

**Improving Elementary Students Social-Emotional Health through an After-School
Mentorship Physical Activity Program**

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Submitted to the Graduate Faculty of

the School of Education

in partial fulfillment of requirements for the degree of

Doctor of Education

University of Pittsburgh

2022

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

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2022

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Children's poor social-emotional functioning has been an increasing concern prior to and amidst the COVID-19 pandemic. Childhood and adolescence are critical stages of life where they acquire key cognitive and social-emotional skills that shape their future mental health. When a student's social-emotional health suffers, so do their relationships, academics, and physical health. The theory of improvement hypothesized that students' social-emotional health can be improved via fostering trusting relationships, boosting self-esteem, and promoting healthy role models and positive adult-child relationships. To address the problem of practice, the primary investigator implemented a social-emotional learning (SEL)-infused, 8-week physical activity after-school program with a strong mentor/role model component. The following inquiry questions guided this dissertation in practice project: 1) *How does students' social-emotional health change after participating the after-school social-emotional learning-infused physical activity program?* And 2) *What are faculty, staff, and parent perceptions of the impact of a social-emotional learning-infused physical activity program on third grade students?* Measures included time sample observations during the program of n=7 at-risk students with behavioral or emotional challenges, field notes compiled by the primary investigator throughout the program, and focus groups with key stakeholders (i.e., n=8 teachers, n=8 parents, and n=12 mentors) conducted post-program. The patterns in changes of student behavior over time were reported as case-study narratives for each observed student. Focus group transcripts and field notes were coded using content analysis

method and analyzed for key categories and themes. Overall, students' time sample data showed positive improvements in social-emotional health as well as on-task behavior. Three themes were identified in the qualitative data, including: 1) Growing and thriving together: benefits of the afterschool program 2) Trial and error: reflecting on what went well and didn't go well in the program and 3) Onward and upward: Fine tuning the program for the future. This program demonstrated initial success for improvements in 3rd grade children's social-emotional health. Implications for practice include improved training for all stakeholders in social-emotional learning, inclusion of mentorship, and additional administrative buy-in, including logistical support and funding. Future research can investigate the effect on mentor and student overall mental health and academic achievement.

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Preface

This paper is dedicated to all that made this research and work possible.

My father, Philip Sabatino, who wanted more than anything for me to have an education.

For my Mother, Barbara, for her constant support and praise and love.

To my husband, Jim, for his hard work, support, and unconditional love.

To my boys, Ronnie and Alex, for their support, always telling me how proud they are of me,
and for respecting Mom's work.

For all my family and friends who were always there.

For my amazing professors and advisor and the best ever EdD committee:

Dr. Sharon Ross, Dr. Tom Farmer, and Dr. Julie Coughenour.

My supportive Pitt EdD. Cohort 2019 and HPA ARCO- I love you all dearly.
I have learned so much from you all!

1.0 Naming & Framing the Problem of Practice

1.1 Broader problem area

Mental health issues among children have tripled from 2007 to 2017 and one in six children aged 2-8 years old has a mental, behavioral, or developmental disorder (CDC, 2020). Those rates are even higher for children living in poverty (CDC, 2021). There is concern about the impact of the pandemic on children's mental health. Suicide is the 2nd leading cause of death among children between ages 10 and 14, and the proportion of mental health-related emergency department visits increased sharply during the early onset of the pandemic (mid-March 2020) compared with rates in 2019. It is undeniable that the pandemic has had a detrimental effect on children's overall mental health.

In the public-school setting prior to COVID 19, there were concerns surrounding the social-emotional functioning of students that are now exacerbated by the pandemic. Social-emotional developmental skills may have been delayed or stunted during the pandemic and need to be addressed to optimize young students' growth and development, academics, and relationships. Pediatricians, psychologists, and educators have warned of the serious threats that this confinement may pose to children from both a physical and emotional perspective (Idoiaga et al., 2020).

Many factors are possible contributors to the poor social-emotional health I am observing in my students (see **Appendix A. Fishbone Diagram**). Key contributing factors negatively impacting students' social-emotional health may include lacking a sense of belonging, lack of trusting relationships, and family challenges such as incarceration, addiction, and poverty. A lack

of services and support systems that are easy to access in this rural community likely add to this problem.

1.2 Organizational System

1.2.1 General McLane School District

The General McLane School District is a small and mostly rural area with four schools which consist of one high school, one middle school, and two elementary schools. The district is diverse economically, but not ethnically or racially. The median income of the area is \$64,219. The percent of Caucasian in the district is 98.2%. We are a Title I school district which indicates that 40% or more of our students come from in low- income families. Because of this, each school is awarded funds for extra resources to promote students' academic achievement. Currently enrollment is declining, costs are rising (due to charter schools and cyber students), public health is worsening (lack of access to care), and there is a shortage of qualified personnel.

Farmer et al. (2018) emphasizes the uniqueness of rural areas and the challenges to provide the necessary supports and systematic resources to serve students with diverse needs. Rural, public schools are a community lifeline and when they struggle, their community struggles. Changes need to happen that include the school becoming a central location or hub for services outside of traditional education such as social-emotional health, social, and nutritional (Farmer et al., 2021). The CDC (2020) refers to this model as “community schools.” As a district, we have attempted to embrace this model by providing increased access to mental health services at school and implementing social-emotional learning opportunities; however, access to other services such as

primary care physicians, dentists, social services, childcare, public transportation, and healthy fresh foods are needed.

1.2.2 McKean Elementary

Our school is centered in a small, rural farming community halfway between Erie and Edinboro, Pennsylvania. It is a small elementary school with approximately 360 students in grades kindergarten through fourth. The community is a cultural and food desert with one traffic light, no grocery stores, and only convenience stores and a few other small businesses. There are no physicians' offices, or dental practices, or social services. The population has some diversity of income, but the majorities of our students live in low-income housing and receive free or reduced lunch. McKean Elementary is a Title I school in which more than 40% of our families live in poverty. Our school is within reasonable driving distance to Erie where there is a plethora of stores, offices, and services. This short distance to travel is a challenge for our parents who have unreliable transportation and many other responsibilities to manage. Most families are blended or single-parent homes and childcare and having a reliable support system (family, trusted friends) to help is a challenge in the rural area. There is substantial drug activity and incarceration among families. The stress from poverty and other financial issues can contribute to a multitude of challenges.

As a member of the Student Assistance Program (SAP), I am aware of student and family challenges. The main issues we see and respond to at school that may contribute to the poor social-emotional health of our students are abuse, neglect, incarceration of parents, and substance abuse. Together, the SAP team problem solves these challenges to connect students and families to necessary school and community services. Due to the pandemic, the challenges facing families have increased. During empathy interviews with one key stakeholder, our school counselor shared

that our biggest need at school is “helping our parents learn skills to manage and cope [in order to] help our students.” Our kindergarten teacher identified that “our kids need more support at home, and many parents need support to learn these coping skills.”

1.2.3 Positionality

As a health and physical education teacher at McKean Elementary, I have various duties outside of my content area. I am the primary health and physical education teacher, a member of the SAP team and positive behavior program. I also serve on the district wellness committee, district safety committee, and our school social committee. I am the new coordinator and coach of our Unified/Special Olympic program which plans and conducts games and sports with a mix of typical students along with students with cognitive or physical disabilities. I am also responsible for the planning and implementation of after-school and special programs. In these roles, I get a lot of face time with my students which help me to get to know them and their situations well. Given my multiple roles within the organization, I have built strong relationships with a variety of individuals throughout the school and district. Because I am able to have my voice heard on important topics, I am well poised to introduce change within the organizational system. In general, the school community trusts my judgment, respects me, and supports my events and initiatives. It also enables me to work with relevant stakeholders to improve the lives and education of our students.

I am a white, female woman in my fifties that has worked at McKean for eleven years. As a HPE teacher, I believe our health is the foundation, and that this needs to come before academics. I want to do my best for my students which begins with helping them meet their basic needs, improve their health, and then build upon that. I enjoy working with children and people

from diverse backgrounds. I want to understand where students and families are coming from, support them, and feel that I gravitate towards those most in need. I am a very maternal person who wants to help, improve their lives, and I can relate to them through my life experiences. I often take my work home with me and which becomes emotionally exhausting at times. My positionality, including my training and history at the school, impacts how I view and approach the problem of practice, and the relationships I have with the stakeholders.

1.3 Stakeholders

The stakeholders related to my problem of practice are elementary students, parents, teachers and staff, and community.

1.3.1 Students

The elementary students depend heavily upon the school for academics, social interaction, and healthy physical and emotional development. They spend most of their day in the school building and this presents an excellent opportunity to form healthy relationships with peers and adults, as well as interact with positive role models. Children look for a feeling of belonging and this helps build confidence, self-esteem, and trust. Because these are young children (5-10 years), often a large part of the day or instructional time is spent on emotional support and overseeing their general well-being. Students of this age are very dependent on responsible adults for their care and therefore the role of teacher is also caregiver. Unhealthy student behaviors and issues affect peers, families, and teachers and staff. All involved want the child to be successful, but

consistency is sometimes derailed by barriers such as transportation, lack of support from family or friends, excessive screen time, and the poor mental health and wellbeing of parents and caregivers.

1.3.2 Parents and Caregivers

Parents have an important role in their child's education and the hours spent away from school are important to reinforce concepts and educational and behavioral expectations. Positive relationships between parents and the school are vital to the student's success and healthy social and emotional growth of the child. Communication and respect between parents and teachers is essential to student success. Currently many parents do not feel there is good communication between the school and their home and do not feel comfortable reaching out to ask questions or communicate.

1.3.3 Teachers and Staff

Currently teachers and staff feel overwhelmed and burned out from lost instructional time due to student's social-emotional or behavioral issues. A 2021 survey of over 2,000 educators from diverse Districts across the U.S. estimated that approximately 144 minutes per week of learning is lost due to these problems (District Leadership Forum, 2021). Teachers often feel a lack of support when the school does not have enough systems and staff in place to assist these students. In the past two years there has been an increase in staff and teacher turnover due to increased stress on teachers because of the decline in social-emotional health of students. There is also a substitute teacher shortage which makes it hard for teachers to take a day off for illness or other family

reasons because they know there is no one to cover. It can be a cycle of stress that affects professional life, personal life, and health for teachers and staff. It is difficult for teacher to prioritize self-care when the workload increases due to meetings, and additional work such as calling parents, setting up meetings, and adapting to meet each student's needs. The school faculty and staff have a tremendous responsibility to balance parent concerns, curriculum and school expectations, the student's academic growth (which the Pennsylvania teacher State evaluation is based on) and overall well-being while also maintaining professionalism and establishing boundaries. These boundaries can be challenging in a small rural area where everyone knows everyone. In the age of social media, it is imperative to maintain these boundaries as well as respecting parent decisions and input about their child. For students to be most successful, it is optimal to have collaboration between school and family and other professionals such as therapists and physicians. Providing equitable and individualized instruction for students is important. Providing varied and interesting lessons via different delivery methods is helpful for differential learning and preventing burnout for teachers.

1.3.4 Community

The community depends on the school for effective instruction to prepare young students to be respectful and productive members of society. Because our school and district are small, with little else in the community, the expectations are high. This is why a community school model as represented by the CDC (2021) may help to enhance the education and health of our students and families. The school has recently increased social-emotional learning opportunities and mental health services access through school-based counseling services, but the need is greater than is currently provided.

1.4 Statement of the Problem of Practice

The problem of practice is poor social-emotional health currently being exhibited by young students at McKean Elementary. The decrease in social-emotional health among elementary-age students has affected academic performance, mental and physical health, and quality of life for student, their families, and teachers. This decrease in social-emotional health of young student presents great urgency. When students struggle, so do their studies, families, and those working to support and help them with their education. Prior to the pandemic, a decrease in communication skills and overall social-emotional health was observed in the elementary students at the school. During the pandemic, this problem has been amplified, and in our school and rural community, a lack of access to health and social services makes this extremely challenging.

1.5 Review of Supporting Knowledge

In the following section, I review the supporting knowledge from the published literature, government and educational research agencies to frame my localized problem of practice. Below I present findings on evidence-based approaches to support children's social-emotional health and the relationship between physical activity and children's social-emotional health. I end with a summary of my learning about the problem and my understanding of the framing of the problem.

1.5.1 Evidence-based Approaches to Support Elementary Students' Social-Emotional Health

This section of literature summarizes 4 evidence-based approaches to support elementary-aged students' social-emotional health: a) equitable support; b) positive early experiences with physical activity and exposure to social-emotional learning; c) structured out- of- school physical activity and social emotional learning opportunities; and d) mentoring and modeling.

