

The Effect of Absenteeism  
on the  
Academic Success of Students in Kindergarten

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## **Abstract**

The purpose of this study was to determine whether there was an impact with student absenteeism and students' academic success while in kindergarten. There were 89 students selected in kindergarten comprising this convenience sample for this study. The measurement tool was the Student Numeracy Assessment Progression and Kindergarten Literacy Assessment from the Harford County Public School curriculum development team. This study involved the use of post-assessment data to show the impact of student absenteeism and their academic growth throughout the length of the study. The study showed that there was not an impact of student absenteeism on student academic success throughout this school year. Studies should continue this topic because of the importance of student attendance and its relationship to students' academic success to determine when the impact and achievement gaps begin.

# CHAPTER I

## INTRODUCTION

The purpose of this study is to determine whether there is a relationship between student absenteeism and student achievement in kindergarten with meeting the same academic growth between same aged peers.

### **Overview**

This study was conducted to show the relationship between students who are missing important developmental windows because of absenteeism and the lack of academic achievement that comes with it. In the 2015 passing of the new Every Student Succeeds Act (ESSA) states were given a new opportunity to work with students on a very different and flexible level. ESSA stated that the ‘missing piece’ of early elementary school was based on not having enough social and emotional development in America’s education system (Gayl, 2017). The problem with students not attending school creates a large gap in their social, emotional, and developmental progression that will become greater as they grow. Students who do not attend school are missing the teaching of self-awareness, self-management, social awareness, relationship building, and decision-making skills which are all associated with a student’s long-term success academically (Gayl, 2017).

The Maryland State Department of Education Report Card states that in the 2018 school year Harford County schools have a 94.5% student attendance rating with an enrollment of 37,780 students.

Those who teach see firsthand the effects that student absenteeism has on the early development of a child. Children who are in attendance during the majority of the school year are falling within the proficient to exceeding proficiency range whereas students who are

chronically absent will fall within the basic to below basic in proficiency. The big picture that needs to be addressed and understood by parents and guardians is that students need to be in school where they can be stimulated to help them grow socially as well as developmentally through academics and same aged play. School teams work very closely with administration, the reading specialist and other kindergarten teachers from other schools to come up with different ideas of ways to get our students ready for the next grade level. What it truly comes down to is that if students are not attending school, they cannot learn what they are needed to throughout the school year. They must be seated in a classroom and ready to attend lessons for us to truly help them grow academically, socially, emotionally, and help their overall development grow and be ready for the rest of the elementary grades that follow.

### **Statement of Problem**

This study was conducted to determine whether there is an impact of students who are chronically absent and the lack of academic achievement that comes with it.

### **Hypothesis**

A student's attendance does not directly affect his/her academic growth among same-aged peers.

### **Operational Definitions**

The independent variable is student attendance. The five categories were created to desegregate between the absences for 1-5 days, 6-10 days, 11-15 days, 16-20 days, and 21 and more days.

The dependent variables are the Kindergarten Literacy Assessment (KLA) and the Student Numeracy Assessment Progression (SNAP).

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

This literature review discusses the importance of children in early elementary school attending school daily to help them grow socially, emotionally, and developmentally. There are many research-based articles and journals that come to the same conclusion when it comes to student attendance and their academic achievement. Studies have shown that there are crucial developmental factors as to why children should be in a stimulating environment with the focus on early literacy and mathematics. This focus is based on the developmental window that children have, and during that time children are like sponges. They soak in all the foundational information from cognitive, social, emotional and academic that they can get out of a nurturing and academically focused classroom environment. Early childhood classrooms are built around children and their need for skill development. For children to get this they must attend school on a regular basis. Academic achievement is only able to be attained with a student given the ability to be present in the classroom where the learning can take place.

