

**The Effectiveness of Attendance-Based Rewards at an Alternative High School**

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### **Abstract**

The purpose of this quantitative study was to determine whether an attendance-based rewards program had any effect on the attendance rates of regular education high school students placed in an alternative education setting. The research question that guided this study was: Does an attendance-based rewards intervention improve alternative high school students' attendance? The teacher-researcher used attendance tracking software and surveys completed by participants to gather data for this six-week study. The surveys were used to gather more insight into the perspectives alternative education students had in relation to receiving rewards for their attendance. The participants in this study were 13 regular education high school students placed in an alternative education high school. The study found that although six participants strongly agreed and four participants agreed that rewards for perfect weekly attendance would motivate them to come to school more often, these rewards did not improve the overall attendance rates for seven of the participants. The mean number of absences during the five weeks prior to the study was 3.4 days ( $SD = 2.5$ ). The mean number of absences during the six-week study increased to 4.6 days ( $SD = 3.4$ ). The mean attendance rate as a percentage prior to the study was 85.1% ( $SD = 10.8$ ). The mean attendance rate throughout the study decreased to 79.6% ( $SD = 19.3$ ).

*Keywords:* attendance, rewards, alternative education

## **The Effectiveness of Attendance-Based Rewards at an Alternative High School**

Chronic absenteeism is an issue that impacts both students and schools nationwide (Humm Patnode et al., 2018; Mireles-Rios et al., 2020; Reyes, 2020; Robinson et al., 2019; Young et al., 2020). According to the U.S Department of Education Civil Rights Data Collection (CRDC), approximately eight million students were chronically absent during the 2015-2016 school year (Chang et al., 2018). In addition, when it comes to studying the experiences of students at alternative schools, their perspectives are mostly absent (Ewing et al., 2021). Although research has evolved when it comes to studying the causes and effects of chronic absenteeism and the methods that can be used to increase student attendance (Humm Patnode et al., 2018), “few data are available describing the...supports being provided to students at risk for educational failure” (Foley & Pang, 2006, p. 11). Generally, one method that has been considered to try and increase student attendance is the use of awards to encourage, recognize, and reward students for attending school. However, attendance related rewards are only one approach aimed at improving attendance (Young et al., 2020), and the research related to the types of incentives or rewards that could be used, as well as their degree of efficacy, is limited with mixed results (Cole, 2011; Garaus et al., 2016; Kleinman & Saigh, 2011; Potacco et al., 2013; Robinson et al., 2019; Springer et al., 2015; Young et al., 2020).

The need to better understand the effects that attendance related interventions could have in a regular education alternative setting while also paying attention to the perspectives of the students enrolled in the alternative education setting were the motivation behind this study. To the teacher-researcher’s knowledge, no formal intervention, albeit a rewards-based intervention, had been studied or used to improve the attendance rates of students enrolled in the teacher-researcher’s educational setting. By being able to use and study the effects of attendance-based

rewards as an intervention to potentially improve attendance, the teacher-researcher believed that their building administration and colleagues could make better informed decisions about future attendance interventions. Therefore, the overall purpose of this study was to determine whether an attendance-based rewards intervention could have any effect on the attendance rates of the students who attended the alternative high school the teacher-researcher worked and to use the findings of this study to inform future decision-making.

There was one research question that guided this study: Does an attendance-based rewards intervention improve alternative high school students' attendance? The hypothesis of this study was that the implementation of an attendance-based rewards intervention would improve the overall attendance rate for regular education high school students attending an alternative education setting.

In the literature review that follows, concepts such as alternative schools and the causes and effects of chronic absenteeism are discussed. Additionally, emphasis is placed on how rewards have been used in a variety of educational settings as an intervention to improve student attendance. Although the teacher-researcher focused on how rewards could be potentially used as an intervention in an alternative high school, the concepts found in the literature review can likely apply in both an alternative educational setting as well as more traditional educational settings.

### **Alternative Schools**

Alternative schools are schools for students who have either withdrawn from traditional school settings or been forced out of traditional school settings by school administrators (Ewing et al., 2021). Alternative educational settings include “public alternative schools, charter schools for at-risk youth, programs within juvenile detention centers, community-based schools or

programs operated by districts, and alternative schools with evening and weekend formats” (Foley & Pang, 2006, p. 10). Foley and Pang (2006) note that there are generally three different types of alternative education programs. The first type of alternative programming, according to Foley and Pang, is found in schools of choice with typically include some focus on thematic content and instruction (e.g., the school focuses on instruction in the arts). The second type of alternative programming offers students support in adapting their behaviors in addition to serving as a last chance or opportunity before being expelled from their traditional school (Foley & Pang, 2006). The third type of program identified by Foley and Pang focuses on rehabilitation or remediation, so that when students complete the program they can return to their traditional school. Students may withdraw from a traditional school setting and enroll in an alternative school setting because of their grades, their attendance (i.e., truancy), and/or because of their disruptive classroom or school behaviors (Ewing et al., 2021). Additionally, Ewing et al. (2021) note that “the majority of students referred to alternative schools are youth of color, students who qualify for free or reduced lunch programs and/or students with disabilities” (p. 3).

### **Chronic Absenteeism Defined**

It can be difficult to define attendance-related terms such as chronic absenteeism because as Reyes (2020) points out, the United States Constitution provides no right(s) to the federal government to provide its citizens with education. Reyes (2020) adds that such right(s) are provided to individuals through their respective state legislatures and constitutions. Therefore, even though guidance for defining chronic absenteeism was provided by the federal government under the Every Student Succeeds Act (ESSA) (2015), each state can set its own definition for chronic absenteeism (Humm Patnode et al., 2018; Reyes, 2020; Young et al., 2020). With the implementation of ESSA, the United States Department of Education (ED) began to define

chronic absenteeism as when students miss “10 percent of school days within one academic year for any reason” (Attendance Works, 2016, p. 1). The Illinois General Assembly defines students as being chronically absent when they have missed at least 10% of the school year (Illinois Public Act 100-0156, 2018). This definition follows the definition used by ED. For this paper and any research conducted by its author, the Illinois definition will be used unless otherwise noted. Regardless of the variety of definitions that can be found for chronic absenteeism throughout the United States, the research is a bit more consistent regarding the causes and effects associated with absenteeism.

### **The Causes of Chronic Absenteeism**

The causes of chronic absenteeism can be rather complex and can vary based on individual students (Humm Patnode et al., 2018; Mireles-Rios et al., 2020; Reyes, 2020). Humm Patnode et al. (2018) separate the causes of absenteeism into three separate categories: “barriers, aversion, and disengagement,” (p. 7) all of which need to be understood by school personnel in order to identify and utilize the best interventions suited to combat the absenteeism of their students.

#### ***Barriers and Absenteeism***

Barriers to attendance include the physical and mental barriers that prevent students from getting to school in some way. These barriers include the physical and mental health of students and their families, issues related to transportation, housing stability (or instability), and/or involvement with the juvenile justice system/and or child protective services (Humm Patnode et al., 2018). Of all the barriers that prevent students from attending school in some way, Mireles-Rios et al. (2020) and Reyes (2020) suggest that physical health and mental health may be the root responsibility for students’ absences.

In their qualitative study which conducted interviews with 39 former high school students who were chronically absent and forced out of their high school because of their absences, Mireles-Rios et al. (2020) found that mental health and physical health were large contributors to students' chronic absenteeism. Seventy percent of participants claimed mental health as a cause for their absences and 60% of participants claimed physical health as a cause for their absences (Mireles-Rios et al., 2020). Although the sample for this study was relatively small and its participants came from only one school district in southern California, the study offers great insight into the perspectives of those who were chronically absent. Furthermore, as Mireles-Rios et al. (2020) point out, not many studies have been conducted with the focus of gaining such insight. Therefore, the information obtained is valuable and supports the barriers category offered by Humm Patnode et al. (2018).

The claims made by Humm Patnode et al. (2018) and Mireles-Rios et al. (2020), that students' health can be related to their ability to attend school, are supported by Reyes (2020) who analyzed both the current and historical laws and policies surrounding absenteeism. This analysis included quantitative data related to how current and historical laws and policies have impacted attendance rates. Reyes (2020), for example, found that students with physical, chronic health conditions, such as asthma, obesity, and diabetes have an increased likelihood of being chronically absent. Barriers to transportation and housing stability may also contribute to a students' absences.