Equitable support: To provide equitable support and meet all student needs, many schools have multi-tiered systems of support, a student assistance program (SAP), and counselors available to help children in need. However, due to the increase in need, these resources and staff are spread thin. Many schools incorporate a Whole School, Whole Community, Whole Child model (WSCC) approach (CDC, 2021). The literature supports this as an optimal combination of school, family, and community programs all housed within the school. There are numerous evidence-based classroom and out- of-school curriculums for social-emotional learning; however, adaptations need to be made to meet the specific school needs. Further, this curriculum needs to be tailored for students with emotional support needs, learning and cognitive disabilities, ADHD, etc.

It has been observed that children of color or lower socio-economic status do not get the same treatment or opportunities awarded to them as white and middle-to-upper class students. Massey et al. (2018) speaks of the benefits for lower socioeconomic status schools and communities to have multifaceted programs like the (WSCC design). These studies create a base for programming that can potentially help children improve their social-emotional health knowledge of what types of programs can help children in the school, family and community environment to help them increase social-emotional health as well as help build resilience and skills to help them manage emotions and relationships in the future. Multi-faceted interventions

that include school, home and community appear to have the most success at ensuring consistency and involve equitable in student support.

Curriculum and its implementation are of high priority. If there is not accountability for curriculum content being covered and in a professional and accurate way, children are not receiving the same education. The effect of high-quality teachers, professional development and attitude can affect a children's learning (Klopfer et.al, 2019). Nichols, Goforth, Sacra & Ahlers (2018) discusses how students in rural settings need collaboration from school professionals, families, and the community to have equity and access to programming that be successful. Nichols et al. (2018) studies provide examples of curriculum that can be integrated into the classroom and other settings to improve student's social-emotional health and ways to consider professional implementation and improved outcomes at school.

The National Academies of Science, Engineering, and Medicine (2021), state that children have varied learning styles, and need multiple approaches to learning. Preferential learning styles are attributed to part nature and part nurture. The Academy also states that much of their early childhood experiences affect their rate of learning. Due to this, research best practice suggests adapting learning to meet the child's needs. Individualization and multiple methods of presenting content appears help them be the most successful. It is important for all students to receive the same opportunities for learning, growing, and health. Equitable access to education and programs can help students thrive.

School-based programs provide a safe and effective place for children to engage in physical activity while at the same time improving social-emotional health. Group settings such as the classroom, physical educational and before and after-school programs have been shown in the literature to have a positive effect on social-emotional health. Recess is also an area that needs to

be available and equitable: structured recess has shown a positive effect on social-emotional health in children (Massey et al., 2017). Having safe places to play and socialize gives young students opportunities to develop skills related to physical and mental developmental growth. Ash et al. (2017) also states that children who have social, emotional, or behavioral disabilities can greatly benefit from physical activity as a low-cost intervention. Often these special needs students do not have equitable access due to the challenges involved with keeping them active such as safety, behavior issues and other concerns tied to their varied disabilities and needs. This can help decrease issues at school such as academic performance, social isolation, and emotional and disruptive outbursts.

Before and after-school programs provide access to PA and infused SEL that some children based on geography and other barriers may not be able to utilize (Whooten, 2019). Children with physical, cognitive or any mental health disabilities need special care and attention and safety is an increased issue. These students need to have the same opportunities to be active and learn as typical students (Deslandes, 2014). Learning disabilities such as Attention Deficit Hyperactivity Disorder (ADHD) can cause frustration and social issues for some children. Having the ability to be active prior and during tasks can help them to complete assignments, be socially appropriate and build relationships (Dore, 2020). Verret et al. examined 21 children with. The three-day per week physical activity program ran for a total of ten weeks and showed an improvement in verbal behavior issues from 0.8 to 78.8 and the control group increased to 91.3.

Positive early experiences with physical activity and social-emotional learning: The quality of the environment where children and adolescents grow up shapes their well-being and development. Early negative experiences in homes, schools, or digital spaces, such as exposure to violence, the mental illness of a parent or other caregiver, bullying and poverty can increase the

risk of mental illness (WHO, 2021). Jones et al. (2015) stated that intervention as early as Kindergarten, Pre-K, or earlier is critical for children struggling with socioemotional issues. Children attending pre-school and Kindergarten who have access to social-emotional curriculum have a developmental advantage over those who do not receive these important lessons (Jones, 2015). Well-trained Kindergarten teachers can identify young students in need of extra interventions and strategies to help them learn the lifelong skills (Splett, 2019).

If interventions can be at the earliest ages possible, children have a better chance at succeeding academically as well as with peer relationships and socialization. Jones et al. (2015) emphasizes the importance of kindergarten interventions and programs as well as information obtained from their teachers regarding school readiness in social-emotional health. Bermejo-Martins et al. (2019) supports this in their study in which 5-6-year-old students has SEL 2x per week for 4 weeks. The study integrated lessons on emotional awareness, regulation, and social skills. Positive first experiences with physical activity are vital for children to adapt healthy practices and enjoy for a lifetime. Children who are not fit or overweight also tend to struggle with social-emotional health and peer relationships (Noonan, 2019).

First experiences can be enhanced by teachers being prepared with the prior year's information about the students (Klopfer, 2019). Transition reports and cross-grade level meetings help ensure students are well served and information is transferred year to year. Collaboration is very important for student success and takes extra effort and time for educators (Nichols et al., 2018). Early intervention in preschool and elementary school can improve non-cognitive skills through adulthood" (Jones et al., 2015). Kindergarten teachers are a reliable way of accessing school readiness and the social-emotional level of development. There are many assessments prior to the start of school and kindergarten teachers are especially skilled at identifying children ready

for school and those that may need additional supports based on these tests. Jones et al. (2015) emphasized that early interventions and experiences with social-emotional learning can help children become healthy adults.

Mentoring and modeling: Research suggests that role models for children in sport or after-school programs such as coaches, mentors and group leaders can have a positive effect on socioemotional health and behavior (Eime et al., 2013). In this review article, the authors reviewed a total of xx publications to summarize the physical and social benefits of sport participation for children and adolescents. The authors were determined that participation in sport enhances social health as relationships are created with teammates as well as coaches and other adults. The authors recommended sport participation to improve children's socioemotional health and promote a healthy weight.

Weiss et al., (2019) showed similar results when evaluating the “Girls on the Run Program.” This evaluation included 2,145 girls across 13 schools participating in the program that focused on running and five character-based attributes: competence, confidence, connection, character, caring, and physical activity. Girls who had lower levels of social-emotional health at baseline showed the most improvement at follow-up. This study provides evidence that girls specifically can benefit from these types of programs.

Structured out-of-school physical activity and social emotional learning opportunities:

Out- of- school programming refers to any program based in- or out-of-the-school building that does not fall under regular academic curriculum (CDC 2021). These types of extracurricular programs can be extremely beneficial to children to enhance social-emotional learning, physical and mental health (Massey et al., 2018). Adequate access to social interaction, play, and physical activity can be challenging during the normal school day. Out –of- school programming or safe

non-curricular activities can enhance and increase these opportunities in many traditional school environments. Some examples include recess, after-school programming, and physical activity in the classroom.

Recess, although typically part of the regular elementary school day, is not part of curriculum. It provides an opportunity to engage children in physical activity and integrate social-emotional learning. However, unstructured recess can allow for less supervision, bullying and social isolation for some children. Massey et al. (2018) examined how a structured recess time could improve social-emotional health of students as well as improve relationships with adults. Structured recess consists of choices of activities (not leaving children to find something to do, but offering a variety to choose from), increased staff, and clear expectations. In the study, recess and classroom observations were examined among approximately 100, 4th and 5th grade students in an urban lower SES school. Positive adult interaction was shown to help students decrease behavior issues with peers. In another study by Massey et al. (2021) students' positive memories of recess showed healthy social-emotional development.

After-school programming also has many positive benefits for students' social-emotional health. For example, Whooten et al. (2019) studied the Build Our Kids Success (BOKS) after-school program and social-emotional wellness as well as physical health. Two-day and three-day programs were compared with a control group (non-participating children). The 3 day a week group showed a decrease in body mass index (BMI) as well as non-significant improvement in social-emotional wellness. The group also showed improved student engagement and improved peer relationships.

Inclusion of physical activity in the classroom is also another way to improve students' social-emotional health. In elementary-aged students, activities in the regular classroom include

short bout of movement such as online video programs like as Brain Breaks (Glapa et al., 2018) and Go Noodle (Swinth, 2015). These types of movement videos can be accessed through YouTube or other streaming services and subscriptions and are usually free. Adding physical movement into classroom lessons help can help children learn how to self-regulate and move while teaching (Watson et al., 2017). In Watson and colleagues' study, 39 articles were examined to conclude physical activity is an asset to help children manage inappropriate behavior which can lead to improved social-emotional skills. An example of this would be physical activity as a vehicle to convey content such as math, reading, science and social-emotional learning and character building. One meta-analysis showed classroom-based physical activity improved students' academic achievement (Watson et al., 2017).

1.5.2 Relationship between Children's Physical Activity and Social-Emotional Health

The empirical literature suggests a strong relationship between children's physical activity and their social-emotional health (Dore et al., 2020). Physical activity has become the focus of increased attention in the past few years with relation to social-emotional health among children, and adults. Research is beginning to expand specific to children and healthy physical and social development. Children's relationship with physical activity can impact their social-emotional health in addition to physical health. Below, the relationship between physical activity and improved cognition, self-esteem and confidence, and social skills and emotional control will be discussed.

Improved cognition: Numerous authors affirm the positive relationship between increased physical activity and improved cognition and improved overall mental health outcomes (Deslandes, 2014; Eime, Young, Charity & Payne, 2013; Verret et al., 2012). Positive

physiological responses while engaged in physical activity can improve many areas of *social-emotional health* such as: cognition, self-esteem, confidence, social skills, and emotional control (Biddle, Ciaccioni & Vergeer, 2019; Dore et al., 2020). There is evidence that physical activity improves on-task behavior and focus and decreases behavior issues in children (Verret, Guay & Berthiaume, 2012). Biddle et al. (2020) analyzed 42 review articles since 2011 and concluded that higher levels of fitness and physical activity showed improvements in academics and cognitive function. The article also concluded that children who are well-rested, engage in daily physical activity, and have proper nutrition perform better academically (Biddle, 2020). Whooten, Perkins, Gerber and Taveras (2018) studied 707 children ranging in grades Kindergarten through 8th from 254 schools. They examined the effects of a 2- or 3-day physical activity program compared with a control. The 3 day per week program demonstrated improvements in the student engagement scores (0.79 units, $p=0.05$), as well as in relationships, and in the socioemotional health domain.

It is possible that physical activity has unique benefits to cognition for students with Attention Deficit Hyperactivity Disorder (ADHD). Verret (2012) studied students with ADHD and revealed positive outcomes, including an increase in on-task behavior, and reduced behavior issues. As children develop it is challenging for them to be sedentary for an extended period. Short bouts of activity can help re-focus and give young children an outlet for expression. Students who can move and exert themselves have increased capacity for attention, time on task, and overall control then when sedentary for long period of time (Ash, Davison & Garcia, 2017).

Improved self-esteem and confidence: Active children with healthy self-esteem and confidence have less social-emotional issues than those who are sedentary or less active (Ahn et al., 2011). Being able to focus and process information helps to build confidence and increase self-esteem (Verret et al., 2012). Students who are off-task and cannot concentrate often feel frustrated

as they are unable to do what is expected of them. This also causes strain on peer relationships and causes social isolation (O’Leary, Longmore & Medcalf, 2020). Self-esteem can be hindered when children’s confidence basic locomotor skills or elements of play are hindered due to their health status (Noonan & Fairclough, 2019; Whooten, 2018). Children who are obese and cannot keep up with their peer’s struggle socially and emotionally. These children may feel isolated and lack self-esteem. Physical activity and belonging to a program, team or organized play can help boost and improve their confidence and self-esteem.

Social connections, communication, and creativity are all utilized when children engage in active play. Children who are alone and isolated often have less fulfillment from physical education class, recess, and other active social environments. Having time to practice skills, strategy, and basic locomotor skills instills confidence in children. This confidence leads to increased self-esteem and positivity (O’Leary et al., 2020). Noonan et al. (2019) studied 6011, 7-year-old children and they wore an accelerometer to track minutes of moderate-to-vigorous physical activity (MVPA). A strong positive association was found between BMI and social emotional wellbeing amongst low-active children. That is, children with higher BMI had a higher incidence of peer problems. This study further revealed that children’s weight had a direct correlation to their social skills and self-esteem and that higher levels of physical activity was associated with higher levels of self-esteem and confidence.