#### **The Importance of Early Childhood Development**

##### **Early Brain Development**

A child's brain development begins before birth. Between the ages of two and six years of age, children begin to have incredibly increases in their brain development at a steady pace. At the age of four, a child's cerebral cortex has created an overproduction of synapses that helps them improve in a variety of skills such as coordination, perception, attention, memory, language, logical thinking, and imagination (Berk, 2010). This overproduction also helps children begin the inhibition of impulsive behaviors due to their frontal lobe development.

The cerebral cortex makes incredibly gains during the early childhood years. This portion of the brain is necessary for the support of the cerebellum. When the cerebral cortex and the cerebellum develop appropriately together, they are then able to support critical thinking, memory, language and motor development (Berk, 2010). A child in early childhood will be find out handedness with utilizing supplies to work on their new-found skills of cutting and holding a pencil or crayon to color. These skills also need to be worked on during this time to then develop their frontal cortex which is responsible for the development of memory and spatial understanding all the way through middle childhood (Berk, 2010).

### **Emotional and Social Development**

Children need to understand emotions for them to have the ability to be socially ready for a setting of academics. The need for self-concept helps to define a child and how they can tell someone about themselves and what makes them and a peer feel a certain way about something. This will also lead itself into a child's ability to self-regulate their emotions. This is a huge piece of childhood development. This is the ability of a child to verbalize strategies to help adjust their emotional arousal about a situation that is happening. A child may have low self-regulation, and it will show in a behavior that is reactive to another behavior occurring that they have an emotion linked to (Berk, 2010). For example, a child may be playing and a parent may tell them to clean up. Children with low emotional self-regulation may have a tantrum with throwing themselves on the ground paired with screaming and crying or can become aggressive and begin hitting the parent or children around them. This portion of emotional development is crucial for a child to be able to maintain and have the skills needed to help regulate his/her emotions appropriately so that he/she can learn and help others around him/her learn as well.

In this portion of childhood development, studies have investigated the Social Learning Theory. This theory is based on moral understanding through experiences. This is based on parent praise through positive reinforcements and punishment through conversational based means that are meant to change behaviors for long term goals of social or emotional norms. This is to help drive the need for the child to understand that they are to be a good citizen and act in good conduct (Berk, 2010). An example of positive reinforcement may be that a parent can see that a child is playing quietly on the rug with his/her peer of the same age and the parent goes over to praise them for working together nicely with their toys. This is meant to give both peers a feeling of praise and know that what they are doing is seen as good and they may continue this behavior. An example of punishment through conversation would be that when a child is seen to be doing something negative towards a peer, for example taking a toy out of their hands. The parent is to intervene and explain why that behavior is seen as wrong. This gives the parent the opportunity to have a one-on-one conversation and explain that the behavior is seen as not being a good citizen and then show the child how to ask using words instead. This is also an excellent opportunity for children to understand empathy when working with peers and adults.

### **Cognitive development**

Children develop their cognitive abilities through skills and experiences that are stimulating. This can be through either discovery learning or through adult guided experiences. Cognitive abilities grow during the ages of two and six in the areas of attention, planning, and memory.

Students' attention can be developed through the scaffolding of skills that children may have already attained (Berk, 2010). Some activities that can help build attention would be frequent shifts in attention-based activities and adding in movement throughout a lesson.

External aids also help build a child's attention as well as adding in make-believe play where a child must follow rules and guided behavior with peers and adults.

Another way that a child's cognitive development can be built is on the planning and implementing the sequence of acts where a child needs to utilize their attention to complete the set of goals (Berk, 2010). An example may be that a parent asks a child to do a multistep direction by putting on their shoes and socks independently. These sequencing of events can begin as only two or three steps and should be scaffolded as necessary. This also helps to build a child's independence and confidence in their ability to complete a task that may be deemed as hard or not preferred.

