school improvement team, it is the job of the researcher to investigate solutions to remedy this alarming trend.

Statement of the Problem

Absenteeism can have a negative effect on student achievement, school performance, and teacher evaluations. Teachers spend roughly 1,350 hours with students in a 180-day school year, and therefore, can be instrumental in combating the growing absenteeism problem. Although teachers are trained experts in their field, they are not always equipped with the tools and strategies needed to support students who are frequently or chronically absent. With that in mind, this study aimed to evaluate the effectiveness of an incentive program on improving the attendance of fifth grade students.

Hypothesis

(H_o): The attendance of fifth grade students who receive attendance incentives is not significantly different than the attendance of fifth graders who do not receive attendance incentives.

(H_1): The attendance of fifth grade students who receive attendance incentives will be higher than fifth grade students who do not receive attendance incentives.

Operational Definitions

Attendance Incentive (Independent Variable): The independent variable is whether students received an incentive for attendance and is coded No or Yes. The attendance incentive is a reward for attending social studies and science classes each day. Students who attend classes on time, Monday-Thursday, will receive an invitation to a celebration event on the following Monday afternoon from 3:00-3:20 (open block after all classes). Students who receive the invitation will be able to participate in the themed activity day. These days include: 1) Game Day, 2) Origami Day, 3) Puzzle Day, 4) Socializing Day, 5) STEM Day, and 6) Show and Tell. Students who attend classes all 6 weeks will be invited to attend the culminating celebration event, The Masked Singer/Dancer competition.

Attendance (Dependent Variable): The dependent variable is the average daily attendance for 6-weeks prior to the study (1/11/21-2/19/21) and for 6 weeks during the study (3/1/21-4/9/21). To determine the effect of the attendance incentive, the researcher will determine how many days students were present for learning for live social studies and science classes, Monday through Thursday while school is in session. To be considered present for learning, students must be on time and stay for the entirety of the class period, except for those who have excused absences. The researcher will conduct a comparison of the percentage of days students were present for learning during the study (March 1- April 9, 2021) to the number of days present for learning six weeks prior to study (January 11, 2021 - February 19, 2021).

Excused Absence: Students who return from an absence to school with a parent or medical note will be counted as an excused absence.

Unexcused Absence: If a student does not attend class and does not provide a parent or medical note, the absence will be considered unexcused.

Chronic Absentee: Students are considered chronically absent if they miss 10% or more school days of the school year

Full Time Student – Student who attends in-person learning 4 days a week.

Part time/hybrid – Student who attends in-person learning 2 days a week and remain virtual the remaining 2 days of the school week. These students are assigned either Monday and Tuesday or Wednesday and Thursday.

Virtual Students- These students are remaining at home 4 days a week for virtual learning. They attend live Microsoft Teams meetings for class.

CHAPTER II

REVIEW OF LITERATURE

This literature review examines the causes and impacts of student absenteeism, as well as explores current strategies for attendance improvement. Section one defines terms related to absenteeism and provides an overview of absenteeism in the country. Section two describes the negative academic and lifelong effects of absenteeism, while section three dives deeper into the various influences that effect school attendance. Section four outlines current strategies that school systems are implementing to address issues of absenteeism and encourage school attendance. The final section explains the importance of continuing research to address the ever-growing issues surrounding student absenteeism.

Absenteeism

Absenteeism in schools has been a growing problem for many years, yet until recent years, it has not been fully recognized by the government and the public (OCR, 2016). Under Every Student Succeeds Act (ESSA), which was implemented in 2015, student and school absenteeism data has now become a vital piece in measuring school performance (Jordan & Miller, 2017). ESSA requires each state to provide data relating to five accountability factors, four of which are related to academic achievement and one being a school quality measure (Jordan & Miller, 2017). As of 2018, 72% of schools use chronic absenteeism as the fifth accountability indicator (Attendance Works). By holding schools accountable with such data, the hope is that educators and leaders will work together to determine the causes of these absences and find ways to address the academic issues related to absenteeism (Jordan & Miller, 2017).

Chronic absenteeism is defined as missing 10% or more of the academic year, which is approximately 18 school days or more (OCR, 2016). For children in kindergarten through third grade, it is often referred to as chronic early absenteeism (Chang & Romero, 2008). Chronic absenteeism encompasses all categories of absences including the usual excused and unexcused absences, as well as disciplinary absences (Jordan & Miller, 2017). This differs from the traditional term of truancy, which only encompasses unexcused absences (Chang & Romero, 2008). According to a study conducted by the Office for Civil Rights, over 7 million students, or 16% of the school aged population in the United States, are considered chronically absent (2016). Although absenteeism is typically viewed in relation to high school aged students and dropout rates, absenteeism is a very prevalent problem in elementary schools as well (Jordan & Miller, 2017). While 44% of all high schools report high levels of absenteeism with 8,131 chronically absent students, elementary schools have more cases of absenteeism reaching 8,363 students (Chang, Bauer, & Burns, 2018). Specifically, kindergarten students display some of the highest levels of chronic absenteeism (Ansari & Pianta, 2019). In a study by London, Sanchez, & Castrechini (2016), the youngest and oldest grades had the highest rates of chronic absenteeism with 12% of kindergarten students and 11% of twelfth graders.

Importance of Attendance

Consistent school attendance in the early elementary grades is especially important to the social, emotional, and academic growth of students, so students who are chronically absent suffer more negative effects than students who consistently attend school. Studies have shown that a student will be able to recover from the academic losses of a single year of excessive absences, but if the pattern continues each year, it will result in significant consequences (Nylund-Gibson, Gottfried, Mireles-Rios, 2020). When students are absent from school, they miss vital

instructional and developmental opportunities (London, Sanchez, & Castrechini, 2016). Students who miss many days of school often advance to the next grade level with weaker academic skills and continue to struggle academically throughout the school year, ending the year further behind their peers then when they started (Ansari & Pianta, 2019). This can lead to a lack of motivation, as these students may feel inferior to their peers (London, Sanchez, & Castrechini, 2016).