Improved social skills and emotional control: When children are engaging in active play, many skills are needed for positive experiences. Communication, respect, and self-regulation are essential to healthy development (Rodriguez et al., 2019). In a study by Ahn and Cummins (2018) the authors examined longitudinal data from boys and girls ages 7-11 and observed decreases in

peer issues, improved social relationships, and improved physical health with increased physical activity.

Children with learning disabilities or emotional disturbances have shown great improvement in engaging in appropriate behavior when physical activity is integrated into curriculum and leisure time (Brazendale et al., 2019). Ash et al. (2017) found that fewer peer issues were observed after physical activity among boys and girls aged 11 years and that physical activity offers a safe and healthy alternative to other interventions. Children with social emotional behavior disorders generally have lot of energy and if they are not permitted to release it and be active it can negatively affect their academics, peer and adult relationships and overall health. The research also indicates that using exercise can produce positive emotions (Bermejo-Martins, Mujika & Iriarte, 2019). Children who have emotional and behavioral disorders can benefit from being with typical children and observing their and adults' behaviors. Most children enjoy play and being active and engaging with peers. Many soft skills and social-emotional learning moments can easily be integrated into these activities (Eime, 2013). These activities can help to foster relationships and a sense of belonging. Many emotional outbursts come from social, physical, or cognitive frustration. Eime et al. (2013) conducted a systematic review which included 30 peer-reviewed research articles and concluded that physical activity through games and sportsmanship can teach children through modeling appropriate displays of emotional control. Many physical activities and games require communication and interaction and this can be helpful for children who need socialization

Physical education classes are another example of how physical activity can be integrated into the school day to help children regulate behavior. One study noted a reduction in disruptive behavior following physical education lessons (O'Leary et al., 2020). It should be recognized that

while many students experiencing social-emotional or mental health issues excel in PE (Bailey, 2009), others find it difficult due to a complex array of behavioral issues. Not being able to follow rules, perform skills, and communicate in a respectful way can decrease children's confidence and self-esteem, as well as strain relationships. A lack of social skills and emotional control can be a downward spiral if interventions and best practices strategies are not put into place (O'Leary et al., 2020)

Mindfulness and yoga have been showed to be beneficial for children to improve social skills and emotional control. Jarraya, Wagner, Jarraya and Engerl (2019) discuss how mindfulness in conjunction with physical activity can have positive effects on children who lived in stressed and lower SES homes. Learning skills that bring focus, awareness, and calming effects can help children regulate emotions. Telles et al. (2013) studied 98 school children aged 8-13 years and assigned them randomly into two groups: a physical activity group and a yoga group. Both groups showed improvements, but the physical activity group showed a significant increase in self-esteem after the 3-month intervention. It is evident from the research that many aspects of overall health can be positively influenced by participation in physical activity.

1.5.3 Summary

The literature indicates that programming and various supports can improve children's social-emotional health. Early intervention with these supports and programs can be beneficial to children's growth and development. Physical activity is shown to support cognition, self-esteem, and confidence as well as social skills and emotional control. Having positive role models and mentors to support children through the school setting and extracurricular structured activities decrease anti-social behavior and increase time with adults and positive models. After reviewing

the literature, the importance of the school to facilitate access to physical activity as well as social-emotional learning was a prominent theme. The literature has reinforced my belief that schools have a responsibility for all aspects of health to best serve the students. Teaching the whole child through an afterschool physical activity program with enhanced social-emotional programming will likely have marked benefits on students' overall health and wellbeing.

2.0 Theory of Improvement and Implementation Plan

2.1 Theory of Improvement

My problem of practice focuses on the declining social-emotional health of my elementary-age students attending McKean elementary. In the past few years in my place of practice I have noticed a significant decline in my student's social-emotional and physical health. I see this in the form of behavior issues, disruptions, anxiety and trauma. This decline in social-emotional health has negatively affected their academic performance, peer relationships, and feelings of belonging at school. My theory of improvement to improve McKean elementary students' social emotional health involves improving access to mentors/role models, trusting relationships, and increased social-emotional learning integration as well as mental health services via increased afterschool programming, educational events, school communication, and professional development opportunities for teachers."

My work is guided by two prominent theories: social cognitive theory (Bandura, 1986) and the socioecological model (Bronfenbrenner, 1974). Social cognitive theory describes the influences on a person's behavior based on their own experiences, others' behavior, and the environment. The socioecological model highlights the individual, interpersonal, institutional and organizational factors, and community and public policy factors that influence a person's health. A child's access to health is heavily dependent on the community in which they live. If there are no services, medical offices, safe places to play, or fresh foods, it makes it very difficult for them to thrive (Kilanowski, 2017). Both theories underscore the importance of comprehensive interventions that include families, school, and the community to create change on a child level.

My improvement strategy for the current problem of practice incorporates increased communication between families and the school/teachers, access to social and health services, social-emotional learning training and mental health education for all stakeholders. It is expected that with small improvements, in partnership with all stakeholders, a change in the system can elicit positive effects in students' social-emotional health. In our small rural school, students feel safe and are in a good place. Increasing time at school where students can engage in positive interactions, in a social but structured setting, while participating in physical activity, has the potential to improve students' social-emotional skills. The driver diagram (**Appendix B**) represents this theory of improvement and includes various change ideas that can impact both the secondary and primary drivers to improve children's social-emotional health at McKean elementary school.

2.1.1 Aim Statement

By 2024, we will show significant improvements in the social-emotional health of students attending McKean Elementary.

2.1.2 Primary Drivers

The three primary drivers of mentors and role models, trusting relationships, and social-emotional learning opportunities emerge as most relevant to improve students' social-emotional health (**Appendix B. Driver Diagram**). An overarching theme came through my empathy interviews, semi-structured interviews as well as my survey and conversations with my EdD classmates, professors and experts in the field of education. The reoccurring themes were

relationships, trust, and mentorship. This can bring job satisfaction to school employees; increase trust and appreciation from families, as well as better serve our students.

Positive role models and trusting relationships are essential for many of our students who struggle with social-emotional issues. In previous programs, our elementary-aged students have enjoyed interacting with mentors and role models who are in their teens or college age. Teachers can also provide mentorship and serve as role models. Having opportunities to interact with students outside of regular education/curriculum fosters trusting relationships, whereas lacking trust and reliable relationships can hinder a child's sense of well-being and safety. Finally, balancing the two previous drivers with comprehensive school-based mental health services can potentially support the student even more. To provide in-school services such as a student assistance program, (SAP) social groups, social-emotional learning, and a mental health counselor can better support the young students.

2.1.3 Secondary Drivers

There are various secondary drivers that impact the primary drivers to create change and achieve the aim. Impacting the primary driver of role models/mentors, there are three groups that serve as secondary drivers: high school and college students, teachers, and community members. Young children look up to young adults and model their behaviors. Having a high school and local university close to our school, we can benefit from these relationships by having them visit the school. The college students come from all over the country and world. The high school and college students can share experiences in life, academics, and sports that are relatable to our young students. Teachers are always admired and have a special connection with children making them great mentors and role models for young learners. Community members via partnerships with

community organizations can also provide mentorship, new opportunities and create relationships with families and students through new programming, assemblies, and classroom visits. These individuals and groups can bring in fresh ideas, exposure to culture, and provide varied perspectives and experiences. This is very helpful and engaging for our students in a rural, mostly white community.

Improved relationships are also needed between the school and families. Often students are put in the middle and told by parents to share information with the school because of the strained relationship. This creates stress and trust issues for the child. If families lack trust with the school, they will be unlikely to engage or allow their child to participate in programs which could have negative academic, social, and emotional consequences. This is usually not the parent's intent, but trust and ultimately permission are needed to allow children to participate in interventions, student assistance program (SAP), and be tested for learning disabilities as well as IEP and 504 plans. Teachers and administration also need to trust parents' best intentions and treat all families with the same care and respect.

A third group of secondary drivers are school mental health services, which currently at McKean are the multi-tiered system of support (MTSS), SAP, social-emotional learning integration and the school's positive behavior program Acts of Respect, Responsibility, Fun to be with, and Safe (ARRFS). Our school has recently added more services due to student need; however, we are under-staffed and lack programming to meet all the needs of our students. The MTSS program can be used to identify children in need and start classroom interventions. There are three tiers of support: 1) programs and norms that establish appropriate behavior and guidelines for all students; 2) smaller group of students that require specific targeted interventions such as a divorce group or grief group; and 3) one-on-one counseling and services provided to single student.

Our Student Assistance Program is a school-based team process with grades and specialty representation for the entire school. The team helps identify barriers to learning that can range from divorce in the family or death, learning disabilities, student social-emotional issues and a wide range of concerns that can potentially inhibit a child's education. Currently our SAP team can be better utilized through increased parent communication and education. Many parents and teachers do not fully understand what SAP is, therefore, more education is needed. The SAP program is designed to be a short-term help for a crisis, but often extends into the full school year. In the program we have started to offer in-school counseling services as parents have many barriers to access services in the community. It can be difficult to get parents' permission and signed consent to participate in SAP to help their child, as many fear that they could have their children taken away if the school is aware of any issues in the home that may be affecting the child. Our positive behavior program is something that all students are exposed to through classroom activities, curriculum in health and physical education, as well as videos and assemblies. There is also a student positive behavior committee who serve as role models and leaders in our school.

2.1.4 Change ideas

There are six change ideas that can be introduced in the system to meet my overall aim of improving students' social-emotional health by 2024. These ideas are the after-school programming, guest speakers, partnerships, educational nights, professional development on SEL, poverty and trauma, increased interaction and communication between all stakeholders, and specific parent information nights to decrease the stigma associated with struggles with poor social-emotional health or any mental health challenge. The after-school program targets change in several primary and secondary drivers, including building trust between teachers and students

and the positive impact of role models and mentors. The after-school program would focus on social-emotional lessons infused into physical activity games with time for reflecting on what was learned as well as increased time with older positive role models such as high school and college students and faculty. Access to bussing and a healthy snack will also help our students to enjoy the program and provide equity. Increased faculty/staff and the addition mentors will provide more interaction and healthy role models.

Another change idea is improving relationships between the school and families through increased communication. The after-school program with increased staff can allow teachers to have more interaction with students and allows them to get to know the child better. Having additional faculty allows for more interaction/communication with students and can promote a sense of belonging for the students and job satisfaction for the teacher. This may not be the child's classroom teacher and lets the school community know the child and support and serve the child when needed. An example of this would be to share behavior concerns with a classroom teacher something observed in another setting such as an after-school program. Increased communication as an intervention can be more time to interact with colleagues at the after-school program due to increased staffing and the help of mentors.

Additional educational nights and programming are change ideas that can support relationships between families and the school and teachers with students. These events could also provide education on various topics related to social-emotional health to decrease stigma. If parents are able to interact more with school staff, it could have a positive impact on relationships and ultimately the child's education and attitudes toward school.

In this investigation the Whole School, Whole Community, Whole Child model (CDC, 2021) is being used as a template to improve relationships with stakeholders, decrease barriers to

healthy development and social-emotional health of students and provide increased access to health for the entire community.

2.2 Systems Measures

2.2.1 Process measures

To understand whether the change ideas are being implemented as planned, I could monitor attendance at events, and solicit parent and student feedback following programming and events to see if they are enjoying the programming or have any suggestions for changes.

2.2.2 Driver measures

Driver measures assess the secondary and primary drivers in the driver diagram. I could assess the level of students' interaction with mentors across all types (teacher, high school/college students, and community members). Each interaction, activity, and facet of the program could have an effect on the student's social-emotional learning. To assess if trusting relationships are developing, we could assess the student and family report of closeness and trust with the school and the teachers. Finally, the quality and support of our existing social-emotional learning or *mental health programs* need to be assessed during the intervention to see if we are supporting students to the best of our abilities. Having all students who show up on the MTSS screener or who are referred to SAP involved in this programming can help them improve their social-emotional skills and health.

2.2.3 Outcome measures

The primary outcome I hope to achieve is increased social-emotional health among my elementary-age students. To measure this, I will need to examine and observe students' attitudes towards peers, school and physical activity. I hope to improve resiliency skills, self-esteem and empathy in my students. I seek to improve socialization in group activities in out of school programming as this facilitates opportunities for healthy development and growth of young students.

