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Social-Emotional Learning & Academic Achievement

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A Literature Review Presented

in Partial Fulfillment of the Requirements

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Abstract

This action research study investigated the impact that social-emotional skills had on academic growth during the first 8 weeks of the 2020-2021 school year for a class of first grade students. Academic growth was evaluated by the students' math gains measured by the STAR math assessment. The SAEBRS teacher assessment was used to measure the students' social-emotional skills, specifically social, emotional, and academic behavior. The data did not indicate statistical significance, however, there is literature that suggests the importance of teaching social-emotional skills to young children to improve their social, emotional, and academic behavior and support their education and life.

Keywords: social-emotional learning, emotional behavior, academic behavior, social behavior, SAEBRS, academic growth

Social-Emotional Learning & Academic Achievement

There is research that stresses the relationship between behavior and academic performance (Kilgus et al., 2017). Studies have also shown that social-emotional skills impact academic achievement and even future employment (Chin Ng & Bull, 2018). Schools are always monitoring students who are at risk of failing or not doing well academically, but it is rare to find schools that also screen for students who are at risk behaviorally (Kilgus et al., 2017). Researchers expect that students' academic achievement is closely tied to their academic behavior, including skills such as study skills and self-motivation (Kilgus, et al., 2017). Social-emotional skills also affect children's engagement and ability to learn (Chin Ng & Bull, 2018). Many of today's educators agree that students are lacking critical social-emotional skills (Duginske, 2017).

CASEL splits social-emotional learning (SEL) into five essential skills. These are: self-awareness, self-management, social awareness, responsible decision making, and relationship skills (Duginske, 2017). Schools are always looking to improve their practices and use best practices. Social-emotional factors continue to be an important variable when studying student achievement (Jones et al., 2009). According to The National Academy of Sciences, under half of all kindergarteners enter school with the social-emotional skills to succeed (Ashdown & Bernard, 2012).

The researcher will be utilizing a behavior screener and an academic achievement test to measure whether a child's academic, social, and emotional behaviors are related to the child's academic growth within a period of time. The researcher hypothesizes that positive social, emotional, and academic behavior and skills will increase academic achievement.

Literature Review

The Basis of Social-Emotional Learning

The Collaborative for Academic, Social, and Emotional Learning defines social-emotional learning as a process where people learn and apply knowledge surrounding emotions, goal-setting, empathy, positive relationships, and responsible decision-making (Chin Ng & Bull, 2018). Educators today largely agree that students are lacking these social-emotional skills (Duginske, 2017). CASEL splits social-emotional learning into five essential skills. These are: self-awareness, self-management, social awareness, responsible decision making, and relationship skills (Duginske, 2017). Social-emotional factors continue to be an important variable when studying student achievement (Jones et al., 2009).

History of Social-Emotional Learning

Social-emotional learning can be found to be discussed even as early as in ancient Greece (Duginske, 2017). Plato once said that a quality education and child-rearing would produce people with good character who are also good citizens (Duginske, 2017). One of the first researchers of social-emotional learning studied inner city youth and found that when taught social-emotional skills, these inner city youth could have greater academic achievement than what they were experiencing before being taught those social-emotional skills (Duginske, 2017). This demonstrated that it was possible to change the trajectory of many youth in danger of not succeeding; these children's success was linked to low income families' lack of early childhood education, experiences for their children, and social development (Duginske, 2017).

Studies on the importance of social-emotional learning continue today. Goleman is another one of the leading researchers for social-emotional learning; he connected emotions to learning and found that students who are able to control their emotions have better academic

achievement (Duginske, 2017). This began a lot of the push for social-emotional learning in schools (Duginske, 2017). Goleman defines the aptitude for social-emotional skills as social-emotional intelligence, and he says that social-emotional intelligence includes awareness and regulation of self, social skills, empathy for others, and self-motivation (Jones et al., 2009).

Social-emotional learning has a lot to do with the prevention of future social and academic problems for children. In 2001, the Oregon Resiliency Project began and studied how prevention science could be linked to social-emotional learning (Duginske, 2017).   Maslow's Hierarchy of Needs shows that children need their basic needs met before they can learn (Duginske, 2017). A child's basic needs are food, water, sleep, safety, love, and belonging (Duginske, 2017). Social-emotional learning and the skills that come from that learning can help with the love and belonging piece of Maslow's Hierarchy of Needs (Duginske, 2017).