Absenteeism causes achievement gaps in all levels of schooling from kindergarten to high school (Balfanz & Brynes, 2012). As early as kindergarten, absenteeism has negative academic effects (Chang & Romero, 2008). Chronically absent kindergarten students perform significantly lower in reading and math when they enter first grade than their peers who are not chronically absent (Chang & Romero, 2008). Specifically, chronically absent Latino kindergarten students perform significantly lower than their peers of other ethnicities who missed the same number of school days (Chang & Romero, 2008). Absenteeism is a key factor in determining reading proficiency by the third grade (Attendance Works, 2014). Only 17% of chronically absent, third grade students in California were proficient on the state's standardized reading test, compared to the 64% of students who regularly attended school (Attendance Works, 2014). Young, low-income students who regularly miss school have much difficulty accessing the necessary support and resources needed outside of school to make up for lost time inside the classroom, even though these students need more instructional time to master skills like reading (Attendance Works, 2014). In a study conducted by Michael Gottfield (2015), it was determined that chronic absenteeism negatively effects reading and math performance of not only the absent individual, but also the performance of the student's classmates. Students in a classroom with a high population of chronically absent students produce lower reading and math test scores (Gottfield, 2015).

Absenteeism is a cumulative process (Nylund-Gibson, Gottfried, Mireles-Rios, 2020). Absenteeism in the early years of schooling sets a tone and pattern for excessive absences in middle and high school (Ansari & Pianta, 2019). A pattern eventually leads many of these students to drop out of high school (Sheldon & Epstein, 2004). Based on a study by the Baltimore Education Research Consortium, the probability that a student will graduate based on their 6th grade attendance drops from 70% to 28.6% for chronically absent sixth graders (2011). Students who are truant, missing school for no reason, may become subject to a lifetime of problems if their attendance problems are not addressed (Garry, 1996). Many become involved in delinquent activity, engage in drugs and alcohol, and later in life become unemployed or even incarcerated (Garry, 1996). Beyond the academic toll that absenteeism takes on students, it also causes issues for society. When students lack a quality education and a degree due to absences and dropouts, it reduces their earning capacity (Garry, 1996). Business will need to pay to train workers to build their skill capacities (Garry, 1996). Some state and federal funding provided to schools is based on daily attendance (Garry, 1996). If students are not consistently attending school, schools will receive less funding, which is vital to the success of schools (Garry, 1996). To avoid these consequences, interventions for attendance need to be implemented early on in a student's school career (Nylund-Gibson, Gottfried, Mireles-Rios, 2020).

Influences on Attendance

In most schools, absences have typically been categorized as excused or unexcused. Today, absenteeism extends beyond these two simple categories, and looks closer into the *reasons* behind these absences (Attendance Works, 2018). According to Attendance Works (2018), reasons for absenteeism can be categorized into four groups: 1) barriers; 2) negative school experiences; 3) lack of engagement; and 4) misconceptions. When students exhibit high

levels of absenteeism there are often multiple factors in play (Chang, Bauer, & Burns, 2018). It is important to understand the reasons behind absences, so educators and schools can develop solutions that directly and appropriately address these influences (Chang, Bauer, & Burns, 2018).

Barriers are typically external influences that occur outside of both the school and families' control (Attendance Works, 2018). However, many barriers can be addressed through school and district resources (Attendance Works, 2018). Some of these barriers would be considered excused absences regarding school policy. Both negative school experiences and lack of engagement reflect issues within the school environment, including teaching, curriculum, and climate (Attendance Works, 2018). All these issues need to be addressed by the school district or the specific school of the students (Attendance Works, 2018). The final category of absences, misconceptions, is related to the misunderstanding of the effects of absenteeism from parents, students, educators, and community (Attendance Works, 2018). These are described next.

Barriers

Barriers, or external influences, may include medical issues, trauma, unreliable transportation, or frequent moves. A student who experiences domestic violence, parental death, divorce, or take care of an ill family member are more likely to have frequent absences (Sahin, Arseven, & Kiliç, 2016). Hynes (2014) found that a student with a parent that is incarcerated is 79% more likely to drop out of school. A student who has experienced the death of a family member is 53% more likely to be absent from school and 45% more likely if they experience abuse from a parent at home (Hynes, 2014). These adverse childhood experiences, or ACEs, increase the chances that a child is absent (Stempel et al., 2017). ACEs such as family substance abuse and neighborhood violence have a greater impact on negative school attendance and chronic absenteeism (Stempel et al., 2017). Poverty also contributes many challenges to students

regarding school attendance and focus. Students living in poverty may not have access to school supplies, may not have support in completing homework, or may even have an obligation to watch over a younger sibling (Sahin, Arseven, & Kiliç, 2016). These economic difficulties make it difficult for a child to focus on attending and performing well in school.

Negative School Experiences

Bullying is one of the most impactful negative school experiences. During the 2015-2016 school year, there were 135,192 reports of bullying and harassment in the United States (The Office for Civil Rights, 2016). Students who experience either in-person or cyberbullying may miss school due to a concern for their safety. According to a study conducted by Steiner & Rasberry (2015), 25% of high school students experience in-person or cyberbullying. Of those students, 15.5% missed 1 or more days of school due to safety concerns (Steiner & Rasberry, 2015). Disciplinary issues, unfair or just, are also negative school experiences and lead to required absences or a desire to miss school. Out-of-school suspensions require students to miss varied amounts of academic instruction. In the 2015-2016 school year, there were 11,392,474 days of school missed due to out-of-school suspensions (The Office for Civil Rights, 2016). Students who miss school due to suspensions perform lower on standardized tests in reading, writing, and math (Lacoe & Steinberg, 2019). Regardless of how much class time is lost, significant amounts for more serious behavior or shorter amounts for less serious offensives, the decline in academic performance will still occur (Lacoe & Steinberg, 2019).