2.2.4 Balance measures

Upon meeting the aim, there are many possibilities for imbalances throughout this system. Because resources will be needed to implement the change ideas, this could upset other faculty and staff who have not requested resources. Further, some faculty and staff may not see value in the change ideas, resulting in strained relationships. Teachers volunteering their time to work extra hours to implement these change ideas could experience stress and burnout, which could take a toll on them physically and emotionally. Also, if teachers start the program and then cannot balance the responsibilities in addition to their other work, they may get substitutes and this could take away from the quality and consistency of the program. Also, classroom teachers who have students struggling academically may frown upon after-school activities as the child will have less work time at home.

2.3 Inquiry questions

Based on evidence from the existing literature, students' social-emotional health can be improved by fostering strong positive relationships, trust, and feelings of belonging by increasing bonds between students and their peers, mentors, and teachers. The change idea implemented in the current PDSA cycle was a social-emotional learning infused after-school physical activity program at McKean Elementary for 3rd grade students. The following inquiry questions guided the project:

1. *How does students' social-emotional health change after participating in the after-school SEL-infused physical activity program?*
2. *What were faculty, staff, and parent perceptions of the impact of an SEL-infused physical activity program on third grade students?*

2.4 Intervention Description

An after-school program was developed and implemented that centered on physical activity and integrated social-emotional learning activities (**Appendix E**). This was an eight-week program that ran from 3:30pm until 5:15pm, one day per week. The program utilized the school building and grounds including the cafeteria, halls, gymnasium, and outdoor areas. The program included 1st – 4th grade students; however, only a subsample of 3rd grade students was included in the assessments. Students were invited to participate through a regular after-school program participation form that was sent home to parents (Appendix F). Bussing was provided for those participants in need of transportation home from the program. The core components of the program

included a snack (during this time faculty spoke to the students about the plan for the day), introductory activity, discussion and reflection, main activity, and final discussion and reflection before dismissal. The introductory and main activities included physical activity-infused with social-emotional learning themes, including character building skills and socioemotional content such as teamwork, respect, self-control, and trust.

Program staff was comprised of school faculty and high school and college mentors. All activities were planned by the primary investigator who is also a teacher at McKean Elementary. Faculty helped to oversee the program and activities, interact with students, and are positive role models. Activities were led by faculty and mentors who enhanced the program by providing additional support and interaction with students. Mentors were required to attend an orientation/training, interact with students during the program, serve as positive role models, and assist with activities.

2.5 Methods and Measures

2.5.1 Participants

The recruitment of staff and mentors for the program took place in August 2021. Faculty and staff were recruited through email. Student mentors were recruited through their school teachers, professors, and coaches. Though students in 1st – 4th grade at McKean elementary participated in the intervention, only eight, 3rd grade students were selected to be observed during the program sessions. The students were selected by the primary investigator for time sample observations were chosen based on their “at-risk” status. For the purpose of this investigation, “at-

risk” refers to students who are currently struggling with social-emotional, behavioral, or physical or cognitive disabilities. Because the observations were completed during the after-school program and were anonymous, parental approval/consent was not needed. Of the eight students selected for observations, 2 students had limited data due to absences (i.e., COVID-19 illness and left the school).

A sample of parents was recruited to participate in the focus group. Parents were invited based on their socio-economic background and current school involvement. Messages were sent via email and the school’s app-based communication platform (Seesaw) to approximately 20 parents. Some parents were also called to answer any questions and provide further information. It was the intention to include parents of some the students who were observed in the program; however, only one of those parents attended the focus groups.

Teachers and staff working the after-school program were recruited to participate in a focus group by the primary investigator via in-person conversations and email. Approximately 12 teachers and staff who worked on the program were invited to participate.

All the high school and college mentors participating in the afterschool program (n=12) were also invited to participate in a focus group. Mentors were recruited by emails sent from the primary investigator to the high school office (high school mentors), and college coaches and professors (college mentors). They were also invited in person by the investigator. The information was also sent out through the Edinboro University School of Education as well as an announcement on PowerSchool, the district communication platform for grades 5-12.

2.5.2 Measures

Time samples of student behavior: Student behavior was observed during 5 weeks of the 8-week program. For each student, the goal was to collect ten, 30-second time samples during each weekly session. The order of the observations (i.e., which student) were randomized each week. The researcher used an observation form (**Appendix C**) taken from Ladd (1983) and adapted for this study. The students' behavior during the 30-second interval was coded according to the following categories: a) Social Conversation, b) Cooperative Play, c) On-looking, d) Parallel play/Non-interactive, e) Disengaged, and f) Argumentative/Disruptive. Below are the code descriptions for each behavior category:

1. Social conversation (positive behavior): Participant is engaged in positive or neutral talk with others in the absence of play activity (e.g., exchanging information, asking questions, joking, discussing activity).
2. Cooperative Play (positive behavior): Participant is engaged in organized activity with others (e.g., playing formal games, sports, building together, and acting out roles).
3. On-looking (neutral behavior): Participant is engaged in organized activity with others (e.g., playing formal games, sports, building together) but not joining peers at play.
4. Parallel play/Non-interactive (neutral behavior): Participant is engaged in independent or similar activity in the vicinity of others (e.g., shooting baskets on a court adjacent to peers engaged in a basketball game, building a "road" near peers playing "trucks," swinging next to others on a swings).
5. Disengaged (negative behavior): Participant is alone, at considerable distance from peers, and appears to be "doing nothing" (e.g., staring off into space, plays with his/her own body, wanders aimlessly) or is off-task.

6. Argumentative/Disruptive (negative behavior): Participant is engaged in hostile talk with others (e.g., insults, threats, contentious remarks).

Focus Groups: Four focus groups were conducted post-intervention to provide deeper insight into the effects of the program on the 3rd grade students as observed by adult stakeholders. Focus groups were stratified by stakeholder type: parents, teachers, high school mentors, and college mentors (~3-8 people per group). These group discussions were conducted to understand how these adult stakeholders perceived the after-school program and its potential impact on the children, as well as to gather recommendations for future programming at the school or district. These group discussions followed a semi-structured discussion guide (**Appendix D**). A sample question was: “*How would you describe [the students’/your child’s] mood when dismissed/picked up from after-school recreation?*” Focus groups were conducted by the primary investigator who has training in moderating focus groups, lasted between 1-1.5 hours, and were audio recorded. The focus groups took place at the school in the health classroom.

Observations & field notes: The primary investigator was present at each after-school program session. During that time, she conducted in-depth observations of student affect, the interactions between students and mentors and teachers, and signs of trusting relationships (e.g., students asking questions, increasing their interactions with mentors and peers), as well as signs of enjoyment in the program. At the end of each day’s session, the primary investigator recorded her jottings taken over the session as field notes. These field notes were utilized to support findings from the student observations and focus group conversations to give additional insight into the student experience.

2.5.3 Data collection procedures

Time sample data collection took place over 5 weeks during weeks 4-8 of the program. General observations were recorded as field notes throughout the program and any comments, input from mentors, teachers, students, and parents were recorded anonymously. At the culmination of the program, parents of participating students', after-school recreation staff and teachers, and program mentors participated in brief, semi-structured focus groups. The Institutional Review Board (IRB) at the University of Pittsburgh approved all research study protocols and activities.

2.5.4 Data Analysis

Descriptive statistics were used to calculate participant demographics. Time sample data for each student were summarized narratively to document any changes over time in their observed behavior during the program.

Focus group discussion audio recordings were transcribed verbatim and verified against the original audio file by the primary investigator. Transcripts from focus groups and field notes were then coded into key categories and themes using content analysis (Erlingsson & Brysiewicz, 2017). Content analysis is a qualitative data analysis method in which the transcripts and field notes are broken down to higher levels of abstraction to reach the most accurate meaning of the units. It begins with a meaning unit (i.e., selection of text) taken from a transcript and then the meaning unit is condensed, after that codes are created and then categories formed. From this point overarching themes are identified. The primary investigator coded the transcripts and all codes and categories were discussed and finalized by the primary investigator and another researcher.

3.0 PDSA Results

3.1 Participant Demographics

The participants in focus groups consisted of 8 McKean elementary teachers and staff who worked in the after-school program, 8 parents of after-school recreation student participants, and 12 (8 high school and 4 college student) mentors who worked in the program (Table 1). On average, teachers were 42.9 ± 11.8 years old, primarily female ($n=7$), and had been working at the school for 15 ± 12 years. Parents ranged in age from 37.9 ± 5.6 years, were mostly female, had an average of 2.7 ± 1.9 (2-5) children and 37.5 % ($n=3$) had children who received free or reduced lunch. The mentors ranged in age from 15-21 years, a little over half were female, most of them (66%) were in high school, and 58% ($n=7$) were school alumni.

Table 1. Demographic characteristics (%[n] or mean±SD) of study participants (n=8 teachers, n=8 parents, and n=12 mentors)

Participant Characteristic	% (n) or Mean ± SD (range)
Teachers, n=8	
Age, years	42.88 ± 11.75 (25-56)
Gender, % Female	87.5 (7)
Years at School	15 ± 11.99 (1-35)
Parents, n=8	
Age, years	37.88 ± 5.57 (32-48)
Gender, % Female	87.5 (7)
# Children	2.71 ± 1.9 (2-5)
Receive Free/Reduced Lunch	37.5 (3)
Mentors, n=12	
Age, range in years	15-21
Gender, % Female	58 (7)

Table 1. Demographic characteristics (%[n] or mean±SD) of study participants (n=8 teachers, n=8 parents, and n=12 mentors) (continued)

Mentor Type	
% High School	66 (8)
% College	33 (4)
School Alumni	58 (7)

3.2 Time Samples of Student Behavior

Individual case study narratives are provided below to describe each student and general patterns in their behavior over time during the after-school program. The final sample of n=7 students included three who are in special education services, one with needs beyond general education, and three students who have social and behavioral needs.

3.2.1 Student 1 (female)

Student 1 is a very social, happy student, though somewhat emotional and has social issues; she also has attention challenges and is unorganized. A “free spirit” some would say. The primary investigator chose to observe Student 1 because it was hypothesized that a mentor or positive role model may help guide her to more socially acceptable behavior to help her improve relationships and academics. From the beginning of the program to the end, this student became more engaged, social, and interactive. Student 1 only had 2 negative codes out of 50 time samples; of those observations, all were positive except for 4 neutral codes. Other observations from field notes

included that Student 1 seemed to gain more confidence and also learned how to ride a bike this year. She seemed to enjoy her school year as it went on and was very social and not as emotional or solitary. She appeared to gain a sense of belonging by the end of the program and increased confidence during the school year.

3.2.2 Student 2 (male)

Student 2 is a student who is very attention-seeking and often off-task. He has a good heart and it was hypothesized that he needs direction and positive people his life in order to promote positive behaviors. Over the course of the program, his behavior improved from the first week and he continued to mostly be on-task in subsequent observations. After a one -week absence from school, he was off-task again, and then the last week was all codes were positive. Out of 40 observations, 11 were coded as negative behaviors. Student 2 was on-task approximately 72% of the time during the program, whereas on a typical school day pre-program, this would most likely be lower. In a conversation with his teacher, she stated he is on-task time much less than 70%. Therefore it appears this student was more on-task during the after-school program than during the typical school day. Based on the primary investigator's observations, consistency, physical activity, and interaction with positive role models appear to help improve his behavior. Mentoring was a very positive experience for this student and he really enjoyed interaction with the high school and college mentors.

3.2.3 Student 3 (male)

Student 3 is a sweet but behaviorally and socially challenged student. After-school recreation is important for this student to learn and adopt positive social interactions. His behavior was erratic throughout the observations (i.e., sometimes engaged, sometimes on-looker) due to his tendency to only want to do preferred activities which are usually solitary or engaging with electronics. Conversely, he would engage and seemed to enjoy the program activities when it was an activity he liked. This student's behavior was more varied than other observed students; out of 31 observations, 10 were in negative categories (mostly disengaged).

3.2.4 Student 4 (male)

Student 4 is an extremely energetic student who loves sports and struggles with attention, appropriate behavior, and self-control. He has no formal diagnosis (e.g., ADHD), but has a hard time with self-control with his body and talking/being loud/disruptions. Student 4 is very bright and academically does well, but he has a lot of pressure on him by family to do well in school and sports. His younger brother has many challenges, and he feels responsible for helping and taking care of him. His teachers feel because of all these pressures that when he has the opportunity to let loose, he does. He attended 3 weeks of the program. During this time his behaviors were primarily coded in the social conversation (positive) or disruptive (negative) categories. Continuation in the program could have shown a potential improvement in those behaviors, but sports took precedence with the family and student.