Past Studies on Social-Emotional Learning

Studies have occurred to study when and how social-emotional learning takes place in the classroom. One study facilitated in kindergarten classrooms found that social-emotional learning occurs more often in small group settings (Chin Ng & Bull, 2018). It also occurs most often in the outdoors during recess or play time (Chin Ng & Bull, 2018). The classroom is the second most significant setting where occurrences of social-emotional learning take place (Chin Ng & Bull, 2018). It is most prevalent during lesson times and then mealtimes, transitions, and centers (Chin Ng & Bull, 2018). This particular study found that social-emotional learning more often than not is *intentional* teaching of social-emotional skills, rather than more informal or casual teaching (Chin Ng & Bull, 2018).

CASEL has done various research on social-emotional learning and has found that teaching social-emotional learning to children through an effective program can increase

academic achievement (Duginske, 2017). A different study conducted in 2011 in schools consisting of students in kindergarten through twelfth grade found that academic achievement was higher when students received social-emotional learning (Duginske, 2017). Duginske noted in his multiphase research that academic achievement is linked to better social-emotional skills, so for the students who do not exhibit good social-emotional skills, their education is in danger (Duginske, 2017). Three large studies in 2008, funded by the Lucille Packard Foundation for Children's Health and the University of Chicago, found that students who received social-emotional learning increased not only on their skills in the social-emotional domain but also their academic achievement (Duginske, 2017). A study published about social-emotional skills and academic success found that students with lower social emotional skills performed in the lowest percentage of their grade level in academics (Duginske, 2017). Data studied by Duginske shows that close to one-third of students that are below grade level in reading in third grade end up dropping out of high school (Duginske, 2017). This is yet another example of the link between social-emotional skills and academic achievement in students.

Importance of Social-Emotional Learning

Researchers have been studying the impacts of social-emotional learning on children and their growing up experiences. Healthy lifestyles, increased satisfaction in life, and safer communities are all benefits that come with social-emotional learning access for children (Chin Ng & Bull, 2018). These studies stress the importance of SEL on academic achievement and employability in adulthood (Chin Ng & Bull, 2018).

In past studies, the effects of academic achievement on social-emotional learning have been positive. When students do not have social-emotional skills, students are not achieving at the rate expected of them that is outlined in the Common Core State Learning Standards

(Duginske, 2017). Social-emotional skills in children are positive indicators of students being

able to stay engaged in learning in the classroom and stay focused and concentrated (Chin Ng &

Bull, 2018). Focus, engagement, and concentration are all ways in which children can reap the

most benefit from their education. These children with strong social-emotional skills also are

more accepted by their teachers and classmates (Chin Ng & Bull, 2018). Children who are

shown acceptance in the classroom are more likely to receive support and assistance in the

classroom, rather than those students who are socially isolated (Chin Ng & Bull, 2018). For those

socially-isolated students, this may lead to problems such as lower academic achievement,

retention, and dropping out of school (Chin Ng & Bull, 2018).

      Social-emotional skills contribute to strong social skills among peers. A study published

in 2001 states that preschool children's ability to understand and read emotions leads to long-

term effects on their social behavior, academic achievement, and the positive behaviors of

assertion and cooperation (Izard et al., 2001). The same study determined that the preschoolers'

knowledge of emotions negatively correlated with hyperactivity and internalizing behaviors

(Izard et al., 2001).

      There are studies on older students and the impacts social-emotional learning has on them

as well (Borg, 2015; Casillas et al., 2012; Jovarini et al., 2018). A study completed in Norway,

amongst thirteen and fourteen-year-olds, found that students who rated themselves and were

categorized as "diligent" students also highly self-reported that they were academically

competent (Borg, 2015). The students who rated themselves and were placed in the "disruptive"

category rated themselves lowest in academic competency (Borg, 2015). Research published in

Brazil, concerning eleven through seventeen-year-olds, found that students who presented

assertiveness and empathy were more likely to achieve academically; on the contrary, students

who had fewer social skills had lower academic achievement in the final years of middle school
(Jovarini et al., 2018). Research done on middle and high schoolers found with statistical
significance that academic, psychosocial, and behavioral criteria were all related to the students'
high school GPA (Casillas et al., 2012). The same study found that behavior was a strong sign
for students at risk of failing in high school (Casillas et al., 2012). This study reiterated the
importance of identifying those students at risk and intervening early in their educational careers
(Casillas et al., 2012).