Lack of Engagement

A lack of engagement with the school can include the absence of relationships with adults and peers in the building, a negative school climate, a lack of plans, and even teacher absence

(Attendance Works, 2018). Student and family engagement are important to the success of students. Students who have lack communication between their family and school personnel are more likely to be absent and have are at higher risk for dropping out of school (Sahin, Arseven, & Kiliç, 2016). A school that does not communicate absences to parents and guardians is sending a message that absences do not hold importance and that investigation into absences will not occur (Sahin, Arseven, & Kiliç, 2016).

Relationships also play a large part in a student's desire to come to school. If a student has a negative relationship with the administration of a school due to the administrator displaying oppressive actions or attitudes, the student may be discouraged from coming to school and eventually choose not to come at all (Sahin, Arseven, & Kiliç, 2016). Teacher- student relationships are equally important, if not more important in determining if students want to come to school. Students spend most of the school day communicating and working with their teacher, so if the teacher is unable to build a supportive and caring relationship with the student, they are likely to either skip their specific class or even the whole day of school (Shute and Cooper, 2015 as cited in Sahin, Arseven, & Kiliç, 2016, p. 10). A teacher who displays negative behaviors decreases a student's interest and desire to learn from school (Sahin, Arseven, & Kiliç, 2016). Similarly, pressures from teachers regarding the completion of homework can deter students from attending school, as many students cannot complete the extra assigned work and some simply choose not to do it (Sahin, Arseven, & Kiliç, 2016).

Students need to feel that they are an important, valued member of the school community. If a student feels a sense of belonging, is involved in school activities, and trusts in the staff, absenteeism decreases (Strand & Granlund, 2014). Alternatively, when students feel excluded, insecure, or worthless to the school culture, the chances of them being chronically

absent increases (Strand & Granlund, 2014). Peers play a large role in a sense of belonging in a school as well. Peer groups can influence each other's views on the importance of school and education. When students do not feel a connection to the school, they may respond by rejecting all the values of the school, one of which is being present (Hartnett, 2008). To fit in with their peers, students may choose to attend or not attend school based on the viewpoint of their peer group (Hartnett, 2008).

Misconceptions

Many parents, students, and community members have a misunderstanding of the effects that absences have on students (Attendance Works, 2018). Misconceptions range from believing that absences only matter in higher grade levels to the idea that unexcused absences, not excused absences are the only issues (Attendance Works, 2018). All of these are incorrect and untrue according to current research on absenteeism. A parent who values school and expresses the importance of school reduces the risk of their child dropping out of school (Foley, Gallipoli, & Green, 2014). However, if parents disregard the importance of school and are uneducated themselves, then their child will most likely be absent from school frequently (Foley, Gallipoli, & Green, 2014). Some families choose to keep their child out of school for shopping, weddings, or visiting families out of town (Sahin, Arseven, & Kiliç, 2016). Although it is easy for parents to believe that missing only a few days a month or sporadically does not make a difference, every absence matters (Attendance Works, 2018).

Strategies to Improve Attendance

Incentives

Incentives for attendance can be intriguing for students who are frequently absent from school. Incentives are most effective when they are involved in a larger approach that includes family outreach and commitment to engaging students in learning (Attendance Works, N.D.). Incentives can be cost effective like assemblies, certificates, extra free play, or even recess passes (Attendance Works, N.D.). Perfect attendance is not the goal in reducing chronic absenteeism (Attendance Works, N.D.). Schools should not encourage students to come to school when they are sick, so schools can focus on providing incentives for improved attendance by recognizing weekly perfect attendance (Attendance Works, N.D.). Incentives do not have to be costly if community partnerships are involved. Barton Phillipps, former principal of a Schuylkill Junior and Senior High School, implemented an incentive program to encourage attendance in which students received food coupons to a local restaurant, local amusement park tickets that were either donated to the school or purchased at a reduced price, merchandise, and gift certificates from local businesses (1995). Not only did student attendance improve, but the school saw an increase in SAT scores, honor roll numbers, and National Honor Society inductees (Phillipps, 1995).

Programs

The Early Truancy Prevention Program, ETPP, was developed as a three-tier approach to improve attendance of elementary students by building communication between teachers and families, encouraging teachers to take an active role in supporting students with excessive absences, and referring chronic absenteeism to specialists (Cook et al., 2017). Tier 1

interventions were focused on monitoring and identifying possible attendance issues. In tier 1, teachers were trained to perform home visits to their students' houses to learn more about their home life and to develop a relationship with parents. Phones were provided to teachers to accommodate and encourage communication with parents, such as emails, texts, or phone calls. Teachers were provided bi-weekly attendance to support the early identification of attendance issues. Tiers 2 and 3 are more intensive strategies aimed at addressed problematic attendance. Using an online attendance program, teachers were informed of barriers that effected student attendance, along with suggested interventions to address those barriers. Teachers were also encouraged to take advantage of staff and resources in the school system for consultation and support. By implementing this program, the classrooms and schools involved showed a reduction of student absences.

Health Promotion Interventions

Many students miss school due to illness each year. To research the effectiveness of handwashing against the spread of illness, a study was conducted that introduced a handwashing program to five elementary schools in Pennsylvania (Guinan, McGuckin, & Ali, 2002). This program included an education session with students that explained disease transmission, teaching proper handwashing techniques, and interactive activities (Guinan, McGuckin, & Ali, 2002). Each classroom was provided Hand Sanitizer to use, but students did not have access to hand washing stations in the classroom (Guinan, McGuckin, & Ali, 2002). The study showed that the school spent less money on hand washing materials by using hand sanitizer and showed 50.6% less absenteeism in the student groups that were involved in the program (Guinan, McGuckin, & Ali, 2002).

Group Intervention Plans

Small peer group interventions have been shown to decrease chronic absenteeism of students. Researchers, DeAnn Baker and Jennifer Jansen, chose to introduce a reward for coming to school, rather than a punishment by including students with poor attendance in an attendance club with slogans of "I'm cool, I don't miss school" and "School is Cool". Primary and intermediate groups met with the researchers for 20-35 minutes once a week to track attendance for their peers, work together to develop solutions to each other's attendance barriers, and to build friendships and social skills. Together, they set attendance goals and created murals for the school hallways. Students held each other accountable for attending school each day by tracking each student's attendance on an attendance chart (2000). At the end of the study, the researchers found that 93% of students had fewer absences and all students displayed increased self-esteem and attitudes towards school.