3.2.5 Student 5 (male)

Student 5 is a physically large child for his age and is new to the school. He struggles to fit in, but is kind and other students like him. He has trouble keeping close friends due to size differences and his tendency to not give peers personal space. This student enjoyed the program and wanted to be social with any peer. He was engaged in social conversation or cooperative play (both positive behaviors) close to 100 % of the time for 38 time samples. He is a very well-behaved student but still struggles socially. The after-school program was a positive opportunity for him to create deeper relationships with peers due to the structure of the program, as opposed to unstructured school environments (e.g., lunch, recess).

3.2.6 Student 6 (female)

Student 6 is a very anxious young lady who struggles socially and feels like she does not fit in. She says she is ill to get out of non-preferred activities or to avoid social situations where she feels uncomfortable. She was absent due to illness for 3 weeks, which left only 2 weeks of observations in the program. During this time, her behavior was almost always coded in social conversation and cooperative play, with only 1 observation being disengaged. For a child who struggles socially, it was hypothesized that more time in the program could potentially help her social-emotional health. Through the observations, it was clear she enjoyed and was engaged in the program.

3.2.7 Student 7 (male)

Student 7 has a long history of an unsafe home and addiction in the family. He has school supports in place to slowly integrate him into traditional classrooms with his peers. The student has a history of unpredictable behavior and needs a support person with him at all times. A support person was provided on the bus, but not at the after-school program. This student needs positive relationships in his life and the program was extremely beneficial for him. Of the 40 observations, none were coded in the negative categories. This is an example of how the most at-risk can show the most benefits. During the observations, he was engaged, demonstrated trust, and a sense of belonging.

Overall the time sample observations were able to show that these at-risk students were exhibiting positive or neutral behaviors 82.6 % of the times observed. Out of 224 observations/time samples, only 39 represented negative behaviors (17.4% of the time). Therefore, 82.6% of the time was spent in neutral or positive behaviors. Of that time 63.8 % were positive behaviors.

3.3 Qualitative data from focus groups

Results of the qualitative analysis of field notes and focus group transcripts revealed 3 overarching themes surrounding the perceptions of the mentors, teachers/staff and parents regarding the after-school program: (1) Growing and thriving together: benefits of the afterschool program. (2) Trial and error: reflecting on what went well and didn't go well in the program, and

(3) Onward and upward: Fine tuning the program for the future. Additional descriptions of these themes and representative quotes within each are detailed below.

Table 2. Emergent themes, core categories and descriptions resulting from the qualitative data analysis

Themes	Core Categories	Category Description
Theme1. Growing and thriving together: benefits of the afterschool program	Student benefits; Mentor benefits	• Improved student outcomes, especially post-COVID • Positive mentor experiences during the program resulted in unexpected benefits
Theme 2. Trial and error: reflecting on what went well and didn't go well in the program	Positive program components; Program challenges	• Positive aspects of the program that contributed to program success • Challenges faced in program implementation
Theme 3. Onward and upward: Fine tuning the program for the future	Program Activities; Program Themes; Mentor training	• Recommendations to improve existing activities • Suggestions to improve the social-emotional learning themes • Ideas to strengthen mentor training and preparation

3.3.1 Theme 1: Growing and thriving together: benefits of the afterschool program

The core categories within this theme included program benefits to students and program benefits to the mentors. The program was designed to yield benefits to the students, including

opportunities for physical activity, improve social-emotional health, and opportunities to build relationships with peers. However, benefits to the mentors were discussed at length and were somewhat unexpected. Collectively, these benefits demonstrate the role of the after-school program in positively impacting those involved, regardless of age or developmental stage.

Student Benefits: The program benefits to students were plentiful. Many teachers, parents, and mentors shared that they saw increased socialization among students with their peers and with the mentors. This was the most talked about benefit from the program. This socialization was noted to be especially important after COVID-19 school closures, shift to online learning, and resulting isolation from peers. For example, one parent said, *“I think it's in some of those environments where you're not sitting at a desk, but that interaction that they're getting, that opportunity to practice [appropriate social skills following the online school year]. I know that she just really enjoyed being surrounded by all of her friends and having that extra space for that to happen.”* At the after-school program, the entire grade level was able to interact in a structured setting, unlike recess, or in their own classroom which can inhibit opportunities for play. One staff member reflected on the students being able to socialize and play with more children from other classes and more opportunities for friendships to be created *“[The students] definitely did mesh more as time went on. And again, seeing people from other classes, and then after a few weeks, playing more and being opened up.”*

Other benefits included the addition of mentors into the program and how that positively impacted the students' participation, engagement, and enjoyment of the program. The mentors were added to provide positive role models for the young students as it was clear that the elementary students looked up to the older high school or college students. One parent said, *“My son... was excited to go [to the program] and never complained. So that's big, right. Yeah, I was*

gonna say look, Nobody called on him but the mentors. Yes. He really, really liked them.” The program allowed students to foster trusting relationships and mentors could also model positive behavior to them. For example, one female mentor shared how she saw improvements in a students’ behavior: *“I actually caught myself like thinking like, later that day, man, that kid, just like Kid “A” was like, he was being really nice today. And he wasn’t being as nice last week.”*

The program also gave students who are struggling with difficult family situations a safe space and enough trust to share their thoughts and feelings. The mentors shared some of these conversations. For example, one high school mentor stated: *“for empathy week... it also got them talking about a lot of really sensitive issues. Like I had one kid say that his parents had passed away. And that had really like, that like, hurt me.”* Another high school mentor shared, *“I feel like the kids with some of the topics got very involved emotionally, like, during the small groups, ...I had intense group talks about, you know, older brothers who really like hurt their feelings, or, you know, like family issues that, you know, I wouldn’t share in a group but they felt comfortable to do ...”* Another mentor added; *“...A lot of them also, like started talking about how their parents were like hitting them or like him in the head or saying that their parents or siblings hurt them. And they’re like, really getting that out and then the whole group would get on that same subject and point it back to our regular (change) subject.”*

Benefits to mentors: The program was intended to benefit the students, but a salient core category from the discussions and observations was how the program mutually benefited the high school and college mentors. Specifically, working for the program benefitted the mentors by giving them job experience and income, but also filling a void left by the pandemic by giving them opportunities to interact in a different setting from school. One female college mentor shared, *“yeah, I definitely look forward to [the program] considering like after class I would usually just*

like go back to my dorm and like do nothing, so I really looked forward to seeing like the children every day.”

The ability to have a positive relationship with young students and were additional benefits for mentors. Mentors reported developing an unexpectedly strong attachment to the children. One female mentor noted, *“It was just nice to get like an emotional attachment with kids, but I never, like, imagined that I would, because I thought I was just gonna come in, be a helping hand, and then leave. And then, like, I was actually like, getting to know these kids.”* From an observational standpoint, the mentors seem to really enjoy building relationships with these students. This environment seemed to help the mentors and the elementary students grow and have a sense of belonging. Many of the high school mentors in the program were not involved in after-school activities so this gave them purpose and many stated in the focus groups that their attachment and enjoyment of the program surprised them. The high school and college mentors seemed aware of how much the younger children enjoyed spending time with them, and this gave them a sense of fulfillment.

3.3.2 Theme 2: Trial and error: reflecting on what went well and didn’t go well in the program

The core categories within this theme included positive program components and program implementation challenges. There were many changes that were integrated into the original after-school program and many of these changes were also viewed positively by parents, mentors, and teachers/staff. Despite the positives in the program, as with any new program, there are often kinks to work out. Stakeholders also discussed some challenges that they faced related to

communication, implementation of activities, and mentors knowing their roles and exact expectations.

Positive Program Components: The positive aspects were the addition of mentors, the infusion of social-emotional learning, and providing bussing and a healthy snack to the students. The addition of high school and college mentors as program staff rather than just school teachers or staff was a positive in the program. Students were able to bond and share in a way that may not have happened with older staff. For example, one mentor stated, *“I had... One girl, she came up to me and she was like, ‘I love you,’ And I was like, ‘Oh, thank you.’ And then I had another little girl come up to me the other day and she was like, ‘You’re my favorite.’ So, I felt like...overall...it was really nice for them to express their feelings like that. And I don’t feel like they would have done that to a teacher. You know someone who is closer in age to them? Not really, but yeah, we’re still kids too.”* The mentors ended up being an “icebreaker” for students. The mentors even mentioned that with them there it helped the younger children to relax more and be more engaged since the older “cool” kids were there.

Physical activity is enjoyed by this age group and having the social-emotional learning combined with physical activity and time for reflection was a positive aspect of the program. A teacher stated, *“We had the fourth grade, like kind of reflect upon the whole after-school rep process. And everybody had something very positive to say about it. They really liked the different kinds of games that we played. And a lot of the girls were very hesitant to pair up with the boys especially in the beginning. But as we went on, they were they’re more willing to do that. And we had one girl who was very quiet. And towards the end, she was talking to all the mentors and us, which was really, really positive. You could tell her emotions definitely changed from the beginning to the end.”* Many parents mentioned it was important for the students to have time out

of the regular school day to socialize and get physical activity. One parent stated, *“feeling of, you know, being a part of something and like, feeling like he belongs to something. And after COVID, you know, being a year and a half, it's like, just having more time with your friends having more time to just run around and exercise and learn, you know, some new things as well.”* Having physical activity be a large part of the program was key to help students release energy in positive ways and help them focus when it was time to listen, learn and engage in conversations. It was also mentioned that having time to talk about activities and reflect was important for the students, and that they enjoyed having the interaction with the mentors during this time. Observations conducted by the primary investigator confirmed that the elementary students enjoyed the conversations and reflection time with mentors based on their body language, facial expressions and overall engagement.

The opportunity to bus children home after the program removed many barriers for families/staff that were faced in the previous program. The addition of bussing was a pleasant surprise to parents and helpful for busy working families. Some parents were unaware that bussing was available but most agreed this was a bonus because the district offers buses for sports and other activities at the middle and high school levels. One parent shared that for those students without transportation, who live in low-income housing areas (i.e., mobile home parks), life is hard and the bussing provided more options for after-school time: *“Yeah, there's a lot of stress, a lot. And they do want to, because like, a lot of them go home in the country where they do get on their Xbox or wait till their parents get home.”*

All stakeholders noted snack time as a positive program component. Parents and mentors noted that the snack was helpful as kids are so hungry after school and while eating pay more attention to instructions and be better equipped to stay on task. The mentors also thought the snack

helped eased the students into the day to change gears from the school day to a more relaxed environment to hang out with friends. Teachers also enjoyed having snack time to prepare for the day's activities, take attendance, and organize.

Program Challenges: The primary areas that were challenging during program implementation were communication issues, defining mentors' roles in the program, program adaptations, and the timing of the program. Lack of effective communication channels caused issues for mentors, the bus garage, and teachers. The mentors shared in the focus groups that there was a lack of communication with the teachers and staff in the program. The mentors did not check email often and some did not have a cell phone to check messages regarding plans for that day/week, or necessary preparation (such as wearing old clothes for outdoor days). The mentors also mentioned that having a lack of information or not knowing what the plan or activities were for the week was a problem. The bus garage, high school office and mentors also had communication issues as the buses were utilized to take the high school mentors to the elementary school. There was often miscommunication and caused frustration for all parties about who should be riding and who should not.

Mentors faced challenges with knowing their role and how to react in certain situations. A college mentor mentioned they faced challenges *"knowing like, where we stand in ...regards to between the teachers and the students, how we're allowed to handle that."* Another comment from a mentor expanded on this challenge and role confusion: *"I had a bullying problem with one kid and, uh, you know, girl, and I was like, Oh, do I step in? Do I say something? Do I let them do it and then report it."* The purpose of increased staff was to facilitate more interaction with teachers in a different environment from the school day. However, the teachers stepped back and let the mentors teach and run most of the days and activities. This put a lot of stress on mentors and they

were put in positions that they should not have been and they were not prepared for. Both the high school and college mentors mentioned feeling unprepared to handle situations, such as children talking about being abused, difficult home situations, and children's behavior issues, or injuries. The teachers were not in close enough proximity to manage these situations appropriately. Observations revealed teachers/staff were not supervising students adequately and were often disengaged with students and mentors.