Certain studies focus more on the younger students and the impacts social-emotional
learning has on them. A longitudinal study in Quebec on child development researched the
importance of skills for success in kindergarten and found that classroom engagement was highly
predictive of academic achievement (Fitzpatrick, 2017). The researchers also noted the
importance of remediation, if social, emotional and academic skills were lacking, early on
(Fitzpatrick, 2017). A similar study of young children that was done in Australia found that
parenting styles has a lot to do with the social, emotional, and behavioral development of young
children, which in turn predicts their academic achievement in later elementary years (Hammer
et al., 2017). More harsh and/or hostile parenting was related to social-emotional problems at
ages four and five (Hammer et al., 2017).

Many life skills that students need today are not being taught in schools. These skills
include self-awareness, self-management, grit, empathy, conflict resolution, discipline, and hard
work (Duginske, 2017). This is resulting in a lack of social-emotional skills in many students
and many students in America are not graduating from high school as a result (Duginske, 2017).

All students have negative factors in their lives outside of school that affect their
educational career. These can include, but are not limited to, poverty, language barriers, single

parents, busy schedules, social media, etc. (Duginske, 2017). Teaching students social-emotional skills can prevent them from being affected too greatly by these barriers and having these barriers affect their academic achievement (Duginske, 2017). Schools are realizing that with the implementation of a social-emotional learning program, educators can decrease negative behaviors and increase what schools strive every day to increase: academic achievement, classroom communities, and positive relationships (Duginske, 2017).

Many educators talk about the protective factors that are vital to children who wish to succeed in school (Duginske, 2017). Protective factors can be things such as positive relationships with parents, adults and/or peers (Duginske, 2017). Social-emotional skills also serve as protective factors for children (Duginske, 2017). Children with resilience can better navigate life and its stresses, which is a positive part of exhibiting social-emotional skills (Duginske, 2017). A cohesive classroom community is another benefit to children through social-emotional learning (Jones et al., 2009).

Schools and communities will also be money ahead if they spend the time and money to fund social-emotional learning. Eleven dollars is saved for every dollar spent on social-emotional education (Duginske, 2017). This money is saved by reducing childhood negative behaviors, mental health issues, drugs & alcohol abuse, violence, and crime among other things (Duginske, 2017).

Social-Emotional Learning in Early Childhood

Early Childhood is a critical time for teaching academic skills and social-emotional skills (Chin Ng & Bull, 2018). According to one study written in 2015, a kindergartener's social-emotional skills are directly related to their chances of obtaining a college degree and gaining employment in adulthood shortly after high school (Chin Ng & Bull, 2018). Self-regulation in

preschoolers is an indicator of literacy achievement in school as well (Chin Ng & Bull, 2018).

Data shows that students often begin kindergarten without social-emotional skills such as the

ability to self-regulate, solve problems, make friends, and focus in school (Duginske, 2017).

Teachers say that these skills are highly important for beginning school (Duginske, 2017).

Starting to teach social-emotional skills at a young age is important. When teachers are

dealing with negative behaviors in the classroom and students are unable to self-regulate, they

are more often sending students out of the room, such as to the principal's office (Duginske,

2017). Students are missing out on a large amount of instructional time due to being out of the

classroom (Duginske, 2017). This will clearly affect the students who are exhibiting the negative

behaviors *and* their classmates, as tending to negative behaviors shifts the teacher's attention

from the entire class's academic needs (Duginske, 2017).

Teaching social-emotional skills from a young age benefits not only those that need to

learn social-emotional skills, but also their peers and the teachers who are teaching all of them.

Students who exhibit high social-emotional skills will give teachers less negative experiences

and be able to solve problems independently more often (Duginske, 2017). The classroom

environment will be more conducive to learning as a result of all students engaging in social-

emotional learning (Duginske, 2017). If students start learning these skills from a young age,

this gives students more time to catch up to their peers, close gaps in their academic

achievement, and be ready for college and the future (Duginske, 2017). Teachers will, in the

long-term, gain more instructional time by taking the time to teach these important social-

emotional skills in classrooms.