Parent and Community Involvement

Involving parents and the community in the fight to end chronic absenteeism has proven to be effective in encouraging students to attend school (Sheldon & Epstein, 2004). Strategies for connecting families and communities to the school include open communication, attendance celebrations with families, utilizing community mentors, and including attendance-based activities (Sheldon & Epstein, 2004). In hosting a variety of family activities, schools provide parents many opportunities to take an active role in their child's education regardless of the challenges of daily life that hinder their involvement (Sheldon & Epstein, 2004). Schools should take a proactive stance on attendance by providing students praise for positive attendance to encourage strong attendance habits before it becomes a problem (Sheldon & Epstein, 2004).

Two-way, open communication with parents is an extremely effective method in improving absenteeism rates (Sheldon & Epstein, 2004). With the emphasis on constant connectivity, texting has become a popular method of communication. Heppen, Kurki, and Brown (2020) conducted a study to determine if texting parents could improve attendance of elementary school students. In this study, researchers used four different versions of text messaging to keep parents informed about their child's absences and to educate them on the importance of attending school (Heppen, Kurki, & Brown, 2020). Every parent was sent weekly texts with tips and reminders about the importance of attendance (Heppen, Kurki, & Brown, 2020). Parents were notified each time their child was absent with a text sharing the number of absences their child had along with a fact about the importance of adding school or a consequence of missing school (Heppen, Kurki, & Brown, 2020). More intensified texts were sent out in the spring to parents of children who were chronically absent in the fall. This included staff outreach messages, where staff personally reached out to parents to engage them in supporting their child, as well as goal setting messages where parents were encouraged to set attendance goals for the remainder of the school week (Heppen, Kurki, & Brown, 2020). This type of communication system decreased chronic absenteeism by 18% for the students of families who received all forms of text messages (Heppen, Kurki, & Brown, 2020).

Mentors can provide positive role models for students who are struggling to attend school regularly. Campus Kids, a mentor program in Washington State, attempted to pair undergraduate students with elementary students who were at risk for poor attendance and school performance (Shepard, 2009). Students met with their mentor for weekly tutoring sessions and engaged in fun activities on the college campus (Shepard, 2009). The students involved in the program developed an excitement for the program and school and reported wanting to go to college when

they were older (Shepard, 2009). These mentors were not only able to support the academic progress of these students, but also show them that school can be fun and exciting.

Conclusion

Now, more than ever, it is important to continue researching and developing strategies to combat chronic absenteeism. The coronavirus pandemic has proven that attendance tracking is vital in the academic success of all students (Attendance Works, 2020). It has allowed educators to examine the influences of attendance more closely, as teachers are seeing families struggling to provide stable housing and food for their children, with limited access to technology and internet, and inequitable resources among races and classes of students (Attendance Works, 2020). With these new insights into the factors that affect learning and school attendance, educators and researchers need to determine new strategies to encourage and support student attendance inspire of these challenges. In accord with Maslow's hierarchy of needs (Berk, 2017), students are more likely to attend school when "physical and emotional health and safety; a sense of belonging, connection and support; academic challenge and engagement; and adults and peers with social emotional competency – are in place" (Attendance Works, 2020, para. 6). The question now becomes, how can schools and educators provide and support these conditions from a distance?

CHAPTER III

METHODS

Design

This study used an experimental design to examine the effect of an incentive on the attendance of fifth grade students. During the study, the control group of students continued to receive the current treatment for attendance. They were given verbal recognition from the classroom teacher for coming to class on time and staying for its entirety. They were still marked tardy and absent in the grade level attendance data sheet, which is a school-wide requirement. The experimental group of students received the attendance incentive for attending their science and social studies classes each week. Students who attended class and stayed for the duration of the class period were given invitations to a weekly celebration event the following Monday afternoon. Students who received the invitation were able to participate in the themed activity day as the incentive. These incentive days included: 1) Game Day, 2) Origami Day, 3) Puzzle Day, 4) Social Day, 5) STEM Day, and 6) Show and Tell. Students who attended classes all 6 weeks were invited to attend the culminating celebration event, The Masked Singer/Dancer competition.

Elementary students in Harford County Public Schools were expected to attend live classes Monday through Friday. However, beginning February 19th, students were only expected to attend live classes Monday through Thursday, as elementary schools transitioned back to in-person teaching. Pretest data is representative of a five-day week, whereas posttest data represents a four-day week. Pretest data was collected from January 11, 2021 - February 19, 2021. This data was collected on a school attendance data sheet by the researcher. Students for

both sets of data were marked either present for class or absent. Posttest data was collected from March 1- April 9, 2021. Pre- and Posttest data was collected to represent a six-week learning period.

Due to the coronavirus pandemic, families have options for how they want their child to attend school. During the time of data collection, students had three options for how they could attend school. Students whose parents teach in Harford County and/or students who were a major attendance concern were given the option of attending school 4 days a week. These students are considered full-time students. Students are considered part time or hybrid students if their families prefer them to attend in person learning 2 days a week and remain virtual for the remaining 2 days. They were also given the option to remain fully virtual and attend live virtual lessons from home 4 days a week. Beginning March 29th, these options changed to either full time, in person learning or fully virtual.

Participants

The target population for this study was fifth grade students. The accessible population in the study were fifth graders at a rural school in Harford County, Maryland. Cluster sampling was utilized for determining the participants that were used in this study. Participants were chosen based on the rotation group they were in at that time. Two out of three rotation groups were used in this study. These two groups, Converse and Nike, are the most comparable when it comes to the characteristics of the students within them. Students in these groups are all fifth-grade students with ages ranging from 10 to 11 years old. There are 18 students in the Converse group and 20 students in the Nike group, totaling 38 students. This study includes 17 female students (5 girls in the Nike group and 7 in the Converse group) and 26 male students (15 in the Nike group and 11 in the Converse group). When pretest data was collected, all students were fully virtual.