Memory is a large piece of cognitive development in early childhood. Memory games and strategies to help build memory are to be utilized as early as two years. They are to help build the ability for children to recall items, pictures, or events immediately after being told them. An example of this would be listening comprehension activities where parents speak and their child is to repeat after them. Giving kids multisyllabic words and then phrases helps to scaffold this activity and develop their working memory. Another example would parents reading to their children and having conversations about events and characters' feelings that have been immediately discerned from the text and having their child reply appropriately to it.

### **Cognitive Development in the Home**

Research has shown that cognitive development is best attained by the child's mesosystem. At the beginning of a child's development, he/she is influenced by his/her microsystem which includes the immediate family, school, neighborhood and home. Studies have shown that when children have parents who stimulate them through language or activities

as they develop, they develop more cognitively than their same-aged children who have parents who do not stimulate them through language or activities. The parent's development is also a factor whether they are able to help enhance their child's cognitive development because of their own level of education or time spent with them. A child's exosystem is also a big piece because the parent's workplace may directly affect children's cognitive development. Parents who are unable to give their children stimulating materials are at risk at not developing special thinking and enhancing mathematical thinking. A parent who is working the night shift work may not have the chance to spend time with his/her children as much as a parent who works day shift work and is able to spend time during the day with his/her child after work. Studies have shown that the quality of the neighborhood that children grow up in also directly affects their mental health and may influence their development (Barreto, Sanchez de Miguel, Ibarluzea, Andiarena, & Arranz, 2017).

Experiences in the home also directly affect a child's cognitive development (Workman, 2017). Children and siblings who grow up in a household that is print rich and is full of different materials that can be physically manipulated benefit from a place that is educationally sound. Parents who fill their homes with reading material, puzzles, LEGOs, and other items that can be utilized to help enhance cognitive learning help children cognitively develop as they develop new skills. It is also developmentally necessary to have a lot of language development as well as behavioral inhibitors that children must work around to help them grow (Berk, 2010).

The number of siblings that are in a household will directly affect the amount of materials and resources that a parent can give to only one child and therefore will create a trickle-down effect. The oldest sibling will have the most time working with parents and resources because there were no other siblings to share resources with unless the oldest and next sibling are very

close in birth age. The more children that adults have, the fewer resources there are to go around. There is also less time to be spent with each child, and time must be shared among the children who need it most. Parents who come from large sibling type families also have the same effects as their own children that they have. There is benefit to children having siblings. There are cognitive developmental skills that can be taken from having a sibling that can enhance spoken language as well as relationship building (Workman, 2017).

Studies have shown that along with parenting behaviors a child's genetics may influence cognitive development. Parents' genetics also play a large role in whether or not they are able to create an environment of stimulation and learning at a very early age with their own children. Parents who create an environment early and expose their children to different styles of learning are enhancing their cognitive skills and, in turn, are also enriching them educationally (Tucker-Drob, & Harden, 2012).

### **Student Achievement in the Early Childhood Classroom**

There is a direct association between school absenteeism and student achievement and learning (Ready, 2010). Students need to be in the classroom to be able to be an active member of their learning and development. When students are absent from the classroom, that, in the most basic form, means that they are not getting the information that their same-aged peers are receiving daily. These chronic absences will go on to create an achievement gap. Research has shown that the focus in kindergarten and first grade is based on literacy development. Those early grades dedicate between a full hour or more to just literacy instruction with the rest on mathematical instruction (Ready, 2010). For students to not be in the classroom during that important instruction, they are losing out on very key subject areas and will likely struggle the rest of the way through their schooling. Students who are also chronically absent comprise the

majority of who will be participating in intervention groups to try and help them close the gap. Interventions targeting the early years hold greater promise than investments later in the life course (Heckman, 2008). “Promoting attendance early in a student's life can encourage attendance and maintain this habit throughout his or her school career. The studies reviewed—using parent involvement—show promise to improving students’ attendance” (McConnell & Kubina, 2014, p. 249).