Ewing et al. (2021) identified housing and transportation as two main factors that contributed to alternative students' attendance at an urban alternative high school. In their qualitative study that used semi-structured interviews to gain alternative high school students' perspectives related to attendance, challenges related to stable housing and access to safe,

reliable transportation were identified by students as factors that contributed to participants' ability to attend school (Ewing et al., 2021). Additionally, Reyes (2020) emphasizes that a family's socioeconomic status (SES) is directly related to the issues of housing and transportation. The data suggest that the less income a family has, the more likely their students are to be chronically absent (Reyes, 2020). Furthermore, both issues are related to one another as housing stability can complicate a family's mode of transportation (Humm Patnode et al., 2018). Although the three sets of research emphasize access to transportation and housing stability as being factors which contribute to students' ability to attend school, only Reyes (2020) mentions these issues as being tied to a family's SES. The barriers to attendance that are related to a student and their family's SES may be slightly alleviated by intervention programs that offer incentives or rewards to students for attending school. Research by Young et al. (2020) looks at this barrier and will be addressed further on in this literature review.

### ***Aversion and Absenteeism***

The second category for absenteeism is aversion. Aversion relates to nonphysical causes for absenteeism including mental health, academic performance, and school climate (Humm Patnode et al., 2018). Mireles-Rios et al. (2020) found that within this category, mental health and trauma are the most likely cause of students being absent. As mentioned previously, 70% of the former high school students interviewed by Mireles-Rios et al. (2020) offered mental health and trauma as being the main cause of their consistent absenteeism. Some of the issues these former students faced were related to the physical barriers, such as the stress of being homeless. This highlights that although there may be distinct causes for students' absenteeism, these causes can be interlinked as well. A commonality shared by the 70% of former students was that the trauma they faced, and the stress related to that trauma, led students to develop coping strategies



which led students to struggle both in and out of school. Examples of such strategies included contemplating suicide, turning to drugs and/or alcohol, and distancing themselves from others (Mireles-Rios et al., 2020).

The research conducted offers educational personnel the insight that whatever interventions they choose to try and combat absenteeism should be multi-faceted. Further, this qualitative research suggests that the three categories for the causes of absenteeism offered by Humm Patnode et al. (2018) may be interconnected, depending upon the student. Interventions need to address aversion to attending school by connecting students and their families to mental health resources both inside and outside of the school. One such type of intervention program which uses rewards in addition to providing students and their families with mental health supports and connection to community-based supports is the program developed by Young et al. (2020). This program will be focused on further in this literature review.

### ***Disengagement and Absenteeism***

The third category for the causes of absenteeism is disengagement. This category focuses on how students' relationships with their teachers and how students' association with their peers may impact their level of engagement with courses and extracurricular activities (Humm Patnode et al., 2018). Cole (2011), Mireles-Rios et al. (2020), Reyes (2020), and Young (2020) support this category, especially the importance of teacher-student relationships in building a school culture focused on acceptance and inclusion. Mireles-Rios et al. (2020), for example, highlight this concept in one of the interviews they conducted with a former high school student. The student related that because of the lack of relationship building, they felt invisible and that their attendance did not matter. Reyes (2020) also reflects this in their analysis of law, policy, and quantitative data. Students need to feel that the adults in their school building care for them,

which is done through relationship building. If those relationships are not created, then students may feel like they are not valued and feel like they may not need to attend school (Reyes, 2020).

Another element that falls under this third category is the effect that students' relationships with their peers may have on their attendance. According to Henry and Huizinga (2007), as cited in Humm Patnode et al (2018), the peers that a student associates with has a connection to their absenteeism rate. This means that if a student associates with those who have low rates of attendance, then they are just as likely to have a similar rate of attendance. The effect peers can have on students' behaviors, particularly as it relates to absenteeism, will be discussed in greater detail further in this review. Specifically, the effects of group-based reward systems, as studied by Kleinman and Saigh (2011), and the effects of sending rewards to students' homes (as opposed to presenting them in front of students' peers), as studied by Robinson et al. (2019) and Springer et al. (2015), will be discussed.

### **The Effects of Chronic Absenteeism on Students**

Although the research cited in this literature review has brought up a broad, complex, and sometimes an interlinking set of causes for chronic absenteeism, the effects absenteeism has on students are a bit more concrete (Cole, 2011; Humm Patnode et al., 2018; Mireles-Rios et al., 2020; Reyes, 2020; Robinson et al., 2019; Young et al., 2020). When a student is chronically absent, they are less likely to find future success in school, future success in employment, and more likely to take part in delinquent behaviors (Cole, 2011; Robinson et al., 2019; Young et al., 2020). Additionally, chronic absenteeism is associated with dropping out, becoming homeless, taking part in criminal behavior, and future health issues (Cole, 2011; Humm Patnode et al., 2018; Mireles-Rios et al., 2020; Reyes, 2020). Furthermore, the effects of chronic absenteeism

tend to affect poor and minority students the most (Humm Patnode et al., 2018; Mireles-Rios et al., 2020; Reyes, 2020; Young et al., 2020).

According to The Hamilton Project, during the 2015-2016 school year “20% or more of Black, Hispanic, and American Indian students experience chronic absenteeism in comparison to only 8% of Asian students” (Humm Patnode et al., 2018, p. 3). These high rates of chronic absenteeism are therefore connected to the high dropout rates associated with Black, Latino, and American Indian students (Mireles-Rios et al., 2020). Additionally, students who live in poverty are more likely to be chronically absent (Chang et al., 2018). Although race, ethnicity, and SES can potentially have an impact on chronic absenteeism, students’ gender does not necessarily have an impact. Humm Patnode et al. (2018) and Reyes (2020) found there is a similar representation of gender in the rates of chronically absent students.

It is important to have a general understanding of the causes and effects of chronic absenteeism. As stated earlier, once school personnel understand which of these categories affect their students, then they can identify and utilize interventions that best meet the needs of their students (Humm Patnode et al., 2018). However, it is important to take note that the interventions used should not include zero-tolerance measures or the criminalization of absenteeism. As Mireles-Rios et al. (2020) and Reyes (2020) found, when schools use punitive measures (such as fines, arresting guardians, suspensions, and expulsions) as an intervention to combat absenteeism, attendance rates do not increase. Moreover, Mireles-Rios et al. (2020) and Reyes (2020) point out that such interventions have adverse effects on both poor and minority students, pushing these students even further away from attending school.

### **Using Rewards to Improve Student Attendance**

Combatting chronic absenteeism is an essential task for both those who work in education (i.e., teachers, social workers, etc.) and policymakers. The wrong interventions, such as the use of zero-tolerance policies or the criminalization of absenteeism, for example, could have no effect on improving attendance and could even contribute more to the barriers, aversion, and disengagement which cause students to be absent (Humm Patnode et al., 2018; Mireles-Rios, et al., 2020; Reyes, 2020). It is imperative to understand why students may be absent and then select the appropriate intervention(s) to help students get back to class. Although Humm Patnode et al. (2018) and Young et al. (2020) argue that multiple types of interventions can be used, this review only focuses on the use of rewards to combat absenteeism. Current research is mixed as to how effective rewards can be when it comes to changing student behavior, particularly their attendance (Garaus et al., 2016; Kleinman & Saigh, 2011; Potacco et al., 2013; Robinson et al., 2019; Springer et al., 2015; Young et al., 2020).

### ***The Timing of Rewards***

When using rewards as an incentive to change student behavior, educational personnel will need to consider the timing for when students receive rewards. Robinson et al. (2019) studied the effects that awarding attendance may serve and the level of effectiveness these awards may have on attendance. In their research, Robinson et al. (2019) identified and described two reward structures that are often used: prospective awards and retrospective awards. Prospective awards are those that students receive after they have accomplished some type of criteria that they were told of ahead of time (Robinson et al., 2019). This award structure was utilized in the research and experimentation conducted by Garaus et al. (2016), Kleinman and Saigh (2011), Potacco et al. (2013), Springer et al. (2015), Robinson et al. (2019), and Young et al. (2020).