Social-Emotional Learning & Teaching Strategies

Communities around the world stress the importance of implementing social-emotional learning in our schools. There are programs such as Fun Friends in Australia, Zippy's Friends in the United Kingdom, and PATHS (Promoting Alternative Thinking Strategies) right here in the United States (Chin Ng & Bull, 2018). These are examples of formal programs, but there are many other alternative ways that SEL is taught in more unstructured and informal ways. Many guidelines and teaching frameworks exist around the world today to support social-emotional learning (Chin Ng & Bull, 2018).

There are some challenges that exist for teachers when implementing social-emotional learning. One of the largest challenges educators face is lack of time. Educators are pressed for time and with the importance of teaching academic subjects, social-emotional learning sometimes gets put on the back-burner (Chin Ng & Bull, 2018). Teachers also may be strapped for resources (Chin Ng & Bull, 2018).

Many teachers take an informal approach to teaching social-emotional skills. This can mean that teachers use situations that arise throughout the day to teach these skills and feature the use of the skills right alongside other learning (Chin Ng & Bull, 2018). Many times this happens through daily problem-solving, turn-taking, sharing, and self-regulation of emotions (Chin Ng & Bull, 2018). Teachers may help students work through a problem as it arises and walk students through the proposing of and finding of solutions (Chin Ng & Bull, 2018). Another way in which teachers casually teach social skills is through active monitoring and stepping in to give positive feedback and scaffolding (Chin Ng & Bull, 2018). The more interactions a teacher has with students, the more opportunities exist to address social-emotional learning (Chin Ng & Bull, 2018).

The Center on Great Teachers and Leaders in the USA states practices teachers should

use with social-emotional learning; these include, but are not limited to, discipline of students,

language of the teacher, responsibility, student choice, warmth, support, cooperative learning,

communication, self-reflection, student challenges, and competence building (Chin Ng & Bull,

2018). There are various programs designed for teaching social-emotional skills to children of

all ages. Multi-tiered systems of support are a leveled approach to giving students the

interventions they may need (Boyd & Anderson, 2013). "Breaks are Better" is a Tier 2

intervention, according to the MTSS (multi-tiered systems of support) model (Boyd & Anderson,

2013). The implementation of the "Breaks are Better" curriculum with an elementary school in

the Pacific Northwest did decrease behaviors for students in the research study (Boyd &

Anderson, 2013). Both teachers and students agreed that "Breaks are Better" improved their

behavior and academic performance (Boyd & Anderson, 2013). Another social-emotional

learning program called "Strong Start K-2" is an early-elementary curriculum and was also

found to have a positive effect on students. The curriculum contributed to a small, yet

significant, decrease in problem behaviors amongst the children involved in the study

(Whitcomb & Merrell, 2012).

Social, Academic, and Emotional Behavior Risk Screener

Though it can be rare to find schools that universally screen students for behavioral risks,

there are a few screeners that do so, one being the Social, Academic, and Emotional Behavior

Risk Screener (also known as SAEBRS) (Kilgus et al., 2017). When developing the SAEBRS,

researchers needed to determine the scores that would identify with students being "at risk"

(Kilgus et al., 2018). During the study of four midwestern elementary schools, the researchers

found that the total score within the SAEBRS is the best score for determining the cut-off score

for students considered "at risk" (Kilgus et al., 2018). From there, teachers and administrators could more easily identify student deficiencies within the students who are considered "at risk" by examining the students' SAEBRS sub-scores and identifying the lowest scores (Kilgus et al., 2018). From there, teachers can remediate and give more support to the students in their areas of deficiency, whether that be academic, social, or emotional behavior or multiple of the prior (Kilgus et al., 2018).

Before the SAEBRS assessment had a component for emotional behavior, it was simply called the Social and Academic Behavior Risk Screener (SABRS) and consisted of twenty-one questions focused on social and academic behavior (Kilgus et al., 2013). The SABRS was developed due to a lack of screening methods for behavior and lack of resources to do so (Kilgus et al., 2013). While developing the SABRS screener, the researchers found that it was a reliable way to assess for behavioral concerns because the data was highly correlated with data using a similar screener, the SSIS rating scales (Kilgus et al., 2013). Although the new SABRS screener identified more students as "at risk" than the SSIS, the researchers found the measure to be appropriate and measuring what it was supposed to measure (Kilgus et al., 2013). The researchers believed that further research should focus on other methods that would help the teachers determine if students are being falsely identified as "at risk", such as progress monitoring or other measurements to compare data (Kilgus et al., 2013).