### **Importance of Student Attendance and Academics**

“Achievement testing in the United States has increased dramatically in frequency and importance during the past 25 years and is now a cornerstone of educational practice and policy making” (Paris & Hoffman, 2004, p. 199). These tests have become so widely used because they show a true achievement score and put the accountability on the educators. The rationale for these assessments is in the research needed to determine whether reading development indicates future success and evidence of classroom instruction and the need to begin early intervention for those students who may be struggling when they begin school. Assessment tools and procedures are created to help enhance student achievement and give educators a tool that can be used as a benchmark throughout the school year to gauge academic growth (Paris & Hoffman, 2004).

The Center for the Improvement of Early Reading Achievement (CIERA) created a survey that was given to teachers in grades Kindergarten through third. They were asked to administer a variety of assessments in their classroom daily and to reflect on what worked best for them as an educator and what worked best for students. The survey found that the teachers used observations, anecdotal evidence, informal inventories, and student work samples as their primary source of data (Paris & Hoffman, 2004). Teachers also stated in the survey that the assessments that were teacher-designed/informal showed a more positive outcome on students

than the standardized assessments that were given. Teachers believed that administrators had a more positive effect from the standardized assessments because of the data that is available after (Paris & Hoffman, 2004).

Assessments are important when collecting data for academic achievement purposes. The information that comes from educational assessments is invaluable for students because it shows how the classroom environment and subject information is directly affecting them. It also shows how much they are gaining from being in the general education classroom and shows correlation between whether a student may need to be placed in a learning environment that best fits their needs. Students are assessed in preschool, and their academic achievement scores are shared with early childhood educators to review and discuss whether the student is performing on average with or below their peers. Early childhood assessments are key when students begin elementary school because these tests help to create a plan for students coming into school so that they do not fall further behind their same aged-peers as much as the school can help it (Schappe, 2005).

The early childhood classroom is also a place where students can begin to develop their skill when playing with peers. In 2015 the government passed the new Every Student Succeeds Act (ESSA) and it states that states and LEAs are now given a new opportunity to work with students on a very different and flexible level. ESSA states that the “‘missing piece’ of early elementary school was based on not having enough social and emotional development in America’s education system” (Gayl, 2017, p.1). Students who do not attend school are missing the teaching of self-awareness, self-management, social awareness, relationship building, and decision-making skills which are all associated with a student’s long-term success academically (Gayl, 2017).

## **Summary**

The development of a child goes through many different avenues before he/she comes into the elementary school. Parents are responsible for creating an environment and atmosphere of positive cognitive, emotional, and social development during the early stages of life for their children, and the school can add to that as students begin their academic journey. Children who do not come into the elementary school with a foundation of emotional, social, and cognitive development have the opportunity in the early childhood classroom to build upon what they do have during center activities and academics. However, if children are not in the classroom during these crucial years, they are missing out on essential developmental milestones that they will need throughout the rest of their school career as well as after. Elementary school attendance is incredibly important for the development of a child and should be nonnegotiable to the community and the educational leaders who support schools.

## **CHAPTER III**

### **METHODS**

The purpose of this study was to determine whether there is a relationship between chronic absenteeism and achievement in kindergarten.

#### **Design**

This study utilized a quasi-experimental posttest only design. The dependent variables were academic achievement on the Kindergarten Literacy Assessment for reading data and Student Numeracy Assessment Progressions (SNAP) for math. The independent variable was student absenteeism. The study was conducted during the 2018-2019 academic year.

#### **Participants**

In this study there were 87 kindergarten students attending a school in Harford County during the 2018-2019 school year. All 87 kindergarten students who were registered by the beginning of the 2018-2019 school year were used in this study. Within this grade level there were 46 female and 41 male students. The ratio was 53% female and 47% male students in the grade level. The demographics of this class were 64 Caucasian students, nine African American students, six Asian students, five Hispanic students, and four students from other race/ethnicities.