Whereas prospective awards are rewarded to students after they have accomplished some type of criteria established at the beginning of a reward period, retrospective awards are those that students receive as a means of acknowledgment, and as a surprise, since no criteria would have been established before the award (Robinson et al., 2019). The retrospective award structure was utilized only by Robinson et al. (2019). Therefore, this literature review is limited in that the only study included which examines the efficacy of retrospective awards comes from Robinson et al. (2019). Although one of the purposes of their study was to compare two reward structures, none of the other studies included can corroborate their findings. As Robinson et al. (2019) suggest, it is difficult to evaluate the efficacy of rewarding attendance and there are little to almost no studies which have compared prospective awards to retrospective awards.

### ***Rewards and Motivation***

In addition to considering the timing of rewards, educational personnel will also want to consider how rewards motivate student behavior. Using rewards as an intervention to try and improve student attendance can be predicated on the concept that rewards can motivate behavior, especially when the outcome of the behavior is positive in nature (Potacco et al., 2013). This essentially works as a cycle whereas rewards create motivation, motivation elicits behavior, and if good and/or positive outcomes come from behavior, motivation to perform the behavior continues (Potacco et al., 2013). Thus, it is important to understand the different types of motivation, primarily the difference between intrinsic and extrinsic motivation.

Concerning student behavior, Garaus et al. (2016) describe intrinsic motivation as when students pursue learning because they find it as being "interesting or rewarding" (p. 46). Extrinsic motivation, on the other hand, can be described as when students' motivation to learn is based on trying "to achieve an external outcome" (Garaus et al., 2016, p. 46). An example of an

external outcome could be an award students have the possibility of receiving if they achieve some type of specified behavior (i.e., attending class). In addition to these two forms of motivation, Garaus et al. (2016) propose that autonomous motivation, students' motivation to learn because of their own interest in the content or because of the relevance of the content to their own future, needs to have more of a focus in future studies about rewards, motivation, and student behavior. This concept of autonomous motivation, that students are motivated by a combination of intrinsic motivation and extrinsic motivators, is not directly addressed in any of the other research included in this literature review. It is, however, indirectly addressed in the study by Potacco et al. (2013).

Potacco et al. (2013) sought to study the effects that a coupon incentive could have on college students' attendance in study groups for courses related to students' prospective careers. Students were rewarded with a small number of coupon points for attending optional study group sessions that could be added to their final grades (Potacco et al., 2013). The use of small rewards to increase motivation is supported by Garaus et al. (2016) who concluded from their own quasi-experiment "that small, performance-contingent rewards increase autonomous motivation to learn among students" (p. 54). Potacco et al. (2013) found that the use of coupon points, with rewards small enough to not make any drastic changes to students' final grades, increased student attendance to study group sessions by 139%. They conclude that the coupon points were extrinsic motivators that improved student attendance and learning (Potacco et al., 2013), learning that was necessary for their future careers. This would count as the autonomous motivation described by Garaus et al. (2016). Another example of rewards being used as extrinsic motivators, although unlikely to have affected intrinsic or autonomous motivation, is in the research conducted by Springer et al. (2015).

In their randomized controlled trial, Springer et al. (2015) compared the effects of monetary and nonmonetary incentives on student attendance in tutoring sessions that qualified as federally funded supplemental education services (SEdS). Notably, the researchers found that students who received nonmonetary incentives (i.e., certificates) attended 43.2% more tutoring sessions than those in the control group (Springer et al., 2015). Although there was a notable increase in the attendance of students who were offered a nonmonetary reward, Springer et al. (2015) found no statistically significant differences between their control and experimental groups when the participants were asked closed-ended survey questions about their likelihood of attending tutoring sessions when a prize was offered. However, students from the nonmonetary incentive experimental group were significantly more likely to note they were extrinsically motivated (Springer et al., 2015). The external motivation provided by the certificate recognizing their attendance rates could be the reason the attendance rate was so much higher for this group.

Springer et al. (2015) believe that nonmonetary incentives, particularly the certificates used in their study, increased attendance because they were mailed to participants' homes as opposed to being presented to the participants in front of their peers. This signaling effect is also mentioned by Robinson et al. (2019) who caution that recipients of awards may inadvertently be demotivated to perform a behavior when the award is presented in front of peers. This is because it could be signaled to the recipient that their behavior may not be the social norm set forth by their peers (Robinson et al., 2019). Although Potacco et al. (2013), Garaus et al. (2016), and Springer et al. (2015) saw increased attendance relative to the extrinsic motivation provided by nonmonetary rewards, Robinson et al. (2019) had a different viewpoint on rewards as well as different results from their experiment.

According to Robinson et al. (2019), awards can have negative effects on behavior. They highlight that rewarding behavior can signal to a recipient that their performance of a behavior does not conform to the social norms set by their peers or that the recipient performed beyond the expectations of the individual or institution rewarding them (Robinson et al., 2019). In either case, rewarding behavior can inadvertently signal to the recipient that their rewarded behavior is neither the norm nor the expectation, which may motivate the recipient to stop performing that behavior in the future. In their experiment conducted with students from sixth through 12<sup>th</sup> grade, Robinson et al. (2019) found that prospective awards did not necessarily motivate students to attend school, and retrospective awards led to an eight percent increase in absences. They suggest that instead of the retrospective award motivating students to attend school, it had the opposite effect because it “may have inadvertently signaled that recipients were performing better than the...social norm of their peers, and that they were exceeding the institutional expectations” (Robinson et al., 2019, p. 11). It is important to note that the results from this study differ from the previously mentioned studies of Garaus et al. (2016), Potacco et al. (2013), and Springer et al. (2015). However, as suggested by Robinson et al. (2019), little research as of 2019 had focused on the timing of awards, and more research needs to be conducted on this topic. Doing such could perhaps expand upon the understanding of rewards and motivation.

### ***Additional Research on Rewarding Student Behaviors***

Not all research suggests that rewards alone may be able to improve student attendance. For example, Young et al. (2020) took a different approach in how they used rewards as a means for improving attendance. The researchers created the Perfect Attendance Wins Stuff (PAWS) program to try and improve the attendance rates of chronically absent students. Although the program was centered around students being able to win monetary and non-monetary awards for



attending school, the program also connected students to social workers and school counselors and students' families to community-based resources (Young et al., 2020). The PAWS program focused on increasing communication and connection between students, students' families, school staff, and the community (Young et al., 2020). PAWS was effective in increasing the attendance of chronically absent students as the average student's attendance increased by 12.2% and saw their overall attendance rate increase to over 90% during and after their time in the program (Young et al., 2020). This research took on a different aspect than the research which has previously been cited in this review. This is because Young et al. (2020) combined monetary and nonmonetary rewards in addition to providing supports to students and their families. This highlights the issue that additional interventions, outside of rewards, may be necessary to have a more concrete impact on improving attendance.

Additional interventions may also be necessary as the research conducted by Kleinman and Saigh (2011) suggests that rewarding desired behavior may not work in the long term, especially after rewards have been removed. Kleinman and Saigh (2011) utilized a group contingency game that collectively rewarded students for demonstrating desired behaviors, such as attendance. They were focused on improving the behaviors of 26 regular education students in a ninth-grade history class in New York City. Although the game was able to reduce the behaviors targeted by the researchers it was found that the behaviors returned “to baseline levels of misconduct when the intervention was withdrawn” (Kleinman & Saigh, 2011, p. 102). This suggests that rewarding desired behaviors, such as attendance, may be ineffective in the long run as when rewards are removed students may be likely to return to their previous behaviors.

Lastly, Ewing et al. (2021) suggest that when it comes to students in alternative education settings, using rewards or other methods to increase personal motivation to attend school may

not necessarily be the solution. Instead, they “challenge...that attendance, or any educational issue, can or should be solely addressed through school-level interventions” and that “the broader ecological context in which schools...are situated” needs to be addressed (Ewing et al., 2021, p. 21). Essentially, educational and non-educational policymakers should be held accountable for the policy decisions they make (e.g., transportation policies or housing policies) in relation to how those policies affect students’ abilities to attend school (Ewing et al., 2021). Basically, those who determine which social and economic policies go into effect at various community levels (i.e., the local and state levels) should be accountable for how those policies contribute to students’ attendance (or lack of attendance).