There have been various studies done on the reliability of the SAEBRS assessment, including one by Whitley & Cuenca-Carlino. After studying data from an elementary school in the Midwest, they found that there was test-retest reliability within the SAEBRS screener (Whitley & Cuenca-Carlino, 2019). They also found it to have higher reliability than three other screeners of the same type (Whitley & Cuenca-Carlino, 2019). The researchers found the

SAEBRS sub-score of academic behavior to be highly predictive of reading achievement in the subjects in the study (Whitley & Cuenca-Carlino, 2019).

Another study completed in a Midwest school district, focused on an elementary sample, was completed to expand upon the research of the reliability, validity, and accuracy of the SAEBRS assessment (Kilgus et al., 2018). During this study, the BESS assessment was used as a comparison assessment, and the researchers determined that the SAEBRS was found to have high consistency and validity and the scores were very consistent with the BESS assessment scores (Kilgus et al., 2018). A research study published in 2019 found the SAEBRS scores to be reliable, with high levels of consistency (Iaccarino et al., 2019)

Though the SAEBRS assessment was initially developed for teachers to assess students' behavior, the SAEBRS also has a component that is student-scored (Kilgus et al., 2020). The student-scored SAEBRS assessment can be effective for older children who are able to self-report scores and give more insight into their behaviors (Kilgus et al., 2020). The Student Rating Scale of the SAEBRS was found to have internal consistency with the teacher-reported scores for the total behavior score, as well as the social behavior and emotional behavior sub-scores (Kilgus et al., 2020).

Parents are also an invaluable resource when it comes to identifying students who are in need of behavior remediation and support, which is what led researchers to develop the parent version of the SAEBRS (Taylor et al., 2019). A research study published in 2019 that focused on four elementary schools in the Pacific Northwest was a starting point for the development of the parent version of the SAEBRS assessment (Taylor et al., 2019). The researchers determined that it was a great starting point for parents to be an informant for their child, but much more

research is needed to determine the reliability and validity of the SAEBRS parent screener

(Taylor et al., 2019).

      In a study done in four elementary schools and one middle school in the Northeastern

United States, the SAEBRS was used to determine if there was statistical significance between

the academic achievement of students and their scores on the SAEBRS; this study found there to

be statistical significance in the correlation between the academic achievement score of the child

and the total score and each of the subscores from the SAEBRS assessment (Kilgus et al., 2017).

Methodology

Participants

The participants of this study were first graders at Kinsey Elementary in Sioux Center, Iowa. Sioux Center is a growing community with a recently more diverse population, due to higher levels of immigration to the community. The large majority of the immigrants are of Hispanic descent. According to the Iowa Department of Education's 2019-2020 school enrollment data, Kinsey Elementary student demographics are approximately 41% hispanic and 55% white; the remaining 4% of students consist of black, Asian, Pacific Islander, Native American, and multi-racial students (Iowa Department of Education, 2020).

Kinsey Elementary School has a total of 604 students, as of September 2020, according to the district's data. Of those 604 students, 207, or 34%, receive free lunches. Fifty-six, or 9%, receive reduced price lunches. That being said, 43% of the students in the elementary school receive free or reduced lunches, which indicates they are of lower socio-economic means. The students in the study are representative of this data.

The participants of the study were chosen due to being the students in the researchers' homeroom class of first-graders in the year of 2020-2021. The participant group consists of 17 students, 10 boys and 7 girls. The students come from a wide variety of backgrounds, with parents of varying educational levels. Seven of the 17 students receive ESL (English as a Second Language) support, and 4 students receive TAG (talented and gifted) services. None of the students currently are on an IEP (Individualized Education Plan) and receiving special education services.

Data Collection

Measurement Instrument

One of the measurement tools used in this study is the STAR Math assessment. This assessment is used many times a year to track growth in math and is assessing the dependent variable of academic growth. The students took the assessment at the beginning of the school year, and then 8 weeks later. The STAR Math assessment reads the questions and answer choices to the students and tests various aspects of mathematical knowledge. The test is designed in a way that it gets more difficult as students answer questions correctly in order to determine the child's grade equivalency and score. The data retrieved from this assessment is quantitative.