Mentors and teachers mentioned that many activities were complicated and if it was a new concept to students, they had a hard time picking it up in the time allotted. A few of the teachers appeared uncomfortable teaching the content and activities, as it was not their typical content area. Also, because the control of the session was shifted to the mentors, less teacher involvement and guidance happened. Some lessons needed to be adapted, and the staff and mentors were challenged with this. Teachers were provided with alternative lessons and it was assumed that teachers could use their professional skills adapt the lessons accordingly to their students. The primary investigator noted this lack of confidence seemed to be amplified by the pandemic. Teachers seemed more reserved much like many of the students. Another challenge with the program activities mentioned by parents was the discussion time. While they recognized this was an important program component, was it difficult for some of their children to sit through. This was illustrated in a quote from a parent, *"I would say the only negative that that was mentioned to me was, because like my older son particularly is so active, the, like, more sit-down discussion part. He was like, 'I've had enough of that.'"*

In summary communication issues, defining mentors' roles, program adaptations, and the timing of the program were all initial challenges but a very meaningful learning process towards improvement of the program moving forward.

3.3.3 Theme 3: Onward and upward: Fine tuning the program for the future

The core categories within this theme that emerged from the focus groups concerned improvement of program activities, the weekly social-emotional learning themes, and mentor training. Many of these recommendations from the stakeholders stemmed from the program challenges that were discussed during the focus groups. Overall, parents and mentors shared more recommendations for improvement than the teachers and staff.

Program Activities: To improve the program for the future, both mentors and parents suggested including more field trips/“outings” and experiences off school property. Stakeholders suggested this in response to the pool week which was an afternoon field trip to the Edinboro University pool. All of them recalled this activity being a great experience for the students and something like would like to see more of. Many parents and mentors thought increased physical activity and competitive games may be more engaging for the students. It was also suggested to integrate physical activity and movement into the discussions and lessons for the day. One parent suggested, “*Yeah, so I don't know if there's a way to, I think that for, I think that [discussion time] is a very important component. And if there's some way to do it in a more active way.*” It was also suggested by the high school mentors to not focus on the social-emotional learning themes as much and make it lighter and more fun for the students. Mentors suggested tag games and less complicated activities such as games the students already know. One high school mentor shared, “*I feel like with the activities, a lot of them were honestly, too creative. They were kind of ... complicated or graphic. If you'd stick with more traditional stuff, like, you know, team handball, or just kind of more traditional games, I think they'd have a lot more fun.*” One high school mentor also suggested sending information about the lesson plans ahead of time via an app they are familiar with from school, “*The games (program activities) are here and then post, like a picture*

of what we're supposed like, you know, like the picture of the paper. Yeah, because I feel like that would make us feel more confident going into it (the program)."

Program themes: The program themes were a topic of conversation in the mentor focus groups. They felt that some of the social-emotional learning themes needed simplified as some of the words being used were too complex for the young students. For example, the meaning of the words "resilience" or "empathy" can be very difficult for children of this age to grasp even though the concepts and activities demonstrated the meaning. Some high mentors thought the themes were not age appropriate for the elementary students. The college mentors had a different perspective. Ultimately it is the behavior, not the words (themes), that were important.

Mentor Training: Comprehensive mentor training was suggested by teachers and mentors to improve the program. Mentors wanted more training to better define their role and learn more about children of this age and best ways to handle various situations. This included how to react in specific situations as well as how to manage student behaviors, injuries, and teach the social-emotional learning lessons. A comment from one mentor stated a need for additional training, *"I didn't want to step in and get in trouble or be you know, or break something up that wasn't supposed to be like, 'That's not how you run it.' Just a little explanation of how we should run that. And then also, like, you know, if a child gets hurt, what should we do specifically?"* Other suggestions for mentor training and improvement of mentoring program were to assign certain duties to mentors based on their talents or to rotate duties to give each mentor more experience. The mentor's also suggested safety training related to sensitive student issues or behaviors as well as injuries and general safety.

4.0 Learning & Actions

4.1 Main Findings

The current dissertation in practice project sought to improve the social-emotional health of 3rd grade students attending McKean elementary through a social-emotional learning (SEL)-infused, 8-week physical activity after-school program with a strong mentor/role model component. This inquiry project provided preliminary evidence of improvements in children's social-emotional health after participating in the program. The enhancements to the program that had the greatest effect, based on focus group discussion and time sample observations and field notes, were the addition of high school and college mentors, social-emotional learning activities, and physical activity into an existing after-school program. These main findings are discussed below, comparing these findings with the literature.

The high school and college mentors were an important component of the after-school program. Not only did their presence benefit the students, but they also benefited from the experience. Based on the literature and past experience, the primary investigator expected to see an improvement in 3rd grade students' behavior because of the mentorship component. In a study by Weiss (2019) the young college and high school age coaches had a strong and positive impact on the participant's social-emotional health. The participants were able to use more "I" statements and control their emotions more appropriately. In another study, at-risk student improved behaviors compared to a control groups (Office of Juvenile Justice and Delinquency Prevention, 1998). The primary investigator had also noted, based on past experiences, when high school or college students visited the school for assemblies, to read books or other programs, this allowed

interaction between the elementary students and the older students. Even though the mentors had challenges of their own, they facilitated much of the social-emotional growth of our young students after a long hiatus of online and at-home only life. The mentors gave our students positive interactions, helped them grow socially and learn to value and foster trusting relationships. The mentors were in effect also an ice breaker for them with their peers.

Social-emotional learning was a key element to this after-school program and likely contributed to the positive behaviors and affect noted in the students. The research has shown that programs that provide character and life skills, such as social-emotional learning, have shown positive effects for children (Weiss et al., 2019). In a study by Nichols et al. (2017) it was concluded that mental health needs in schools are rising and there are not enough resources to serve all in need. It was also stated in the study that collaboration among educators and mental health professionals is strongly advised for the best outcomes. This was the reason for adding the component to after-school program this year. Prior to the pandemic, an increased social- emotional health mental health need was observed in students at McKean Elementary. It was anticipated there would be greater needs after 1.5 years of non-typical education, which led to little to no socialization and normal developmental opportunities for growth in this area. As such, McKean Elementary began to integrate social-emotional learning in all areas of the curriculum, including the after-school program.

Physical activity was an essential part of the after-school program. It is possible that the after-school program was more impactful than integration of social-emotional learning concepts into classroom curriculum due to the combination with physical activity children of this age enjoy and thrive when they are able to move. The combination of physical activity and social-emotional health was selected because many studies show this is beneficial to children's physical and mental

well-being (WHO 2020; Telles et al.2013; Whooten et al., 2020). Physical activity is shown to improve three basic areas of psychological health (i.e., perceptions of autonomy, competence, and relatedness which can lead to improved mental health (Dore et al. 2020). If you are a teacher or a parent it is widely accepted knowledge that kids need to be worn out. There seems to be less screaming, fighting, or inappropriate behavior when children have a positive outlet for their energy. Studies such as Biddle et al. (2019) show a relationship between children’s physical activity and cognitive functioning. This research is well received, and many schools even implement “brain breaks” and short bursts of physical activity within the classroom to help stimulate thinking and concentration to improve focus and academics (Glapy 2018). Brazendale et al. (2019) has shown a positive to response in students with disabilities to increased physical activity. Generally, these students are less engaged in activity than their typical peers and often physical activity is used as an intervention to deter behavior issues. Physical activity was always part of the original program, but with the addition of SEL the movements were connected and had purpose. There was less physical activity in the program compared to previous years due to the addition of snack and social-emotional themes and reflection. All stakeholders recommended more physical activity in the program, whether through the activities or discussion time.

4.2 Strengths & Weaknesses

4.2.1 Strengths

After completing this initial Plan, Do, Study, Act cycle, there are clear strengths of the change implemented and overall process. These strengths are: increased staff, funding for the

program through the American Rescue Act specifically for social emotional learning programs, the primary investigator was the after-school program coordinator, and that all students in grades 1-4 were able to participate although only 3rd grade students were part of the investigation.

Increasing program staff from 2 to 4 teachers or staff helped with overall safety and behavioral issues that sometimes arise during these programs. It also allowed for a smooth dismissal process as that can sometimes be overwhelming for only 2 teachers. The addition of mentors to the program was the most beneficial addition based on focus group findings and observations by the investigator. The mentors added a new facet to the program that really helped the students acclimate to being in school and in-person socialization. The mentors provided positive role models for the young students and interacted and with them during games and activities, snack time and talking and reflection time. The students developed trusting relationships with the mentors as well as their peers.

.Funding for the program enabled a healthy snack to be offered to students, paid teachers, staff and mentors and also provided bussing which decreased barriers to participation. It should be stated that administration supported the program and wanted it and approved funding through the American Rescue Act. However moving forward to maintain the integrity of the program more funding will be needed.

The primary investigator was the after-school program coordinator, so many of the changes were easy to make and had she approval/relationship with the principal and superintendent. It was also helpful that the coordinator was the schools health and physical education teacher and was able to be present at many sessions was highly involved in the day to day happenings.

Although only 3rd graders were the focus of this inquiry project, all students in 1st-4th grade were invited to participate in the program, potentially reaping important benefits. It was

stated that this was a very impactful program for 1st grade students as many of them could not attend typical in-person schooling due to the pandemic.

4.2.2 Weaknesses

There are also noted weaknesses that became evidence through implementing the after-school program and change process. Specifically, these are in the areas of staffing, training, and program awareness. During the planning phase, with the focus on social-emotional learning it was anticipated that an increase in staffing would help build and deepen relationships between teachers and students that may carry over into the academic day. However, many teachers pulled back even more and allowed the mentors to do most of the interaction and delivery of lessons and activities to students. We may have seen more positive results if it were implemented as planned with more interaction from the teachers with students. A lack of training in social-emotional learning could have contributed to the lack of buy-in and commitment to the program by teachers. It appeared that teachers were not comfortable talking about many topics or engaging in the reflection time with students and mentors.

The overstaffing of mentors was also an issue because not all were as engaged as others and this sometimes led to resentment of those who did not fully engage and “pull their weight.” The large amount of mentors led to transportation issues as many needed rides to the elementary school and therefore our transportation department was asked to assist with this. In “normal” times this would have not been a huge issue but because we were adding more students to the bus it complicated contract tracing during the fall term.

A lack of district-wide awareness of the program contributed to confusion and sometimes resentment of extra added work that was unexpected to some departments. The timing of the

program (first month back post-online learning), a new administration, and other issues created challenges. The timing of the program was needed post-pandemic but difficult with the return to in-person schooling which contributed to a lack of support from district administration and less awareness and help for district employees. Everyone was already spread thin and stressed. Teamwork among all district employees was needed for the best outcomes but difficult under the conditions.

Another weakness to the investigation and data was that only 5 weeks of time samples were collected during the 8-week program. I was not able to collect data during the first 3 weeks of the program due to pending IRB approval. With data from weeks 1-3, it is possible this would have changed our conclusions regarding the observed patterns of student behavior during the after-school program. Additional student-level data could have provided deeper insight into their overall behaviors, and it is possible more negative or neutral behaviors could have occurred and then improved over time.

4.3 Next steps and Implications

4.3.1 Lessons Learned

Much can be learned from the implementation of this change idea within this initial Plan, Do, Study, Act Cycle. I learned that more staff does not necessarily mean more engagement. For all to be engaged, there must be buy-in and commitment. I also came to the realization that not everyone wants the same things. Not everyone working in a school district has direct contact with students and can see the immediate need and crisis of our students social-emotional health. I need

to take action in educating all stakeholders on the happenings, needs and goals of the district as a whole. I need to educate students, parents, teachers and administrators on social-emotional learning. I need to teach empathy and cultural humility (Brown et al., 2016) to those who have not been in the shoes of families who have struggles with poverty, and food insecurity. We need to take more action to teach to the whole child and not just the content for the academic tests.

It was evident that the students missed school and “normal” activities. Having the enhanced program begin early in the year as they returned from online learning was optimal. They seemed very excited and much more enthusiastic than previous “normal” years. It was very clear that the students were craving interacting and experiencing in-person socialization and play. They want to talk and be heard and they want to feel like they belong and are a part of something. Relationships and socialization are positives in children’s lives. This past year (2021-2022) was a difficult one to get stakeholder buy-in, with so many challenges facing families, teachers, and the district. But the program was needed and it seems to have benefitted the children. After a few bumps in the initial implementation, I am confident that the program can continue to grow and improve.