### **Conclusion**

The causes of chronic absenteeism, whether they be physical, mental, familial, and/or social, are complex. The effects of chronic absenteeism are not as complex, but they may be dire in that being absent for at least 10% of a school year may result in the inability to find future success academically, financially, and/or socially. Interventions must be put in place by school personnel that can help students successfully overcome the barriers, aversion, and disengagement they face in attending school. To best combat the causes and effects of chronic absenteeism, there needs to be a school- and community-wide intervention that rewards and reinforces school attendance while also breaking down the physical, mental, familial, and/or social causes for chronic absenteeism.

### **Method**

This descriptive study used a quantitative approach with a quasi-experimental design. It was limited to determining the effects of attendance-based rewards on a single group of students. The study took place during the spring semester of 2023 and lasted for a total of six weeks. For

the first four weeks of the study, students had the opportunity to earn a weekly reward (e.g., stickers, snacks, pens and pencils, reusable water bottles, etc.) for perfect attendance. Then, after measuring students' attendance rates at the conclusion of four weeks, any student who had a 90% or higher attendance rate earned a pizza party. The pizza party took place during regular school hours. The decision to celebrate students' 90% or higher attendance rate was based on the definition of chronic absenteeism set by the United States Department of Education (ED) and Illinois General Assembly.

According to the ED and Illinois General Assembly, students are chronically absent when they miss 10% of school days within a school year (Attendance Works, 2016, p. 1; Illinois Public Act 100-0156, 2018). After the conclusion of the four-week intervention period, students no longer earned rewards for their attendance, but their attendance rates continued to be measured for an additional two weeks. The additional measurement of student attendance was done to help determine if attendance-based rewards were an effective intervention for improving students' attendance. What follows includes details about the participants and setting of the study, data sources and research materials used in the study, and data collection procedures.

### **Participants and Setting**

Participants in this study were 13 regular education high school students who had been placed in an alternative education setting. There were 11 male students and two female students that participated in the study, ranging in age from 15 to 17 years old. The mean age of participants was 16.01 years old. Of these 13 participants, six identified as Hispanic, five identified as Black, one identified as White, and one identified as having two or more ethnicities. Each participant qualified to receive free lunch. Although none of the participants had an IEP or 504 accommodations, two of the students were English Language Learners (ELLs).

The participants for this study were selected out of the 18 total students enrolled in the alternative education program. There were three reasons that students did not participate in this study. The first reason was that they chose not to. This was the case for one student. The second reason was that the student was receiving some type of inpatient or outpatient mental health services which meant they would be regularly absent from school. This was the case for two students. The third reason was that the student was suspended and in the process of disenrolling from the program. This was the case for one student.

This study took place within a specialized alternative education program that is a combination of the second and third type of alternative education programs noted by Foley and Pang (2006). This alternative education program offers students support in adapting their behaviors in addition to serving as a last chance or opportunity before being expelled from their traditional school. The program is also remedial in that if students successfully complete the program after a designated amount of time, they have the opportunity to return to their traditional school. This program is housed inside of a larger alternative school that serves both middle school and high school students. This program is the only regular education program found in this alternative school. The alternative school is one of 31 schools that make up a large, suburban public consolidated school district in the southwestern suburbs of Chicago. As this is the only alternative school in the district, students found in this school come from any of the district's seven middle schools and four high schools.

The school district's total student population of 24,904 students is 50.4% White, 12.5% Black, 25.1% Hispanic, 7.3% Asian, 0.3% American Indian, 0.1% Pacific Islander, and 4.4% two or more races/ethnicities (Illinois State Board of Education, 2022). Twenty-six percent of the students in this district are from low-income households. Additionally, according to the Illinois

Report Card, 11% of students are chronically truant and 27% are chronically absent (Illinois State Board of Education, 2022).

### **Data Source and Research Materials**

This study primarily used attendance data generated from the school district's attendance software, called PowerSchool. This software generated two types of attendance reports. The first report contained the total amount of absences each participant had within a given timeframe (e.g., absences per week or absences per month). The second report contained an attendance rate for each participant within a given timeframe (e.g., attendance rate per week or attendance rate per month).

This attendance rate was given as a percentage of the school days participants attended school. For example, if a student had zero absences, then their attendance rate was 100%. The attendance reports generated by this software established a baseline attendance rate as a percentage and a total number of absences that all future attendance rates were compared to. The use of this baseline attendance rate was similar to how teachers, such as the teacher-researcher, use pre- and post-tests to measure student achievement or growth. Attendance reports were also generated by the PowerSchool software at the end of each week for the six weeks of the study. These weekly reports detailed the number of absences and attendance rate for each participant.

In addition to the attendance reports, data from two surveys were obtained during the study. The first survey asked participants the same closed-ended questions at the beginning of the intervention and at the conclusion of the intervention (Appendix A). This survey was administered through Google Forms. It asked participants their level of agreement related to being reward for attendance. The purpose of this specific survey was to gain more insight into

the perspectives of alternative education students related to being rewarded for attendance behaviors.

The second survey, which was also administered through Google Forms, asked participants to provide the teacher-researcher with rewards they would be interested in earning for weekly perfect attendance (Appendix B). This survey was administered at the beginning of the intervention.

### **Procedures of Data Collection**

Data were collected for a total of six weeks, which was the duration of the study. On the first day during the first week of the study, attendance rates prior to the intervention were collected using PowerSchool, the school district's attendance tracking software. Additionally, participants took two surveys on the first day of the study. The first survey that participants took asked them to identify what type of rewards they would be interested in earning if they had perfect weekly attendance. The second survey they took asked participants their level of agreement to statements related to being rewarded for attendance. At the conclusion of the first week, an attendance report was generated with the participants' attendance rates and number of absences for that week.

During the second through sixth weeks of the study, attendance reports were generated at the conclusion of each week. These reports tracked the number of absences each participant had as well as their rate of attendance. These reports were used to determine which participants would receive rewards during the first four weeks of the study for perfect attendance. The reports were generated just prior to the end of the final school day for those weeks so that participants would receive their reward prior to leaving school for the weekend. Although participants'

attendance was measured throughout the study, they only were able to earn rewards during the first four weeks of the study.

At the conclusion of the fourth week, an attendance report with each participant's attendance rate from the first four weeks of the study was generated. This was to inform the teacher-researcher as to which participants earned a 90% or higher attendance rate up to that point of the study. Participants with a 90% or higher attendance rate received a pizza party at end of the fifth week of the study. This pizza party took place during the last half hour of the school day. Participants' attendance was still measured during the fifth week of the study even though no weekly rewards for perfect attendance could be earned.

During the final week of the study, participants took the survey asking their level of agreement with statements related to being rewarded for their attendance. They answered the same questions that they were asked at the beginning of the study. This survey was given on the first day of the final week, so that there would be time throughout the week for participants to take the survey in case they were absent that first day of the final week. Attendance reports were also generated during the final week as a way to compare participants' final number of absences and attendance rates to the initial baseline number of absences and attendance rates. In the next section of this study, the data analysis and results will be reported.

### **Data Analysis and Results**

Descriptive analysis was used to analyze the data obtained throughout this study. Over a period of six weeks, the teacher-researcher collected participants' attendance records using PowerSchool, the attendance-tracking software used by their school district. Data from these reports were organized using Microsoft Excel. Additionally, participants' beliefs related to receiving rewards for attending school were collected using closed-ended surveys created in

Google Forms. The data from these surveys were organized in a separate Microsoft Excel spreadsheet. Participants' attendance rates and attitudes toward attendance-based rewards were compared to a baseline attendance rate and a baseline set of beliefs established at the beginning of the study. The participants in this study were 13 regular education high school students who had been placed in the alternative education program that the teacher-researcher works for.

## **Data Analysis**

### ***Collecting and Recording Participants' Attendance Rates***

On the first day of the study, the teacher-researcher had the first attendance report generated which provided the total amount of absences each participant had leading up to the study. There was a total of five weeks of school prior to the beginning of the study. A second report was also generated for this five-week period, and it provided each participant's attendance rate as a percentage for this time period (e.g., Participant 1 had attended 67.4% of the school days during this five-week period). These reports helped to establish a baseline of the total number of absences each participant had and a baseline attendance rate as a percentage for each participant. These baselines are from which the rest of the study's data would be compared to. The data from these initial reports were recorded by the teacher-researcher into separate Microsoft Excel spreadsheets.