#### **Instrument**

##### **Student Attendance**

All student attendance data was collected through a computer program titled eSchoolPLUS. The Teacher Access center is where student attendance is reported and recorded daily. Attendance reports are checked by the classroom teacher as well as the attendance secretary monthly by comparing the online report with student late slips and absentee notes collected and kept in student attendance folders held in the classroom.

## **Student Academic Achievement**

All kindergarten students' academic data for reading is collected through the Kindergarten Literacy Assessment (KLA), and math is collected through the Student Numeracy Assessment Progressions (SNAP) folder. These assessments are directly aligned with Maryland State Common Core for College and Career Readiness standards. These assessments have also been approved through Harford County Public School as valid based on the direct link to the standards.

These assessments are considered reliable through Harford County Public schools based on the frequency of administration being quarterly for data collection. This data collection was viewed as appropriate for criterion-referenced assessing and reporting academic progress.

### **Procedure**

The data points were collected quarterly from all 87 kindergarten students in the 2018-2019 school year and compared whether the higher the rate of a student's absence directly affects his/her academic achievement by the end of the 2018-2019 school year. The data was collected through eSchoolsPlus online program daily by the classroom teacher. This program was checked for validity from the classroom teacher and attendance secretary's anecdotal notes.

The data points for student academics (SNAP and KLA) were collected onto Unify during benchmark allocated assessment windows by the classroom teacher. The classroom teacher shares the information through Unify with the Reading Specialist, assistant principal, and principal to check for validity before sending to parents and guardians.

## CHAPTER IV

### RESULTS

The purpose of this study was to determine whether absenteeism has an effect on achievement on students in kindergarten. The study consisted of student academic assessments in reading and math through quarterly benchmarks from September 2018 to May 2019. Pre- and post-assessment data were gathered to identify student growth compared to data collected for attendance.

When looking at the absent data, five attendance categories were created for student absences, 1-5 days, 6-10 days, 11-15 days, 16-20 days, and 21 or more days to determine whether absenteeism had an effect on student achievement. An ANOVA was conducted on SNAP and KLA.

The analysis revealed that the number of days absent had no effect on the math data,  $F(5,77)=.61, p=.70$ . The study also examined student reading ability on five areas which were print awareness, blending, segmenting, decoding, and word knowledge. Attendance had no effect on the sight word mean scores,  $F(5,76)=.1.68, p=.15$ . Attendance had no effect on the print awareness scores,  $F(5,76)=.82, p=.54$ . The number of days absent did have an effect on the word blending mean score,  $(5,76) 4.35, <.05$ . The post-hoc analysis revealed a difference between the scores of those who were absent 1-5 days and 16-20 days (Table 1).

The analysis also revealed that the number of days absent also had no effect on the word segmentation scores,  $F(5,76).56, p=.73$ .

Finally the decoding scores also indicated that the number of days absent had no effect on the decoding skills,  $F(5,76)1.90, p=.11$ .

Table 1: Student Attendance and Student Mean Scores on KLA and SNAP

<b>ABSENCES</b>	<b>SNAP</b>	<b>Print</b>	<b>Blend</b>	<b>Segment</b>	<b>Decode</b>
	Mean	Mean	Mean	Mean	Mean
<b>1-5 Days</b>	46.07	8.19	7.59	7.44	8.52
<b>6-10 Days</b>	46.27	7.75	7.75	7.81	8.75
<b>11-15 Days</b>	44.07	7.33	7.8	7.27	8.67
<b>16-20 Days</b>	42.67	7.5	6.5	7.5	7.17
<b>21 Higher</b>	42	7.5	5	7	4

Although the number of days absent did not have a significant effect on the majority of measures, the null hypothesis was partially supported.

## **CHAPTER V**

### **DISCUSSION**

The purpose of this study was to determine whether there is a relationship between absenteeism and achievement in kindergarten. The null hypothesis of this study was that there would be no significant difference in the performance of student achievement depending on the amount of days absent from school. Overall the numerical and most of the literacy data showed no significant effect observed, thus providing support for the null hypothesis.