From March 1st – March 26th, 7 students were full-time students (6 out of the 7 were attendance concerns and 1 was a child of a Harford County teacher), 18 were part-time students, and 13 students were fully virtual. Beginning March 29th, 6 students remained virtual and 32 returned full time.

These groups both represent similar ability levels and are average academic performers. There are 5 students in the Nike group who receive Special Education Services. These students have Individualized Education Programs, or IEPs, however, they do not reflect difficulties in social studies or science concepts or performance. Both groups have had the most absences in social studies and science courses from the beginning of the school year. Over the six-week period, there were 37 Converse group absences and 51 absences in the Nike group. The researcher felt that these students were most representative of the population that the study aimed to support.

Instrument

The instrument used for the study was an Excel data collection chart created by the researcher. This data chart was modeled after the school's attendance tracker to remain consistent between the pre and post data. The students were assigned a number from 1-38 and were represented by those numbers to keep their names anonymous. On each sheet of the data chart, students were marked either 1-present or 2-absent. Then, the number of days present was tracked along with the total number of days belonging for each week. This allowed for the consideration of breaks and school closures. The data chart also indicated their learning status as full-time, part-time/hybrid, or virtual. Please see Appendix A for the data chart used in this study.

Procedure

Following the selection of the participants, the researcher developed a presentation to introduce the attendance incentive to the students in the Nike group the week prior to the study beginning. The researcher explained to students that beginning the following week, attendance would be tracked and students who attend social studies and science classes throughout the week would be invited to a special weekly celebration event. The researcher explained that students would need to attend all social studies and science classes each week to qualify for the celebration event. Then, the researcher explained that students who attend all social studies and science classes for the next six weeks would be invited to a culminating, extra special celebration event. The themes of each celebration events were not revealed at the time. The researcher did not want to influence the motivation of students by revealing the activity too early in the week but wanted to cultivate interest in the mystery activity.

Every week attendance data was tracked in the attendance data chart. Students who were present for all social studies and science classes received a special invitation image through the school's learning platform each Monday. These students would either participate in person for the event or virtually depending on their learning status. The researcher was not the homeroom teacher for the Nike group, so the teacher would remain in the classroom and begin the celebration directly after class. These events would take place during the last 20 minutes of the school day.

The first celebration event was the Game Day. Students were given time to play computer games using the ABCya, Prodigy, and Coolmath Games platforms. The second celebration event was the Origami Day. The researcher demonstrated how to create an origami dog, frog, and fish and provided students time to create their own origami using scrap paper from

the classroom and paper students had at home. The third celebration event was Puzzle Day. Students worked together to solve emoji and rebus puzzles that the researcher presented to them. Socializing Day was the fourth celebration event where virtual and in person students met with the teacher and their classmates in a virtual meeting to talk about topics of interest that were not school related like gaming, tv shows, and sports. STEM Day was centered around a construction challenge. Students were challenged to construct a paper tower and test to see how many books their structure could hold. The final celebration day was Show and Tell, where each student was able to share 1 special item from home with the class, either virtually or in person.

Following the study, on April 12th, students who were present for the entire 6 weeks of learning were invited to join in the culminating special event, The Masked Singer/Dancer of Churchville. The researcher asked for teacher and staff volunteers to participate in the creation of the event. Teachers and staff throughout the school disguised their faces and created humorous videos of themselves singing and dancing. During the event, students were able to work together to figure out who the mystery singers and dancers were.

CHAPTER IV

RESULTS

Descriptive statistics and *t*-tests were performed on pre and post attendance data. Pre-attendance descriptive statistics showed that the average attendance of the control group was higher than the average attendance of the incentive group (refer to Table 1), and post attendance was greater in the incentive group than the control group (see Table 2); However, neither of the differences were statistically significant (pre = .426, post = .393). Scatterplots were also performed on the data, refer to Figure 1. The pre-post difference indicated that the mean incentive attendance was indeed higher than the control group's mean, but the difference was not statistically significant at $\alpha = 0.05$ ($p = .235$), therefore, H_0 could not be rejected (see Table 3). Scatterplots were also performed on the pre and post change as indicated in Figure 2. The attendance incentives used in this study may not produce the same results in other classrooms.

Table 1. t-test of the sample mean difference, pre attendance by treatment group

Method

μ_1: population mean of preatt when treat = control

μ_2: population mean of preatt when treat = incentive

Difference: $\mu_1 - \mu_2$

Equal variances are not assumed for this analysis.

Descriptive Statistics: pre attendance

treat	N	Mean	StDev	SE Mean
control	18	91.7	11.2	2.6
incentive	20	88.5	13.4	3.0

Estimation for Difference

Null hypothesis H_0: $\mu_1 - \mu_2 = 0$

Alternative hypothesis H_1: $\mu_1 - \mu_2 \neq 0$

Test

T-Value	DF	P-Value	95% CI for Difference	Difference
0.81	35	0.426		3.21 (-4.89, 11.32)

Table 2. t-test of the sample mean difference, post attendance by treatment group

Method

μ_1: population mean of postatt when treat = control

μ_2: population mean of postatt when treat = incentive

Difference: $\mu_1 - \mu_2$

Equal variances are not assumed for this analysis.

Descriptive Statistics: post attendance

treat	N	Mean	StDev	SE Mean
control	18	94.17	8.26	1.9
incentive	20	96.19	5.69	1.3

Estimation for Difference

Difference	95% CI for Difference
-2.02	(-6.77, 2.74)

Test

Null hypothesis $H_0: \mu_1 - \mu_2 = 0$

Alternative hypothesis $H_1: \mu_1 - \mu_2 \neq 0$

T-Value	DF	P-Value
-0.87	29	0.393

Table 3. t-test of the sample mean difference, pre-post change in attendance by treatment group

Method

μ_1: population mean of change when treat = control

μ_2: population mean of change when treat = incentive

Difference: $\mu_1 - \mu_2$

Equal variances are not assumed for this analysis.