These Excel spreadsheets were then used to create two separate tables. Table 1 was used to record the total amount of absences each participant had before and throughout the intervention period (i.e., the six-week study). The last row of this table reports the mean and standard deviation of absences from both before and during the intervention. Table 2 was used to record the attendance rates as percentages for each participant. Attendance data were recorded from before and during the intervention period. The last row of this table reports the mean and



standard deviation of attendance rates for the entire sample from before and during the intervention period.

Throughout the study, the teacher-researcher had weekly attendance reports generated by the PowerSchool attendance-tracking software and then recorded the total number of absences each participant had in Table 3. It was based on this table that the teacher-researcher identified which participants could receive rewards for earning perfect weekly attendance. Participants only received rewards during the first four weeks of the study. During the final two weeks of the study, participants could not earn rewards for perfect attendance.

The attendance percentages from each period of the intervention (i.e., the first four-week period and the second two-week period) were recorded by the teacher-researcher and incorporated into Table 2. This was tabulated to compare participants' attendance rates during these two periods of the intervention. Incorporating this data into Table 2 would help determine if the attendance-based rewards intervention improved the participants' attendance.

### ***Collecting and Recording Participants' Perspectives Toward Attendance-Based Rewards***

Throughout the first week of the study, participants took a closed-ended survey which asked them to state their level of agreement with three different statements about receiving rewards for attendance. The statements that participants responded to focused on what role they believed rewards would have on their own attendance behaviors. The data from this survey were organized into a Microsoft Excel spreadsheet from which a Table 4 was created. At the conclusion of the study, participants took the same survey that they completed during the first week of the study. The data from the second survey were organized into the Microsoft Excel spreadsheet used to organize the data from the initial survey. This data was included in the fifth table as a way to compare participants' perspectives related to attendance-based rewards before

and after the rewards-based intervention was used. What follows is a brief discussion of the study as it relates to the study's research question.

## **Results**

This section reports the results of the study based on the research question: Does an attendance-based rewards intervention improve alternative high school students' attendance? First reported are the results related to participants' attendance rates when they were and were not rewarded for their attendance. Then, the results of the closed-ended surveys that participants took are reported.

### ***Participants' Attendance Rates and Rewards***

Prior to the start of the study, participants had been in school for a total of 23 days over five weeks. Over these 23 days, the mean number of absences for the sample was 3.4 days (SD = 2.5). The length of the study was six weeks. Of these six weeks, there was a total of 27 days that participants were in attendance. During the study, the mean number of absences for the sample 4.6 days (SD = 3.4).

The three participants with lowest number of absences prior to the beginning of the study were Participants 3, 4, and 6. Participants 3 and 4 were each absent for only a half a day of school while Participant 6 had zero absences. The three participants with the highest number of absences were Participant 1, 9, and 12. Participant 1 was absent for 7.5 days of school, Participant 9 was absent for 8.5 days of school, and Participant 12 was absent for 5.5 days of school.

At the conclusion of the intervention, the participants with the lowest number of absences were Participant 2, Participant 3, Participant 4, and Participant 10. Participant 2 was absent once during the study, Participants 3 and 10 were absent twice, and Participant 4 was present

throughout the entire study. The three participants with the highest number of absences were Participants 7, 9, and 12. Participant 7 was absent for 9.5 school days, Participant 9 was absent for 11 school days, and Participant 12 was absent 10 times. The total amount of absences each participant had before and throughout the intervention period can be seen in Table 1.

**Table 1**

*Mean and Standard Deviation of Total Number of Days Absent Before and During the Intervention. n=13*

Participant	Before	During
1	7.5	3.5
2	2	1
3	0.5	2
4	0.5	0
5	2.5	5
6 <sup>a</sup>	0	3.5
7 <sup>b</sup>	4	9.5
8	3	3.5
9	8.5	11
10	2.5	2
11	4	5.5
12	5.5	10
13	4	3
M	3.4	4.6
SD	2.5	3.4

*Note.* M=Mean, SD=Standard Deviation

<sup>a</sup> Participant 6 was dropped from the alternative education program at the conclusion of Week 5. Therefore, no attendance data were gathered for this participant during Week 6.

<sup>b</sup> Participant 7 was held in correctional facility for all of Week 4 and for the first day of Week 5.

The next section reports the results of the study based on participants' attendance rates when they were either rewarded or not rewarded for their attendance. Participants' baseline attendance rates were recorded at the beginning of the study using the attendance reports generated by the PowerSchool software. These rates were then compared to the two phases of the study (i.e., when participants could earn rewards and when participants could not earn rewards).

At the beginning of the study, the mean attendance rate for the sample was 85.1% (SD = 10.8). At the conclusion of the intervention, the mean attendance rate for the sample was 79.6% (SD = 19.3). The three participants with the highest attendance rates before the study were Participants 3, 4, and 6. These participants had attendance rates of 97.6%, 97.8%, and 100%, respectively. The three participants with the lowest attendance rates before the study were Participants 1, 9, and 12. Participant 1 had attended 67.4% of the school days, Participant 9 had attended 63%, and Participant 12 had attended 76.1%. These attendance rates, as well as the number of absences each participant had can be seen in Table 2.

During the first four weeks of the intervention, participants had the opportunity to receive a reward for each week they earned perfect attendance. At the end of these four weeks, if the participant had a 90% or higher attendance rate, they would also be able to earn a pizza party. Of the three participants with the highest attendance rates at the beginning of the study, Participant 3's attendance rate decreased from 97.6% to 94.4%, Participant 4's attendance rate increased from 97.8% to 100%, and Participant 6's attendance rate decreased from 100% to 86.1%. Within this four-week period, Participant 3 earned three rewards (i.e., they had perfect attendance for 3 of the 4 weeks), Participant 4 earned four rewards, and Participant 6 earned two rewards. Only Participants 3 and 4 were able to attend the pizza party.

The participants with the lowest attendance rates at the beginning of the study also had a mixture of increased and decreased attendance rates during the first phase of the intervention. During the rewards phase of the study, Participant 1's attendance rate increased from 67.4% to 86.1%, Participant 9's attendance rate decreased from 63% to 61.1%, and Participant 12's attendance rate decreased from 76.1% to 66.7%. Although none of these participants were able to attend the pizza party, Participant 1 did receive three rewards for perfect attendance. Participants 9 and 12 did not receive any weekly rewards as they had absences throughout each of the four weeks of this initial phase of the intervention.

During the last two weeks of the intervention, participants did not receive rewards for perfect weekly attendance. There was also no pizza party at the end of this phase of the intervention. Similar to the first part of the intervention, participants with the highest and the lowest attendance rates at the beginning of the intervention had different results during the final part of the intervention. When rewards were not offered to participants for their attendance, Participant 3's attendance rate was 88.9%, Participant 4's attendance rate was 100%, and Participant 6's attendance rate was 75%. Both Participants 3 and 6 had a decrease in their attendance. Participant 3's attendance decreased from 94.4% with rewards to 88.9% without rewards. Participant 6's attendance decreased from 86.1% with rewards to 75% without rewards. Only Participant 4 maintained the attendance rate they had during the rewards period (i.e., the initial phase of the intervention), which was 100%.

It should also be noted that Participant 6 was dropped from the alternative education program (i.e., they were placed in a more restrictive alternative education setting outside of the program and building this study took place in) after the conclusion of Week 5. Since their attendance was only measured through Week 5, it is unknown what their attendance rate might

have been like during the final week of the study when rewards were no longer offered.

Alternatively, Participant 2 had the fourth highest attendance rate at the beginning of the study, attending 91.3% of the classes at that time. For a more complete understanding of how a participant that started the study with one of the highest attendance rates of the sample, looking at their attendance rates throughout the study might be helpful.

When Participant 2 began the study, their attendance rate was 91.3%. When rewards were offered during the first four-weeks of the study, their attendance rate increased to 94.4%. They earned two weekly attendance rewards during Weeks 1 and 4 as well as attended the pizza party after Week 4. During the final two weeks of the study, when rewards were no longer offered for perfect attendance, Participant 2's attendance rate increased to 100%. Throughout the entirety of the intervention period, this participant's attendance rate was 96.3%. Although Participant 2 did not have one of the top three attendance rates at the beginning, their attendance rates might be a bit more helpful in determining the effects of rewards on attendance since they were able to complete the entirety of the study.