4.3.2 Implications for Practice

Based on the current dissertation in practice inquiry results, there are several main implications for practice. These implications are related to social-emotional learning, the presence of mentors in programming with elementary-aged children, and receiving buy-in from all stakeholders. Another essential component is administrative implementation and logistical support and future funding. Social-emotional learning is an important part of overall health (Bermejo-Martin et al., 2016). It is important for educators to prepare children for the real world where we deal with emotional control, respect, empathy and need to be resilient. I highly recommend training

for all after-school staff for the best possible outcomes. Trainings could be led by the program coordinator, the school counselor, and the school safety officer as well as other representatives from the community. The parents who participated in the focus groups were so happy to be invited and suggested more meetings and conversations to happen in the future related to school and student needs. It is helpful to include parents and the community in this type of training as it does take a village (CDC, 2021) the more our families and community are educated about the positives steps schools are taking to support their children, the more support they will receive outside of the school walls (Elliot et al , 2022)

Mentors were essential for program success. Young students loved working with high school and college age students as they provide positive, fun and energetic role models. To help the mentors and students have the best possible experience and benefit, additional training is necessary. Topics, beyond social-emotional learning as suggested above, should include safety and general expectations and knowledge. Well-defined mentor roles and appropriate staffing are important for program success and management. I would suggest finding an appropriate amount of quality mentors that fit the programs specific needs. It is important to state that the teachers are responsible for all instruction and should be engaged along with the mentors in all activities and conversations/reflections. Proper training will be an important aspect to this program moving forward.

Buy-in from all stakeholders can only improve outcomes for this program. In addition to teacher and staff buy-in, district administrative support is needed for program success and longevity. As stated earlier, the administration was very supportive by providing funding for the after-school program; however, additional support to raise awareness of the program throughout the district or coordinating/providing mandatory trainings would be helpful. As a professional

courtesy and to make relationships stronger in the district, it would be helpful to provide more support and resources for those planning and implementing the program. Also sharing results of interventions such as this one at school board meetings, faculty meetings, and with the community to discuss how to apply these social-emotional learning concepts to other areas and programming can help to make social-emotional learning and mentoring an increased area of focus for the future.

4.3.3 Implications for Research

There are several key implications for research that can build on the current inquiry project findings. Future research could evaluate additional child-level measures. For example, examine the effect of an increase in social-emotional learning and socialization and its relationship to improved academics. Another avenue could be the impact on classroom behavior and school day or home behavior. Longer studies that look at other aspects such as fitness, academics, and mental health over months or years can be explored. Observations could also be conducted to see if the number of positive interactions children had within the program affected their behavior positively.

Future research could also more fully explore the impact of the program on the mentors. The benefits of the program to the mentor were shared consistently but somewhat unexpected by the primary investigator. Assessing the effect of participation in the program on mentors' physical activity, social-emotional and overall mental health, and future career aspirations would be options. Data collected from these stakeholders could also inform future iterations of the program and mentor training.

5.0 Reflections

In this section I would like to share my experience as a student in the Doctorate of Education program with a concentration in Health and Physical Activity at the University of Pittsburgh. I would also like to share my experience as an improver, leader and practitioner, and lastly where this amazing journey may continue.

This program was calling me. I kept looking at it and coming back to it over and over again. I felt like this was a program and degree that fit who I am as a professional and as a person. In education we teach the students, care about the student –that’s what it is about. This program has helped me to stand up for justice, given me the confidence to questions and *disrupt*. This does not make life easier but it creates change and awareness. It raises the level of expectation and refocuses us all on making the best and right choices to best serve our students. To be in a cohort of 66 amazing, diverse, intellectual, passionate, and fun people was a gift. This is what I want for my students. I want them to be exposed to the world and learn about and respect diversity. I want them to open their eyes and try new things and respect themselves and others. To me that is true health. To care for yourself in the best way possible by having the resources and knowledge to do so, while at the same time reaching out to help and accept other people, ideas, and methodologies. My 3 years seemed to go by so quickly. I looked forward to every class and every event. I feel that I have so much more to learn and even if that does not happen in the way of formal education, I want to keep learning, keep improving, and working to help students of all ages.

As an improver, leader and practitioner this last year was the most difficult and the most rewarding. To have a student look back and tell me, “*Mrs. Roberts, it feels like real school now.*” I can’t tell you how emotional I felt upon hearing this. I felt their need to be at school, with their

friends, and even seeing their teachers. For many of our students, we are all they have. I learned that all relationships are so very important. This means with colleagues, students, family, and the community, all of us. We are in this together. We need to step out of our silos and learn about what others do in our place of practice, we need to share what we do; we need to share what others are doing. It takes mutual respect and patience! What I learned about myself was that I can do it. I can make it happen. I am passionate and can support the “why” and justify the need because it’s there. I fully stand behind my motto of “it can’t hurt to ask.” There are ways to improve our students’ education, mental, and physical health. We just need to work for it and get buy-in so we are well-supported and our efforts are sustainable. I never thought my short email stating that I had an idea for those federal funds would turn into a dissertation and a program costing over \$40,000 per term. I am very thankful and thrilled the students could benefit. There were many bumps along the way, but as they say, anything worthwhile usually isn’t easy.

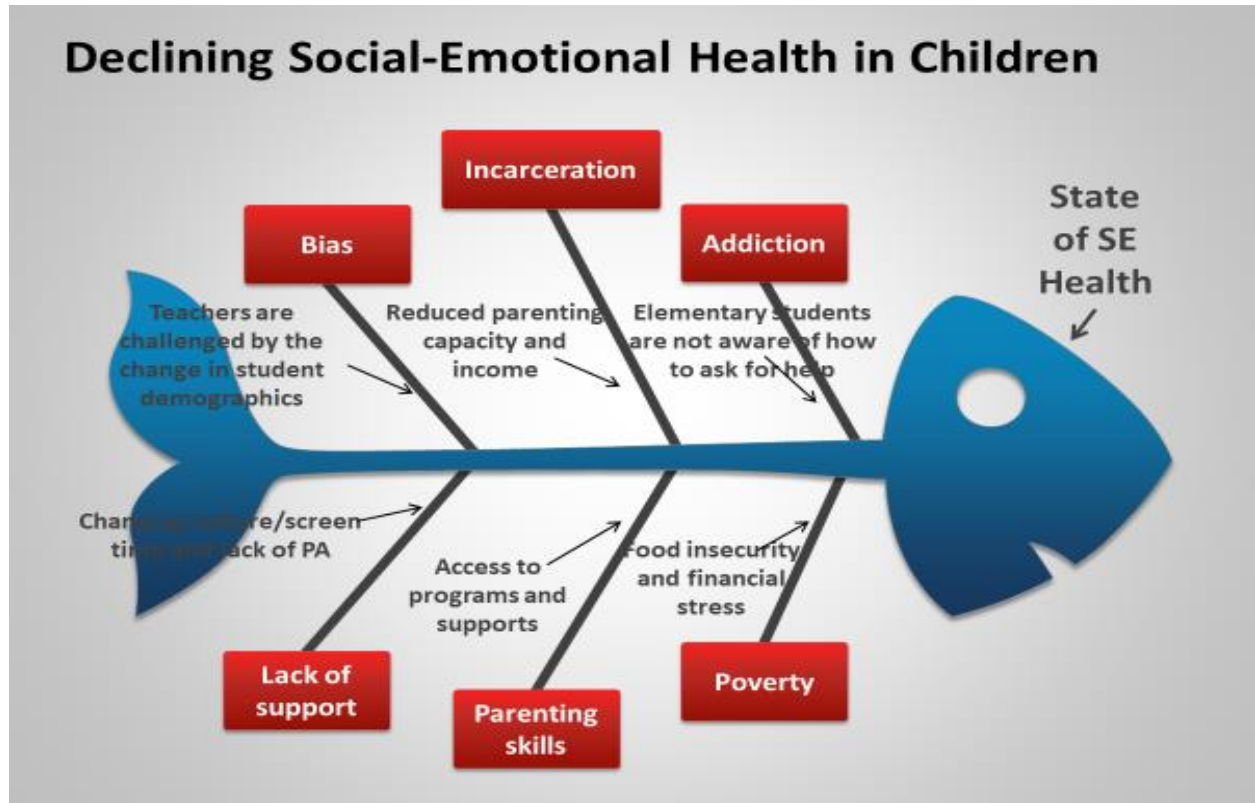
During the implementation of this program and research, my normal role as teacher had expanded. I had more interaction with payroll, the bus garage, food services, and other principals and school secretaries than most teachers usually do. I was perceived as “out of my lane” and creating more work for administrative staff. This was difficult as there was not enough communication for other departments to understand why this was important and why I was given this perceived “power.” In my own perception, I really had no power, just a bigger to-do list. In addition to teaching 7 classes and seeing approximately 140 students per day and planning lessons for my 35 classes per week, I had the responsibility of creating and implementing a social-emotional mentoring program at both elementary schools. I was more than happy to do this because I knew it would benefit the students and they would enjoy it. However the logistics of this effort, along with my full work schedule, were tremendously challenging. Elementary students are young

and need lots of attention and focus. It was near impossible to email, make phone calls or tend to my own basic personal needs most days. Even though the process was challenging, I learned so very much. I grew as a professional and had opportunities given to me that both challenged and rewarded me.

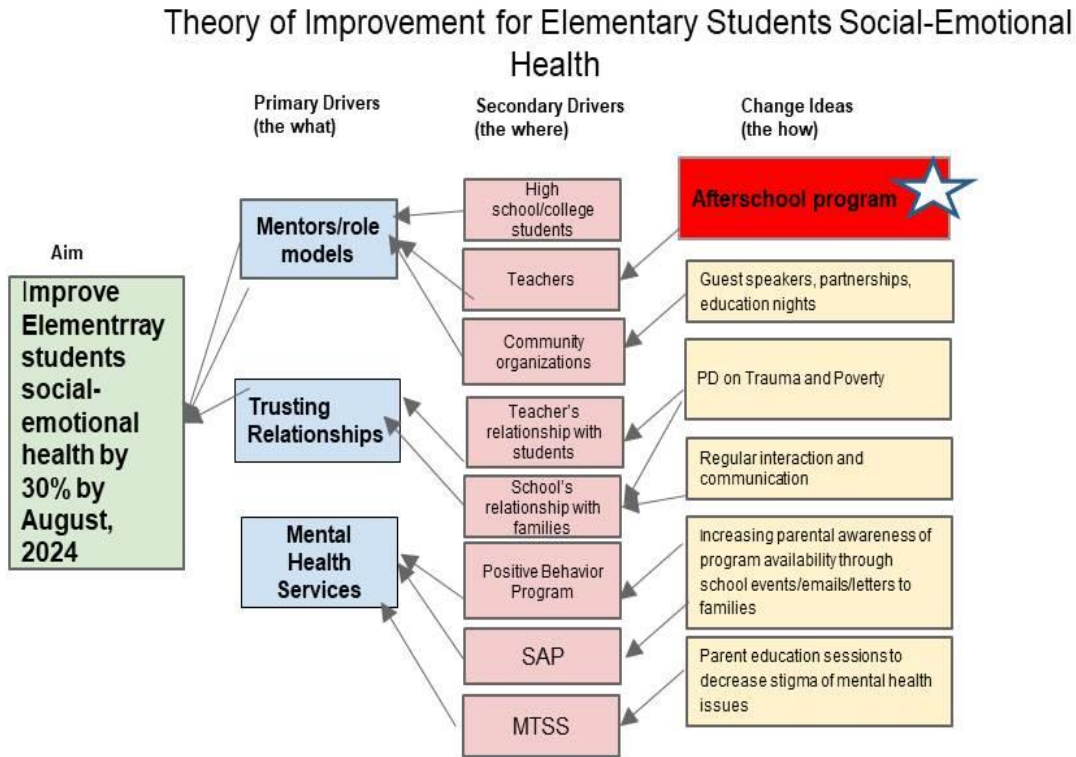
I would like to share the 3 experiences that affected me in very positive ways: the effect of the mentors on the students and vice versa, the time sample observations, and the focus group discussions. I learned so much more about our school community, built relationships, and was able to help students that were the most in need. I am so very thankful for these experiences.

Moving forward, I plan to keep improving: utilizing the data I collected as part of my dissertation in practice to make change and improvements within my school and district. I intend to seek additional funding to support the after-school program. I hope to mentor current and future teachers on the importance of social-emotional learning and physical activity for children. If the past few years have shown us anything, it's that our health needs to come first. By health I mean holistic health including multiple dimensions, not just the physical; they are all interrelated. I want to be a strong advocate for wellness for our district and beyond. I do not want policies to be non-performatives and just on paper and not yield positive actions and outcomes. I am truly thankful for Dr. Ross and the entire program at the University of Pittsburgh. I leave the University a motivated, proud, and inspired scholar practitioner.