Descriptive Statistics: change

treat	N	Mean	StDev	SE Mean
control	18	2.5	14.0	3.3
incentive	20	7.7	12.5	2.8

Estimation for Difference

Difference	95% CI for Difference
-5.23	(-14.02, 3.56)

Test

Null hypothesis $H_0: \mu_1 - \mu_2 = 0$

Alternative hypothesis $H_1: \mu_1 - \mu_2 \neq 0$

T-Value	DF	P-Value
-1.21	34	0.235

Figure 1. Individual Value Plot of Pre and Post Attendance by Treatment Group

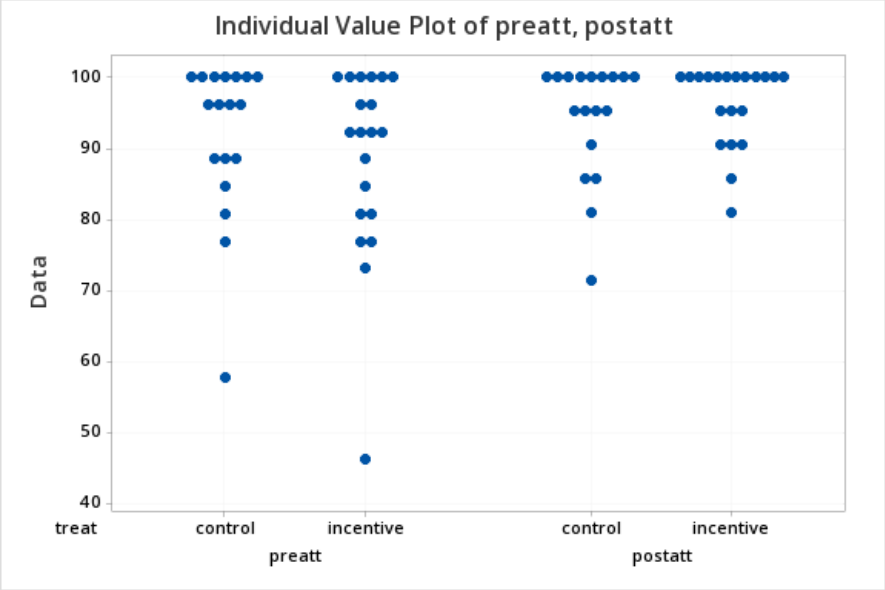
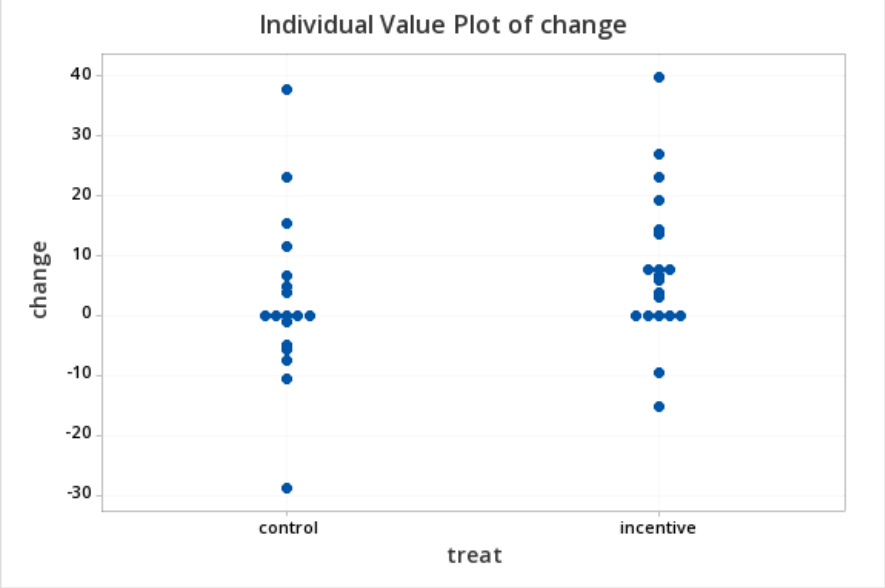


Figure 2. Individual Value Plot of pre-to-Post Change in Attendance by Treatment Group



CHAPTER V

DISCUSSION

Implications of Results

The results of this study show that the attendance incentive had a positive impact on the attendance of fifth graders. However, the H_o could not be rejected at this time. The results of the study were not statistically significant, so we cannot conclude that an attendance incentive would improve the attendance of all fifth graders. The positive impact of the attendance incentive that was demonstrated in this study may not translate to other classrooms, therefore, further studies would be needed to substantiate the effectiveness of an attendance incentive program. The results show that incentives on their own may not be enough to dramatically increase attendance levels, therefore, schools and educators must look at incorporating other strategies to increase attendance in addition to incentives, such as health promotion, group interventions, and parent and community involvement.

Threats to Validity

During this study, there were several internal and external factors that could have influenced the results. In this case, history is a threat to the validity of the study. The entire school environment and structure of learning during the 20-21 school year has been affected by the COVID-19 pandemic. During the pretest, all students were attending class virtually due to the large increase in COVID-19 numbers in the school system. This could have caused the pretest attendance data to be inflated due to the nature of learning at home. During the study, school systems in Maryland decided that numbers were low enough to open the school building to in person learning. This change had students attending virtually, part time in school, and full

time in school. This shift in the educational environment may have affected the increase in school attendance. It is hard to distinguish what effect this shift in structure caused during the study.

Population validity can also be examined in this study. Due to the nature of the study, the researcher had to choose from an available population of students. Therefore, differential selection may have influenced the study. The researcher attempted to choose the classes that were the closest in characteristics as they were based on academic skills from the previous grade level. Although these groups were similar performers, there were differences in areas such as personalities, work ethic, and maturity. Similarly, selection-treatment interaction could also be in effect. It would be difficult to extend these results to a different population of students. For example, the students who were in the average to below average class may respond differently to an attendance incentive than students in the Gifted and Talented class. On a larger scale, the population is not representative of all fifth graders as it is a small population of 38 students. These were all students who live and attend school in a rural area. These results may not be able to be applied to students living in other types of communities.