As to the three participants that started the study with the lowest attendance rates, Participant 1's attendance increased from 86.1% during the rewards period to 88.9% during the period without rewards. Both Participant 9 and 12 had a decrease in attendance, as each only attended 55.6% of the school days during the last two weeks of the intervention. Participant 9's attendance decreased from 61.1% Participant 12's attendance decreased from 66.7% during the first portion of the intervention. At the conclusion of the study, Participants 9 and 12 still had the lowest attendance rates of the entire sample. In fact, over the six-week intervention period, both of these participants' attendance rates decreased. Participant 9's attendance rate decreased from

63% to 59.3% and Participant 12's decreased from 76.1% to 63%. On the other hand, Participant 1's attendance rate increased from 67.4% to 87%.

**Table 2**

*Mean and Standard Deviation of Attendance Percentages Before and During the Intervention With and Without Rewards. n=13*

Participant	Before	During	With Rewards	Without Rewards
1	67.4	87	86.1	88.9
2	91.3	96.3	94.4	100
3	97.6	92.6	94.4	88.9
4	97.8	100	100	100
5	89.1	81.5	77.8	88.9
6 <sup>a</sup>	100	84.1	86.1	75
7 <sup>b</sup>	82.6	64.8	58.3	77.8
8	87	87	86.1	88.9
9	63	59.3	61.1	55.6
10	89.1	92.6	100	77.8
11	82.6	79.6	83.3	72.2
12	76.1	63	66.7	55.6
13	82.6	88.9	88.9	88.9
M	85.1	79.6	83.3	81.4
SD	10.8	19.3	13.3	13.7

*Note.* M=Mean, SD=Standard Deviation

Before = the attendance rate before the study took place; During = the attendance rate throughout the six-week study; With Rewards = the first four weeks of the study when participants were rewarded for perfect attendance; Without Rewards = the final two weeks of the study when participants were not rewarded for perfect attendance.

<sup>a</sup> Participant 6 was dropped from the alternative education program at the conclusion of Week 5. Therefore, no attendance data were gathered for this participant during Week 6. The total attendance rate for this participant was calculated using only the days they were enrolled in the program.

<sup>b</sup> Participant 7 was held in correctional facility for all of Week 4 and for the first day of Week 5.

Participants 1, 2, 4, 10, 11, and 13 all had higher attendance rates when they could earn rewards for their attendance. However, Participants 3, 5, 6, 7, 8, 9, and 12 had a lower attendance rate when they could earn rewards. This shows that the participants' ability to earn and choose their rewards might have improved the attendance rates of 6 of the total 13 participants.

Continuing to look at Table 2, Participants 1, 2, 4, 8, and 13 had a higher attendance rate when they could not earn rewards when compared to their initial attendance rates. This could reflect that earning rewards may not have been a factor in why these participants chose to attend school. Moreover, Participants 1, 2, and 8 had a higher attendance rate when they could not earn rewards. Additionally, the attendance rates of Participants 4 and 13 remained the same between both periods. Lastly, when comparing the attendance rates of participants from the period before the intervention and the intervention period itself, only five participants' overall attendance rate increased. One participant's attendance rate remained the same while seven participants' attendance rates decreased. For these reasons, rewards may not have been a motivating factor for the participants of this study to attend school.

Table 3 shows the details of participants' number of days absent each week throughout the six-week study. Week 4 of the intervention saw the highest mean of days absent. There was a mean of one absence per participant ( $SD = 1.4$ ). During this week, Participant 7 was absent for five days, meaning they were absent for the entire week. Participants 1, 2, 3, 4, and 5 all had 0 absences during this week. Week 1 of the intervention saw the lowest mean of days absent. There was a mean of 0.58 absences per participant ( $SD = 0.58$ ). During this week, Participants 5 and 9 had the highest number of absences. Both participants were absent 1.5 days. Participants 1, 2, 3, 4, 6, and 10 all had 0 absences during this week.



**Table 3**

*Mean and Standard Deviation of Number of Days Absent per Week During the Intervention.  
n=13*

Participant	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1	0	2.5	0	0	1	0
2	0	0.5	0.5	0	0	0
3	0	1	0	0	1	0
4	0	0	0	0	0	0
5	1.5	1.5	1	0	0	1
6	0	0.5	0	2	1	- <sup>b</sup>
7	1	0	1.5	5 <sup>a</sup>	1	1
8	0.5	0	0	2	1	0
9	1.5	1.5	2.5	1.5	2	2
10	0	0	0	0	2	0
11	1	1	0	1	1.5	1
12	1	1	2.5	1.5	2	2
13	1	0	1	0	0	1
M	0.58	0.73	0.69	1	0.96	0.67
SD	0.58	0.75	0.91	1.4	0.75	0.75

*Note.* M=Mean, SD=Standard Deviation

<sup>a</sup> Participant 6 was dropped from the alternative education program at the conclusion of Week 5. Therefore, no attendance data were gathered for this participant during Week 6.

<sup>b</sup> Participant 7 was held in correctional facility for all of Week 4 and for the first day of Week 5.

### **Participants' Perspectives**

At the beginning and conclusion of this study, participants took a Likert type survey in which they had to select their level of agreement with three different statements about being rewarded for attendance. The results from these surveys, both of which asked the same questions to participants, can be seen in Table 4. It is important to note, as is done in Table 4, that there

were less responses to the final survey than to the initial survey. This was due to a variety of reasons, such as the removal of participants from the study or the removal of a participant from the alternative education program while the study was taking place.

**Table 4**

*Frequency of Participants' Survey Results from Beginning and End of the Study. n=13*

Item	SA		A		NA/D		D		SD	
	Beg.	End	Beg.	End	Beg.	End	Beg.	End	Beg.	End
Rewards Influence Attendance	5	6	7	4	3	2	0	0	0	0
Suggesting Rewards is Influential	7	6	3	3	3	3	0	0	0	0
No Rewards, Less Attendance	2	2	0	2	9	4	4	2	0	2

*Note.* SA = Strongly Agree, A = Agree, NA/D = Neither Agree nor Disagree, D = Disagree, SD = Strongly Disagree. The initial sample size of the study was 15 participants. Two participants were removed during the first week of the study after they were admitted into inpatient or outpatient medical treatment for an unknown amount of time. At the conclusion of the study, only 12 participants were able to respond to the survey as Participant 6 was dropped from the alternative education program at the conclusion of Week 5.

When it came to participants' perspectives related to the statement, "the ability to earn a weekly reward for perfect attendance will influence my decision to come to school every day," one more participant strongly agreed to this statement at the end of the study than they did at the beginning. Three less participants agreed with this statement at the end of the study and one less participant neither agreed nor disagreed by the end of the study. None of the participants selected that they disagreed or strongly disagreed with this statement. The data suggests that the majority of the participants agreed with the concept of being rewarded for their attendance.

The second statement that participants responded to was “being able to suggest rewards for perfect attendance will influence my decision to come to school more often.” This statement was meant to look more into whether the ability to be rewarded and choose those rewards could be motivating to participants. The only difference between the first and second survey was with the strongly agree category. One less student chose this in the second survey. Three participants chose that they neither agree nor disagree with this statement. Similar to the first statement, none of the participants disagreed or strongly disagreed with this statement. Due to none of the participants disagreeing with this statement, and the same amount remaining neutral before and at the conclusion of the study, it might be suggested that the ability to be rewarded for attendance, as well as having the opportunity to choose what to be rewarded with, could have been motivating to most of the participants.

The last statement of the survey had the most amount of change between the beginning and end of the study. The third statement was “if there were no rewards for attending school, I would attend less.” Nine of the participants were neutral at the beginning of the study. Yet, at the end of the study only four chose the neither agree nor disagree category. In the first survey, only two participants selected they strongly agreed with the statement and no participants selected that they agreed with the statement. Also in the first survey, four participants disagreed with the statement and no participants strongly disagreed with the statement.

In the second survey, however, the participants who agreed or strongly disagreed with the statement increased from zero to two. Those who neither agreed nor disagreed decreased from nine to four participants. Lastly, there were two less participants that disagreed with the statement. The biggest change in this survey seems to be with the participants who initially were neutral at the beginning of the study. However, because those participants who might have been

neutral at the beginning of the study may have agreed or strongly disagreed with the statement by the end of the study, it is difficult to determine whether not being rewarded for attendance could decrease participants' motivation to attend school.