The other measurement tool in this study that measures the independent variable of social, emotional, and academic behavior is the SAEBRS teacher assessment and is the assessment used to assess each student's composite behavior score, as well as their individual academic, social, and emotional behavior scores. This data is also quantitative. According to FastBridge, which is the website that administers the SAEBRS screener, social behavior is tied to the ability to maintain quality age-appropriate relationships. Academic behavior is a child's ability to be prepared for and obtain as much as they can from their classroom instruction. Emotional behavior is the ability to regulate emotions, adapt, and respond when stress comes up. (FastBridge, 2020) This screener assesses whether or not a student is at risk of having one or more of these behavior problems.

Validity and Reliability of Measurement Instrument

One aspect of testing reliability is the environment in which the students test. The researcher strived to keep the environment the same, as much as possible, during both testing

sessions of the STAR Math assessment. The researcher also completed the SAEBRS teacher

assessment for each child on the same day. The researcher completed the training for the

SAEBRS teacher assessment in order to become certified and review proper procedures for

scoring immediately prior to completing the teacher assessment.

Renaissance Learning, the website where the researcher accesses the STAR Math

assessment, describes the reliability and validity of the tests in a document published to explain

the STAR tests. According to Renaissance Learning (2013), the STAR assessments' reliability

is estimated based on the internal consistency and test-retest correlation of the tests, and the

assessments are found to be highly reliable. The STAR math assessment has been found to be a

valid and reliable manner of measuring mathematical progress (Renaissance Learning, 2013, p.

8). The STAR assessments were created and validated based on lots of research; 97 studies have

been completed, including 31 led by independent research on the STAR math assessment alone

(Renaissance Learning, 2013, p. 12).

Limitations of Measurement Tools

The main limitation of these measurement tools is the fact that the data was obtained

during a short window of 8 weeks. It would be better to follow students and analyze their

academic growth over a longer period of time, such as over an entire school year. It would also

be beneficial for the researcher to obtain data from multiple assessments to measure academic

growth, including methods that measure academic growth other than mathematical growth.

Variables

The independent variable in the study is social-emotional competence, which will be

determined by screening for academic, social, and emotional behavior. The teacher will score all

the students in the study using a survey with a section for each academic, social, and emotional

behavior. There are six questions in each section. The researcher will be using the SAEBRS

teacher screening tool through the Fastbridge portal that the researcher's school has access to.

The dependent variable will be the academic achievement of the students. All of the

students were tested for academic achievement using the STAR Math assessment. Both sets of

data that measure the independent and dependent variables are quantitative.

Procedures

The researcher began research in August of 2020 by conducting the STAR math

assessment with her class of 17 first-grade students. All of the students completed the

assessment on the same day. The researcher preceded the test by talking to the students about

the importance of taking their time and trying their hardest. The test location was the regular

classroom where the students take all standard assessments.   During the test, the researcher

monitored the room by walking around and observing quietly. If a student had a question, the

researcher assisted the child, but did not give any clues or inclinations to the correct answer as to

ensure the validity and reliability of the test.

During the first quarter of school and after a month of observation of the children, the

teacher conducted the SAEBRS teacher survey. The teacher completed the certification needed

in order to administer the test the day prior to conducting the survey, to ensure that she

remembered how to accurately administer the survey and get accurate results. The teacher spent

3-4 minutes per child scoring them on academic, social, and emotional behavior.

After 8 weeks of school, the teacher re-administered the STAR math assessment to

measure for academic growth in mathematics. The teacher used the same testing procedures and

had the students complete the assessment in the same environment as 8 weeks prior.

Data Collection

After all 3 assessments were given, all of the data could be retrieved and analyzed by the researcher. The mathematical growth of the students was determined by looking at the score the child obtained in the August STAR math assessment and subtracting the score from the score obtained in the October STAR math assessment.

The researcher followed all protocol when administering the assessments, and was certified to administer the SAEBRS teacher survey before beginning. The researcher accessed the students' behavior scores from the Fastbridge website, where the SAEBRS survey is accessed. The teacher accessed the academic growth scores by utilizing the reports on the Renaissance Learning website.