Lastly, experimenter bias may have unintentionally affected the results. The researcher's mood and attitude towards each class were not always able to be controlled and consistent. The researcher may have had a more positive attitude, providing more praise for the students in the experimental group due to the knowledge of knowing they were given the incentive. This may have had a positive effect on attendance in the experimental group, but a negative effect on the motivation of the control group to attend class.

It would be difficult to generalize these results due to the nature of the attendance incentive. It is a very specific type of incentive. This study can only extend its results in respect

to themed activity days. Even so, the implementation of the incentive may differ on a case-to-case basis.

Connection to Previous Literature

The reasons behind student absences can be categorized by barriers, negative school experiences, lack of engagement, and misconceptions (Attendance Works, 2018). Chang, Bauer, and Burns (2018) state that if absenteeism is high, then there are typically multiple factors influencing the student. Students in the incentive group showed high levels of pretest absences. There was an increase in attendance in the posttest data, so the attendance incentive may have been able to address some of the reasons behind the absences. If students had negative school experiences or felt a lack of engagement, the incentive may have been something that the students enjoyed and were motivated to earn. It may have made them feel that their attendance in class was important because they are a valued member. However, there may have been other factors in play that the incentive could not address, like barriers and misconceptions. The reasons behind the absences of the population were not identified prior to the study beginning. Fortunately, the goal in this setting was to merely reduce absenteeism, not to have perfect attendance, since there are other factors that are beyond the control of the researcher and the study.

Attendance Works suggests that schools celebrate improved attendance with weekly attendance celebrations rather than perfect attendance (N.D.). The reason behind this is because students should not be encouraged to come to school sick (Attendance Works, N.D.). With the current pandemic, the idea of staying home when sick is strongly encouraged, so this study focused on weekly celebrations. This allowed students multiple opportunities to participate in the reward, even if they were excluded from prior weeks' celebrations. Research also shows that

when incentives are applied in a larger approach, where family outreach is involved, they are most effective (Attendance Works, N.D.). In this case, the incentive did not incorporate family involvement, which may have been a missing element for better success. However, this was a very cost-efficient incentive for the researcher and for any classrooms looking to implement something similar. Therefore, if this were to expand to a larger setting, there would be less push back from classroom teachers and parents.

Implications for Future Research

It is recommended that future studies be conducted to provide further clarification on the effectiveness of an attendance incentive program. If the study was to be replicated, it is suggested that it includes a larger sample size. The researchers could include more classrooms, as well as include a larger number of schools in various states and location types. Similarly, the study should be conducted over a longer period to substantiate validity. It would be preferable if the study were conducted outside of a global pandemic. Due to the pandemic, there were various factors that the researcher could not control, like the learning status of the students. Throughout the study students changed how they were learning, either virtual, part time, or full time. It is suggested that future studies choose one of the learning statuses to use in the study.

Conclusion

The goal of this study was to determine the effectiveness of an incentive on the attendance of fifth grade students. The researcher used a weekly themed day as an incentive for students that were present for all social studies and science classes from the previous week. The results of the study showed that the attendance incentive did increase the attendance of fifth graders, however the results were not statistically significant to enable generalization. Further

studies are needed to determine if attendance incentives are an effective strategy to improve attendance of fifth graders.

References

Ansari, A. & Pianta, R. (2019). School absenteeism in the first decade of education and outcomes in adolescence. Journal of School Psychology 76. 48-61. https://doi.org/10.1016/j.jsp.2019.07.010

Attendance Works (2014). Attendance in the early grades: Why it matters for reading. Attendance Works.

Attendance Works. (2018). Reducing chronic absence requires problem solving and support, not blame and punishment. *Attendance Works*. https://www.attendanceworks.org/reducing-chronic-absence-requires-problem-solving-support-not-blame-punishment/

Attendance Works. (2020). Key concepts for leveraging chronic absence during the coronavirus pandemic. *Attendance Works.* *https://www.attendanceworks.org/chronic-absence/addressing-chronic-absence/key-concepts-for-leveraging-chronic-absence-during-the-coronavirus-pandemic/*

Attendance Works. (N.D.) Establishing School-wide Attendance Incentives. *Attendance Works.* https://www.attendanceworks.org/wp-content/uploads/2017/10/Attendance-Works-Establishing-School-wide-Attendance-Incentives.pdf

Baker, D., & Jansen, J. (2000). Using groups to reduce elementary school absenteeism. *Social Work in Education*, *22*(1), 46. doi: http://dx.doi.org.goucher.idm.oclc.org/10.1093/cs/22.1.46

Balfanz, R., & Byrnes, V. (2012). The importance of being in school: A report on absenteeism in the nation's public schools. *Education Digest: Essential Readings Condensed for Quick Review, 78*(2), 4–9.

Baltimore Education Research Consortium. (2011). Destination graduation: Sixth grade early warning indicators for Baltimore city schools. Retrieved November 8, 2020 from http://www.baltimore-berc.org/pdfs/SixthGradeEWIFullReport.pdf

Berk, L. (2017). Development through the lifespan, 7th Edition. Boston, Ma: Allyn, & Bacon (Pearson).
http://www.pearson.com.au/products/A-C-Berk/A-C-Berk-Laura-E/Development-Through-the-Lifespan/9780134419695?R=9780134419695

Chang, H., Bauer, L., & Byrnes, V. (2018). *Data matters: Using chronic absence to accelerate action for student success*. Attendance Works and Everyone Graduates Center. https://www.attendanceworks.org/wp-content/uploads/2018/08/Data-Matters_EXEC-Summary_083118-2.pdf

Chang, H., & Romero, M. (2008). Present, engaged, and accounted for: The critical importance of addressing chronic absence in the early grades. The National Center for Children in Poverty. http://www.nccp.org/wp-content/uploads/2008/09/text_837.pdf

Chou, L. C, Ho, C.Y., Chen, C.Y, & Chen, W.J. (2006). Truancy and illicit drug use among adolescents surveyed via street outreach. *Addictive Behaviors*, 31, 149-154.