The results of these surveys contribute to answering the research question: does an attendance-based rewards intervention improve alternative high school students' attendance? Based on participants' responses to the first two statements, it seems as if being rewarded and being able to choose one's rewards could provide some motivation to the participants' attendance at school. Most participants agreed or strongly agreed that being able to earn a weekly reward that they could choose for perfect attendance would motivate them to attend.

The next section will provide further discussion about the overall findings of this study. This section will also highlight limitations with the data analysis and results as well as make note of the implications based on these findings and limitations.

### **Findings, Implications, Limitations**

#### **Findings**

The purpose of this study was to determine whether an attendance rewards intervention had any effect on the attendance rates of students who attend an alternative high school. Based on the data collected throughout the study, being offered rewards did not increase the attendance rates of seven of the 13 total participants. Six of the participants' attendance rates did increase when they were offered rewards. Additionally, five participants had a higher attendance rate during the two-week period when rewards were no longer offered, and two participants' attendance remained the same through both the rewards and no-rewards periods of the intervention. These two participants, however, each improved their overall attendance rates when compared to the initial attendance rate they began the study with.

The hypothesis of this study was that the implementation of an attendance-based rewards intervention would improve the overall attendance rate for regular education high school students attending an alternative education setting. Although six of the participants had an increase in their attendance rate when they were offered rewards for attending school, seven participants' attendance rates decreased. Additionally, the mean attendance rate for the entire sample decreased from 85.1% when the study began to 83.3% when rewards were offered. Also, at the end of the six-week study, the mean attendance rate was 79.6%. Therefore, the implementation of an attendance-based rewards intervention did not improve the overall attendance rate for the entire sample. What follows is a description of how the findings relate to participants' gender and/or ethnicity.

### ***Findings Based on Gender***

The sample this study used was predominantly populated by male participants. Of the 13 total participants, only two were female. Both female participants had an overall decrease in their attendance rates from the beginning to the end of the study. However, one of these participant's attendance rate increased when offered rewards for attending school. The other female participant's attendance rate declined throughout the entirety of the study. If looking at how attendance-based rewards affected the female participants of the study, only one of the two female participants had an increased attendance rate when offered rewards and both saw their overall attendance rate decrease in the six-week study.

Eleven of the 13 participants were male. Of these 11 participants, five of them had increased attendance rates when they were offered rewards for attending school. Five of the male participants had a higher attendance rate in the two-week period when rewards were not offered and two of the male participants' attendance rates remained the same during both periods of the

study when rewards were and were not offered. At the conclusion of the study, five of the male participants' overall attendance rates increased, five participants' attendance rates decreased, and one participant's attendance rate remained the same. The next portion of the findings section will focus on how attendance-based rewards affected the participants of different ethnicities.

### ***Findings Based on Ethnicity***

Of the total 13 participants, six identified as Hispanic, five identified as Black, one identified as White, and one identified with two or more ethnicities. Four of the Hispanic participants had an increased attendance rate when they were offered rewards for their attendance. Two of these participants' attendance rates declined when rewards were no longer offered. Of the six total Hispanic participants, three participants' attendance rates were higher by the end of the study and three of the participants' attendance rates were lower. Based on the data obtained in this study, the rewards could have contributed to the majority of the Hispanic participants' increased attendance rates.

Only one of the five total Black participants increased their attendance rate when offered rewards for attending school. This same participant's attendance rate increased when rewards were no longer offered. This participant was the only Black participant whose overall attendance rate improved during the study. The findings about the contributions rewards may have had on the Black participants' attendance rates may be a bit limited because one of the Black participants was absent for a total of six days due to being held in a correctional facility. Another of the Black participants was dropped from the program at the end of Week 5, so there is no attendance data to support what this participant's attendance might have been for the final week of the study.

For the White participant, their attendance rate decreased during the rewards period of the study. However, their attendance rate did increase when rewards were no longer offered. The participant's overall attendance rate from throughout the study remained the same as it was when the intervention began. Based on the findings from the data, it is not likely that rewards motivated this participant to attend school. The participant that identified with two or more ethnicities, however, saw increased attendance during both the rewards and non-rewards periods of the study. Nonetheless, the attendance rate was the same for both of these periods, so it is difficult to determine if rewards had any effect on improving their attendance rate. In the section that follows, attention will be given to the potential implications of this research.

### **Conclusion and Discussion**

Overall, the results from the research find that rewarding attendance could pose as a potential intervention to improve the attendance rates for some alternative education high school students. However, based on the attendance data, using rewards to increase attendance did not work for the majority of the sample. The findings connect to the suggestion made by Ewing et al. (2021) that rewards may not be the necessary solution to increase students' personal motivation to attend school. The findings also suggest that rewards cannot be used alone to try and improve attendance.

There were a few instances during the study that students were absent due to medical reasons (e.g., doctor's appointments or illness), having issues with transportation (e.g., the district-provided bus transportation never picked students up), and/or being involved with the criminal justice system in some way (e.g., needing to go to court and/or being detained in a correctional facility). Having a rewards system in place as the sole intervention to try and improve attendance cannot overcome the challenges that result from students needing to see a

doctor, not being picked up for school, and/or having to go to court. There likely need to be interventions in place that better identify the root causes of individual students' absenteeism and attempt to overcome the challenges created by those root causes.

Rewards alone cannot help if a student is absent because their bus never picked them up or because they were in a corrections facility. Rewards may also be an inappropriate intervention for addressing the root causes of individual student's absences. It may be necessary to connect students and families to community-based supports and/or counseling services, something that rewards alone cannot do. Therefore, an approach which rewards students for attendance while also strengthening the relationships between students, students' families, school staff, and the larger community, which was done by Young et al. (2020), may be a more appropriate intervention to improve students' attendance. It may also be helpful to try to gain more insight into students' perspectives related to attendance and attendance-based rewards.

The surveys that participants took at the beginning and end of the study provide a brief glimpse into the perspectives alternative education high school students have related to attendance-based rewards. Of the 13 participants, six strongly agreed and four agreed with the statement that rewards could be motivating to their attendance. Therefore, further research could be conducted into the best uses of rewards to motivate this particular population of students.

It is unclear to the teacher-researcher at this time whether additional research into the perspectives of alternative education students in relation to being rewarded for attendance exists. Pursuing additional research into this topic can help educators (i.e., administrators, teachers, support staff, etc.) better support the alternative education students in their care. The research and findings contained within this study can be a starting point for future research and



considerations into what interventions can be used to best support the attendance of at-risk youth in alternative education settings.

### **Limitations**

Throughout the study, the teacher-researcher identified one potential limitation. The limitation was that the duration of the study lasted only six weeks. To better understand the effects rewards might have on alternative students' overall attendance rates, more time could have been potentially provided more data and insight into the effects the rewards had on the participants' attendance.

### **Reflection and Action Plan**

#### **Reflection**

It was hypothesized that using a rewards-based intervention tied to attendance would improve the overall attendance rate for the participants in this study. However, this intervention only worked for some of the participants and not for all of them. Moreover, some participants had a higher attendance rate when rewards were not even offered. Reflecting on the research experiences related to attendance and rewards-based interventions makes the teacher-researcher believe that rewards could have some potential as an intervention to improve student attendance, but they cannot be used alone. Although this study was limited to a six-week period, its results make the teacher-researcher want to conduct further research and develop interventions that could be better tailored to the experiences of regular education high school students placed in an alternative education setting.

Based on the results from the surveys used in the study, it seemed that the concept of being rewarded for their attendance resonated with the participants. Yet, it also seemed that the idea of being rewarded did not necessarily conceptualize into attending more school, at least not

for all the participants. There were legitimate reasons why some participants were absent, such as having to visit their doctor, needing to appear before court, or supporting their family with a financial issue. Also, a few of the participants received out-of-school suspensions, which meant they could not be in attendance for varied periods of time. For all the other absences that participants had, it makes the teacher-researcher wonder why participants were absent as well as what school personnel could have potentially done to better support these students in attending school. Two things come to mind.