Data Analysis

The variables assessed included student behavior and student's academic growth in math during the 8 weeks of the study. After completing a correlation test using the data of the composite behavior and academic growth, it was found that there was a weak, negative, not statistically significant relationship between composite behavior and academic growth, with weak practical significance, $r(15) = -0.18$, $p > .05$, $r^2 = .03$.

After completing a correlation test using the data of the social behavior and academic growth, it was found that there was a weak, negative, not statistically significant relationship between social behavior and academic growth, with weak practical significance, $r(15) = -.24$, $p > .05$, $r^2 = .06$.

After completing a correlation test using the data of the academic behavior and academic growth, it was found that there was a weak, negative, not statistically significant relationship between academic behavior and academic growth, with weak practical significance, $r(15) = -.01$, $p > .05$, $r^2 = 0$.

After completing a correlation test using the data of the emotional behavior and academic growth, it was found that there was a weak, negative, not statistically significant relationship between emotional behavior and academic growth, with weak practical significance, $r(15) = -.35$, $p > .05$, $r^2 = .12$.

Discussion

The data is not statistically significant for any of the correlation tests run on the data. There are two data points that could be considered outliers because the children did not show growth between the two testing sessions. There are many things that can account for scores such as these, such as poor testing conditions for that child that day, an "off" day for that child, or lack of effort.

There are various aspects that play a part in a child's academic growth, with their behavior being only a small part of it. Some students showed lots of growth during the first 8 weeks of this school year, while others showed minimal to no growth. Many things may play a part in this. This data was collected during a pandemic. All of the students who were studied did not attend school from mid-March until mid-August due to the Covid-19 pandemic. Some of these students may have done school work during that time, but many did not. This likely will affect students' scores when they return to school. Some students likely quickly regained what they had lost, while others will take longer to make up for their losses due to the lack of schooling during the pandemic.

Limitations of this Study

In order to get more informed and better data, it would be wise to continue monitoring and observing the students throughout a longer period of time. 8 weeks is a very minimal amount of time to monitor academic growth. It would also be beneficial to test the students using more than one test and in more than one academic area. Due to the small time frame, these students were only able to be tested in one area (math) and with one measurement assessment (the STAR math assessment). The researcher acknowledges that it would be beneficial to

monitor the students for a longer period of time and use more than one test to measure academic growth. The data could look very different if there was more time in between testing sessions.

This study was also limited in that it observed the behavior and academic growth of only 17 students in one class and in one grade. 17 students is a small sample size. Due to the Coronavirus pandemic, some of the students also missed schooling during the 8-week period of the study due to being in quarantine or being exposed to Covid-19. This will affect student growth during such a short period of time in school.

Future Research

In further studies, it would be beneficial to compare students' behavior to more than one math assessment. It would benefit the researcher to be able to include multiple assessments that measure math because one assessment doesn't always give the full picture of the student. It is inevitable to have poor scores for students based on testing conditions the researcher can't control, such as students not being able to focus that day or having a bad day for one reason or another. It would also be beneficial to include assessments that measure more than just math, such as including reading assessments as well. The more academic data that you have on a student, the less likely one poor test score will affect the child's overall academic growth data.

It would also benefit future researchers to have the study take place over a longer period of time. A longer period of time would give better information on academic growth over that time and give the researchers more measurable data. It would also be beneficial to complete the study with a larger number of participants, over various grade levels and from various classes and schools to get a better representation of students. A larger, more comprehensive study using the same variables would be beneficial to the education community in order to get better information about the impact of social, emotional, and academic behavior on academic growth.

Conclusion

Social-emotional learning is a widely-discussed topic in the educational realm. It is broadly known that a student's behavior, including their academic, social, and emotional behavior will affect their lives in various ways. It is still widely unknown how and how much this behavior will affect a child's academics in school. This study was a starting point in studying how a child's academic, social, and emotional behavior affects their learning.

Although this particular study found no statistical significance between behavior and academic growth, there were various limitations to the study and further studies should be pursued. The researcher notes that the students who show higher scores of academic, social, and emotional behavior tend to have better relationships, have more positive views of school, and tend to show resilience and positive qualities that likely will affect their schooling in the long run.

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