Cook, P., Dodge, K., Gifford, E., Schulting, A. (2017). A new program to prevent primary school absenteeism: Results of a pilot study in five schools. *Children and Youth Services Review, 82.* 267-270. https://doi.org/10.1016/j.childyouth.2017.09.017

Ehrlich, S. B., Gwynne, J., Allensworth, E. M., Fatani, S., & Society for Research on Educational Effectiveness (SREE). (2016). Preschool attendance: How researchers and practitioners are working together to understand and address absenteeism among our youngest students. *Society for Research on Educational Effectiveness*. Society for Research on Educational Effectiveness.

Foley, K., Gallipoli, G., & Green, D. A. (2014). Ability, parental valuation of education, and the high school dropout decision. *The Journal of Human Resources 49*(4), 906-942.

Garry, E.M. (1996). *Truancy: First step to a lifetime of problems.* U.S. Department of Justice. https://files.eric.ed.gov/fulltext/ED408666.pdf

Ginsburg, A., Jordan, P., & Chang, H. (2014) *Absences add up: How school attendance influences student success*. Attendance Works. https://www.attendanceworks.org/wp-content/uploads/2017/05/Absenses-Add-Up_September-3rd-2014.pdf

Goldstein, D., Popescu, A., & Hannah-Jones, N. (2020, April 6). As school moves online, many students stay logged out. *The New York Times*. https://www.nytimes.com/2020/04/06/us/coronavirus-schools-attendance-absent.html

Gottfried, M. (2015). Chronic absenteeism in the classroom context: Effects on classroom achievement. *Urban Education 54*(1), 3-34. https://doi-org.goucher.idm.oclc.org/10.1177%2F0042085915618709

Guinan, M. McGuckin, M, Ali, Y. (2002). The effect of a comprehensive handwashing program on absenteeism in elementary schools. *American Journal of Infection Control 30*(4). https://doi.org/10.1067/mic.2002.120366

Hartnett, S. (2008). Does peer group identity influence absenteeism in high school students? *High School Journal*, *91*(2), 35–44.

Heppen, J.B., Kurki, A., & Brown, S. (2020). *Can texting parents improve attendance in elementary school? A test of an adaptive messaging strategy*. U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee.

Hynes, M. (2014). Don't call them dropouts: Understanding the experiences of young people who leave high school before graduation. A Report from America's Promise Alliance, 1-72.

Jordan, P.W., & Miller, R. (2017). *Who's in: Chronic absenteeism under the Every Student Succeeds Act.* FutureEd. https://www.future-ed.org/wp-content/uploads/2017/09/REPORT_Chronic_Absenteeism_final_v5.pdf

Lacoe, J., & Steinberg, M. P. (2019). Do suspensions affect student outcomes? *Educational Evaluation and Policy Analysis*, *41*(1), 34–62. https://doi.org/10.3102/0162373718794897

London, R.A., Sanchez, M., & Castrechini, S. (2016). The dynamics of chronic absence and student achievement. *Education Policy Analysis Archives*, *24*(112). http://dx.doi.org/10.14507/epaa.24.2741

Minitab 19.2020.2.0. (2020). State College, PA: Minitab, LLC.

Phillipps, B. K. (1995). Improving school attendance through an incentive system. *National Association of Secondary School Principals. NASSP Bulletin, 79*(575), 111. Retrieved

from https://goucher.idm.oclc.org/login?url=https://www-proquest-com.goucher.idm.oclc.org/docview/216037320?accountid=11164

Sahin, S., Arseven, Z., & Kiliç, A. (2016). Causes of student absenteeism and school dropouts. *International Journal of Instruction*, *9*(1), 195–210.

Sheldon, S. B., & Epstein, J. L. (2004). Getting students to school: Using family and community involvement to reduce chronic absenteeism. *School Community Journal, 14*(2), 39-56. Retrieved from https://goucher.idm.oclc.org/login?url=https://www-proquest-com.goucher.idm.oclc.org/docview/195456429?accountid=11164

Shepard, J. (2009). Campus kids mentoring program: Fifteen years of success. *Reclaiming Children and Youth*, *18*(3), 38–43.

Simon, O., Nylund-Gibson, K., Gottfried, M., Mireles-Rios, R. (2020). Elementary absenteeism over time: A latent class growth analysis predicting fifth and eighth grade outcomes. *Learning and Individual Differences 78*. https://doi.org/10.1016/j.lindif.2020.101822

Steiner, R. & Rasberry, C. (2015). Brief report: Associations between in-person and electronic bullying victimization and missing school because of safety concerns among U.S. high school students. *Journal of Adolescence, 43*,1-4 https://doi.org/10.1016/j.adolescence.2015.05.005.

Stempel, H., Cox-Martin, M., Bronsert, M., Dickinson, M., Allison, M., (2017). Chronic school absenteeism and the role of adverse childhood experiences. *Academic Pediatrics 17*(8). https://doi.org/10.1016/j.acap.2017.09.013

Strand, A. M. & Granlund, M. (2014). The school situation for students with a high level of absenteeism in compulsory school: Is there a pattern in documented support?. *Scandinavian Journal of Educational Research, 58*(5), 551–569.

The Office for Civil Rights (OCR). (2016). *Chronic absenteeism in the nation's schools.* U.S. Department of Education. https://www2.ed.gov/datastory/chronicabsenteeism.html

The Office for Civil Rights (2016). *Number and percentage of days missed from school due to out-of-school suspensions [Data set].* Department of Education. https://ocrdata.ed.gov/estimations/2015-2016

The Office for Civil Rights (2016). *Number of allegations of harassment or bullying reported to responsible school employees [Data set].* Department of Education. https://ocrdata.ed.gov/estimations/2015-2016

U.S. Department of Education. (n.d.). www.ed.gov

Appendix A

Student #	Date 1	Date2	Date3	Date4	# Days Present	# Days Belonging
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						

20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38

Key

In Class Full Time

In Class

Part Time

(2 days)

Virtual Full time

1= Present

2- Absent