#### **Implications of Results**

Examining the results, there was an indication of a significant effect in blending with 1-5 days absent compared to 16-20 days absent. On the Kindergarten Literacy Assessment, blending is where students are showing proficiency by isolating letter sounds in a word. Students are required to pull apart letter sounds in the beginning, middle, and ending of words to be proficient. The results stated that the only significant effect was on blending during the September 2018 to May 2019 school year.

#### **Theoretical Consequences**

The results of this study did not support the Social Learning Theory. Social Learning Theory states that students learn best through positive reinforcement and classroom experiences (Berk, 2010). Students are taught how to be good citizens and how to work through their social and emotional regulations to help them learn. Students who do not attend school on a regular basis will lack in this area and it will show in maturity as they go through the rest of their schooling.

Children also develop their cognitive skills most through the ages of two and six years in the areas of attention, planning, and memory (Berk, 2010). For students to grow in these areas,

they need to be cognitively engaged frequently and attend lessons based on these successes. Students with chronic absenteeism are lacking in these areas specifically because they are not attending lessons frequently to help them with their growth.

### **Threats to Validity**

An internal threat to the validity of this study would be differential selection. The kindergarten population was used during the school year which was based on a convenience sample. This sample was used because the researcher teaches kindergarten; therefore, the sample was easily chosen.

Another threat could be the accuracy of the data due to teacher or attendance secretary not entering in attendance records correctly.

Maturation is another threat to internal validity for this study. As students grow, they become more mature, and some of the changes from pre- to post-data may be due to normal changes that may normally occur.

This study was a longitudinal study which spanned the months of September to May. Because of this large timeframe, there was a great amount of data collected. There are many times throughout the school year where families travel for many different reasons, sports schedules become priority, and sickness occurs where students are unable to attend school.

### **Connections to Previous Studies**

“Achievement testing in the United States has increased dramatically in frequency and importance during the past 25 years and is now a cornerstone of educational practice and policy making” (Paris & Hoffman, 2004, p. 199). These tests are critical to help develop students’ growth in all areas and for students to show their successes they must attend school on a regular basis. The rationale for these assessments is in the research needed to determine whether the

reading development indicates future success and evidence of classroom instruction and the need to begin early intervention for those students who may be struggling when they begin school. This is a direct correlation to the current study based on the evidence that for students to be successful on an academic-based assessment they must have spent enough time in the classroom to pick up on the strategies and lessons needed to be successful on the assessment.

Maryland Every Student Succeeds Act (ESSA) refers directly to state goals set to reduce chronic absenteeism in all grade levels. Section e. School Quality or Student Success Indicators discusses the importance of the data collected through a survey instrument which is to measure “meaningful differentiation among school performance” (U.S. Department of Education, 2017, p. 27). This measurement is designed to show whether or not there is a relationship between student absenteeism and student achievement throughout the school year.

### **Implications for Future Research**

The results of this study suggest that student absence does not have a direct impact on academic success in kindergarten. The study was conducted without a control group and was based on a convenience study but would prove much more informational if a control group was chosen from first grade following these students to really solidify the impact that attendance has in the areas of reading and math. This could be a longitudinal study and follow this particular set of students from kindergarten through fifth grade to determine whether or not their attendance throughout their elementary years has impacted their academic success significantly in the areas of reading and math.

This study could also have been conducted with pre- to post-data with a correlational design. This study would have looked at the direct relationship of the growth of a student’s achievement and the number of days that he/she spent in school.

Finally, there was an exclusion of students who had not missed any days of school because the study was designed to look at absenteeism. This study did not look at students who did not miss any days, but if it had there may have been more significant of a difference between student absence and student achievement.

### **Summary**

This study was completed to determine the impact of chronic absenteeism on academic success in the areas of reading and math during students' year in kindergarten. The results showed that the number of days absent had no effect on academic success in a majority of reading measures and math in kindergarten.

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