The first is that it should not be fully up to the school to address the broader issues that contribute to students' attendance issues, an idea suggested by Ewing et al. (2021). It is true that the teachers and other support staff in the alternative education setting this study took place in had no direct say in the housing, transportation, healthcare, or other policies that could have had a direct or indirect impact on why participants were absent. At the same time, however, it would still be pragmatic to have educational personnel develop interventions to best meet the needs of their students. One such intervention that was developed by educational personnel was the multi-faceted rewards program discussed by Young et al. (2020).

As a part of their rewards intervention program, Young et al. (2020) provided their students with regular and consistent access to social work and counseling services as well as with resources and activities that created stronger connections between students, students' families, and school staff. The social worker that was a part of this program also was able to connect students and families to community services when needed to better address the issues that prevented some of the students from regularly attending school (Young et al., 2020). Although the program as designed by Young et al. (2020) would need to be adapted to better meet the setting of the teacher-researcher's alternative high school, a program that utilizes rewards as well

as other approaches to improve students' attendance might work. If anything, the research conducted by the teacher-researcher could be used to develop some type of program similar to this in their alternative education setting. This idea will be discussed further in the following Action Plan section.

### **Action Plan**

The teacher-researcher plans on sharing the findings of their study with the other staff members that are a part of the teacher-researcher's alternative education program. This includes two other teachers and a school counselor. Additionally, the teacher-researcher plans on sharing the findings of the study with their building administration as well. These teachers, administrators, and counselor had all been very supportive of the teacher-researcher while the study had been completed.

Based on the initial support of their colleagues, the teacher-researcher plans to also share more information about Young et al. (2020)'s study. The idea would be to develop as a staff some sort of attendance intervention program that still uses rewards but also builds stronger connections between students, students' families, and school personnel. Although the use of rewards did not improve the attendance rates for all the participants in this study, it was evident based on the data from the surveys that being rewarded for attendance could provide additional motivation to come to school. Since it is still unclear why some participants were absent, perhaps building stronger connections between students, students' families, and school personnel could help identify the causes for these absences as well as better supports to improve overall attendance.

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## Appendix A

### Attendance Survey

 nflanner@psd202.org (not shared) [Switch account](#) 

State your level of agreement for the following questions.

The ability to earn a weekly reward for perfect attendance will influence my decision to come to school every day.

Strongly Agree

Agree

Neither Agree nor Disagree

Disagree

Strongly Disagree

Being able to suggest rewards for perfect attendance will influence my decision to come to school more often.

Strongly Agree

Agree

Neither agree nor disagree

Disagree

Strongly Disagree

If there were no rewards for attending school, I would attend less.

Strongly Agree

Agree

Neither agree nor disagree


Disagree

Strongly Disagree

[Submit](#) [Clear form](#)

## Appendix B

# Attendance Rewards

nflanner@psd202.org [Switch account](#) 

Your email will be recorded when you submit this form

**\* Required**

Name: \*

Your answer \_\_\_\_\_

If you could earn any of the following rewards for 100% attendance, what would they be? You can select as many as you'd like. If you get perfect attendance, you'll be able to choose from one of the rewards you selected.

- Stickers
- Snacks
- Pens
- Pencils
- Reusable Water Bottles
- Deodorant
- Other: \_\_\_\_\_

**Submit** [Clear form](#)

Never submit passwords through Google Forms.

This form was created inside of Plainfield School District 202. [Report Abuse](#)

Google Forms



## Appendix C

Dear Parents or Guardians,

As a part of my graduate work in Curriculum and Instruction at Eastern Illinois University, I am conducting an Action Research project with the Turnabout program this semester. This research project is a requirement to fulfill my master's degree coursework.

I will be conducting a study to determine if rewards have any effect on students' attendance. The study will take place over a period of six weeks, beginning February 13. For the first four weeks of the study, students will be rewarded for each week they have perfect attendance. During the fifth week of the study, students who had an attended 90% or more school days during the previous month will be rewarded with a pizza party. During the fifth and sixth weeks of the study, students will no longer be able to earn rewards for perfect attendance. I will be collecting and comparing students' attendance rates throughout the study to determine if rewards had any effect on students' attendance during the six-week period. My hope is that by using rewards, attendance in the Turnabout program will improve.

There is no more than minimal risk to this study. It is possible that students may feel anxious or upset about not receiving rewards, especially if other students in the study have received rewards. In the case that a student feels anxious or upset, those feelings can be addressed by myself and/or the Turnabout social worker or counselor. Your child's participation in this study will not be factored into their grades at the end of the semester. Any results gathered from this study will be used only for this project and to inform Turnabout staff and administration as to whether the rewards were effective for improving attendance. All data collected in this study will be kept confidential and stored on my password protected laptop. Any identifying information will not be used when presenting the outcomes of this study.

Your child's participation in this study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University, the Turnabout Program, or Plainfield Academy. You have the option to exclude your child from the study or withdraw your child from the study at any time.

I have been granted approval to conduct this research project by Plainfield Academy's principal. If you have any questions or concerns about this research, please feel free to contact myself or my Faculty Sponsor:

Nicholas Flannery  
Tel: (815) 577-4003 X8099  
Email: [nflanner@psd202.org](mailto:nflanner@psd202.org)

Dr. Sham'ah Md-Yunus  
2203 Buzzard Hall  
Eastern Illinois University  
Tel: (217) 581-5728  
Email: [smdyunus@eiu.edu](mailto:smdyunus@eiu.edu)

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board  
Eastern Illinois University  
600 Lincoln Ave.  
Charleston, IL 61920  
Telephone: (217) 581-8576  
Email: [eiuirb@eiu.edu](mailto:eiuirb@eiu.edu)

You will be given the opportunity to discuss any questions about your child's rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

Thank you,

Nicholas Flannery

## Appendix D

Dear Students,

I am currently working on a master's degree at Eastern Illinois University, and as part of my studies, I will be studying whether or not a rewards system will affect your attendance.

If you choose to participate, you will complete a survey at the beginning and end of my six-week study. Your attendance will be monitored throughout the study in the same ways it always has been.

Each week that you have perfect attendance you will be rewarded. After four weeks, if you attended 90% of the time you will be rewarded with a pizza party. At the end of the study, I will present my results to my instructor, but your names will not be on my report.

Your participation is optional. If you do not want to participate, please let me know. You will not be penalized for choosing not to participate. You can also choose not to participate at any point during the study. Just make sure to let me know if you do not want to participate.

It is possible that at some point during the study you may feel upset or anxious about the rewards. Please let me, your social worker, and/or the school counsellor know. Your access to social work services and the school counsellor will continue to remain the same, even if you choose not to participate in the study.

Thank you,

Mr. Flannery

## Appendix E

### *Plainfield Community Consolidated School District 202*

#### PLAINFIELD ACADEMY

23930 W. LOCKPORT STREET • PLAINFIELD, ILLINOIS 60544

Tel. (815) 439-5521 • Fax: (815) 439-7014

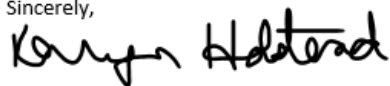
[www.psd202.org/academy](http://www.psd202.org/academy)

January 20, 2023

To Whom it May Concern,

As principal of Plainfield Academy, I approve the appropriateness of Nicholas Flannery's action research project titled The Effectiveness of Attendance-Based Rewards at an Alternative High School. I have spoken with Mr. Flannery about the project and ways to use different rewards to motivate the students to attend school. Conducting the project at Plainfield Academy is very feasible and should be completed by the end of the semester. If you have any questions, please feel free to contact me.

Sincerely,



Karyn Holstead  
Principal  
Plainfield Academy

## Appendix F

### IRB Submission 23-007

Jennifer L Smith <jlsmith@eiu.edu>

Tue 2/7/2023 10:59 AM

To: Nick P Flannery <npflannery@eiu.edu>

Cc: Sham'ah Md-Yunus <smdyunus@eiu.edu>

February 7, 2023

Nicholas Flannery  
Sham'ah Md-Yunus  
Teaching, Learning, and Foundations

Dear Nicholas,

Thank you for submitting the research protocol titled, "The Effectiveness of Attendance-Based Rewards at an Alternative High School" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 2/7/2023, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 23-007. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board  
c/o Office of Research and Sponsored Programs  
Telephone: 217-581-8576  
Fax: 217-581-7181  
Email: eiuirb@eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Bickford, Chairperson  
Institutional Review Board  
Telephone: 217-581-7881  
Email: jbickford@eiu.edu

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