Appendix A Fishbone Diagram



Appendix B Driver Diagram



Appendix C Time Sample Codes

Codes	Social Conversatio n	Cooperative play	On looking	Disengage d	Argumenta tive/disrupt ive	Parallel/or non- interactive
Student 1						
Student 2						
Student 3						
Student 4						
Student 5						
Student 6						
Student 7						
Student 8						

Appendix D Focus Group Discussion Guide

Objective: to gain further insight into the effect of the after-school program on 3rd grade students from the perspective of parents, teachers, and mentors.

Welcome/Introduction (2-3 min)

Introduce yourself and the assistant moderator.

Ground rules: Please talk loudly and clearly, and speak one at a time so we can hear from everyone. Be courteous;

Remind them of confidentiality, session recorded, etc. Also mention bathroom, water, and they are there voluntarily.

Ask questions, Have fun!

Opening Question (2-3 min)

1. Please tell me the name you would like us to refer you as during this discussion, and your favorite activity you like to do in your free time.

Introductory Question (5-10 min)

2. Today we are going to talk about the after-school program and your child's (student or mentee's) experience in the program. In general, is physical activity something your child enjoys or something they avoid? What activities do they like to do?

Transition Questions (10 min)

3. "What was the reason you wanted your child to participate, or they wanted to participate in the after-school program? (Why do you feel the student/mentee was interested in participating?)

Probe: Any concerns about socialization, interaction or communication?

Key Questions (40-50 min)

In light of the pandemic and changes in our culture, we wanted to modify the program this year to increase support for our students. Some of the ways we tried to do this was by increasing the number of faculty and including high school/college-aged mentors, providing bussing, and infusing all activities with concepts such as teamwork, respect, responsibility and more.

4. All that being said... how do you think the changes made to the program impacted your child (student/mentee)? What changes did you see in them after these 8 weeks?
 - a. Probe: changes to their behavior, communication, interactions with peers, schoolwork, etc.

- b. Probe: engage in any other extracurricular activities, programs, lessons, or sports?
 - c. Probe: Changes observed by you? mentioned by your child? Shared by a teacher, etc.
- 5. Could you share whether you heard anything from your child (student/mentee) about something they liked or didn't like about the program?
 - a. Probe: If there is something they liked, why did they enjoy that aspect? And if there was something they did not like, why do you think that was?
- 6. As we plan the program for the spring, what recommendations do you have or what important things should we keep in mind about your child (student/mentee), the school, and the surrounding community?

Concluding Questions (10 min)

- 7. Is there anything else you would like to share today about the program or your child (student/mentee)?

Assistant moderator gives summary of main points covered and findings:

Ex. "So far today we have talked about [...], and you all mentioned that [...] Do you think this summary covers the main points we talked about today? Is there anything I forgot to say or should leave out?"

Thank the participants for their time.
Dismiss them.

Appendix E Sample after-school recreation lesson plan with social-emotional learning theme

ASR week 3: wear red- trust!

Definition of trust: firm belief in the reliability, truth, ability, or strength of someone or something

(the links below have good info on talking to kids about trust) .

<https://kidsrkids.com/blog/teaching-kids-the-importance-of-trust/>

<https://www.today.com/parenting-guides/developing-trust-kids-ages-8-11-t179074>

Grades 1 and 2: all directions for activities below

Activity 1: rush hour

Activity 2: electric fence

*Chat with mentors and teachers about TRUST in small groups

Activity 3: look into my eyes

Activity 4: blanket switch

Activity 5: helium stick

Grades 3 and 4:

1. Buddy walk

2. Electric fence

*Trust talk with mentors and teachers in small groups

3. Trust fall

4. Blanket switch

5. Look into my eyes

6. Helium stick

The Buddy Walk Activity- grades 1-4

An exciting group activity that helps instill the feeling of trust in the partner. Here is what you have to do:

Instructions

- Pair up kids, so that each kid has a partner.
- Place obstacles like chairs, tables, toys, etc. randomly in the place the activity will be conducted.
- Blindfold one kid in each pair. Let the other kid in the pair walk his buddy safely through the obstacles to the other side.
- Once the pair reaches the other side, blindfold the other partner and let his partner walk him safely back to the other side.

The Helium Stick Activity grades 1-4

This exciting activity helps the kids to form strategies and trust each other. Here are the steps that you need to follow:

Instructions

- Make the kids stand in a circle with their hands extended in front, parallel to the ground.
- Ask them to make fists with their hands as they extend only the index finger out.
- You can place any object such as a stick, hula hoop, etc. on the index finger and ask the kids to lower that object to the ground gently.
- This is a challenging activity as the kids are neither allowed to lose contact with the object nor drop it.

The Trust Fall Activity- grades 3 and 4

One of the most exciting and thrilling trust activities for preschoolers', this activity can help in building confidence and trust in each other. This is what you need to do:

Instructions

- Divide the kids into pairs.
- Let one kid from each pair stand facing away from the partner and the other kid standing a few meters behind him as he faces his partner.
- Ask the kid facing the other side to gently fall backwards and ask the partner to catch him as he falls.
- As the kids start getting comfortable with each other, the distance between them can be increased gradually.
- Change the partners' places and repeat the activity.

The Rush Hour Activity- grades 1 and 2

Another activity that requires blindfolding to take the fun to the next level. This is what needs to be done:

Instructions

- Pair up kids and blindfold one partner.
- Ask the other partner to navigate their partner through the traffic as the facilitator keeps announcing the traffic directions such as red light, school zone, speed breakers, etc.

Over the electric fence: grades 1-4

This one is a well-known team building game. Imagine two chairs connected with a wire at about 1m high. Imagine this is an electric fence. If you touch it, you're dead. Even worse... everyone is dead, because all the students must stay connected as well, and just like with an electric fence, if one person touches it, the electric shock guides through all the persons until the last one. Good thing it's not really loaded with electricity. The goal is to get over the fence while holding hands. It's a real challenge, as not everyone can just jump over it. It takes real teamwork to succeed.

Blanket switch: grades 1-4

Divide your classroom into 3 teams. Each team stands on a blanket, leaving about a quarter of the blanket space. Now, the three teams have to turn over the blanket without leaving it. This means they have to work together to end up standing on the other side of the blanket.

** Look into my eyes: grades 1-4

Have your students take turns staring into each other's eyes for 60 seconds. This trust activity might frighten students a bit as gazing in each other's eyes is not easy. But, not only will they become better at maintaining eye contact, they should connect with one another on some level.

8.

Appendix F Sample registration form for after-school program

McKean Elementary
After School Recreation Program

Spring 2022

Dear Parents,

Our After School Recreation program will begin the week of Monday, March 28th. This program, full of fun and structured activities in a relaxed atmosphere, will give your children time to enjoy some of their favorite games and activities, along with some new adventures with their classmates. This year we are happy to announce that we have student mentors from General McLane High School and Edinboro University joining us as well as increased faculty in order to foster an environment of friendship, safety, and learning. A healthy snack and beverage will be provided for the students at the beginning of the program each day. Bussing is also available this year if your child is in need of transportation home after the program. This spring we are also adding in some special lessons along with all the physical activity on topics such as trust, teamwork, resilience, and more. Each child will also receive a special T-shirt at the end of the program.

****Due to the additional logistics involved with bussing please return these forms as soon as possible. If you would like your child to participate, this form must be turned into the school office no later than Friday March 11th by 4pm: NO late forms will be accepted.**

The program begins right after school at 3:30 pm and concludes at 5pm. It is the responsibility of parents to provide and/or arrange transportation home for their child. Students must be picked up no later than 5pm. Students being picked up by parents will be dismissed in the back of the school in exactly the same way as parent drop off in the morning/near the gym back doors.

In May we have some very special fun planned for the students. We will head to Edinboro University for some fun in the pool. This is great experience for our students (and awesome exercise)! They love riding the bus with their classmates and having swim time. This also helps prepare them for our water safety course in 4th grade. If your child will not participate in the pool day they will not stay for ASR that day.

To participate in the After School Recreation Program the student must have:

1. A PERMISSION FORM signed by the parent or guardian and returned to the school office no later than by 4pm on Friday March 11th. NO LATE FORMS CAN BE ACCEPTED.

2. AN ACKNOWLEDGEMENT OF INSURANCE FORM signed and returned with the permission slip if you have not chosen to enroll in the student insurance program available through the General McLane School District. NO child will be able to participate without this acknowledgement.

3. PROPER SHOES and CLOTHING (swimsuit and towel on their swimming day) are essential to the student's safety when participating. Some activities will take place in the gym and others outside when possible. Please send students with comfortable and safe clothes and shoes, as well as dressed for the weather. If students do not have proper dress, they will not be permitted to stay (for their own safety). As a general rule and to keep all students safe and able to begin activities, phone calls home to request forgotten clothing will not be permitted.

4. ARRANGEMENTS FOR GETTING HOME (PARENT PICK-UP OR BUS) should be arranged by parents and a note of consent must be sent in if students are riding with other adults besides parents (carpool, grandparents, etc.). Students will sign IN and OUT of After School Recreation and will NOT be permitted to leave with anyone without a note of consent. This is just to ensure the safety of your children. Children will be dismissed at 4:50pm and must be picked up by 5 PM to continue in the program. Students can be picked up at the back of the building near the gym.

**** IMPORTANT: If arriving early to After School Recreation to pick up your child, please be aware that we may do some outdoor activities and SLOW and SAFE driving in the parking lot is essential. If we have an activity in session, we will have the area marked off with cones to keep children safe from vehicles.

**** ALSO in case of bad weather After School Recreation may be cancelled. Should this happen, your child will be sent home on the bus or dismissed at the regular time of 3:30pm.

All activities are planned for children of all abilities. The program is intended to be a time of learning, fitness and FUN!!!! We look forward to your child's participation in After School Recreation at McKean Elementary.

Please return signed forms by Friday march 11th, 2022 by 4pm- no late forms accepted.

McKean Elementary After School Recreation Schedule for Grades 1-4: 3:30-5:00pm

Mon.1st Graders:3/28, 4/4, 4/25, 5/2, 5/9, 5/16, 5/23 and 6/6 for first grade

Tues. 2nd Graders: 3/29, 4/5,4/26, 5/3, 5/10, 5/17, 5/24, and June 1st

Wed. 3rd Graders: 3/30, 4/6, 4/27, 5/3, 5/11, 5/18, 5/25, and June 2nd

Thurs. 4th Graders: 3/31, 4/7, 4/28, 5/4, 5/12, 5/19, 5/26, and June 3rd

Swim week is the week of May 16th all students will be picked up at McKean Elementary.

PLEASE NOTE: there is no ASR the weeks of April 11th and 18th due to the spring break.

We are looking forward to a fun and active program. Thank you and Happy Spring!!!

Lisa Roberts
lisaroberts@generalmcclane.org
814-273-1033 x4020

Please fill out all information- thank you!

Childs t-shirt size: _____

My child is using the BUS for transportation home YES_____NO_____

*Is your child attending on the pool week? YES____ NO_____

My child is being picked up (behind the gym) _____

*Childs address for ASR bussing: (only if using the bus to ride home after ASR)_____

Food allergies (if any):

Any special instructions or notes:

After School Recreation Registration Form

(Please return to school no later than) no late forms will be accepted.

My son/daughter _____has my permission to participate in spring After School Recreation. I will make arrangements to pick him/her up at the designated time (by 5pm) and place (exit near gym-back of school- same procedures as drop off in am).

I have checked the appropriate statement below that applies:

____We have enrolled in the Student Insurance Plan available through the General McLane School District.

____We have chosen NOT to enroll in the Student Insurance Plan available through the General McLane School District and have signed the ACKNOWLEDGEMENT OF INSURANCE FORM below.

Parents Signature_____ Phone # you can be reached 3:30-5pm: _____

ACKNOWLEDGEMENT OF INSURANCE FORM

We, the undersigned, parents of a student or students enrolled in the General McLane School District, acknowledge that there is student insurance available through the School District which will reimburse us for medical bills and related expenses which might be required in the event that our son/daughter was injured while involved in the McKean Elementary After School Recreation Program. We have declined to enroll in the student insurance program and we fully understand that should an accident occur, we are obligated, either personally or through other insurance we maintain, to pay said medical bills and related expenses; and that there is insurance maintained by the School District which would reimburse us for expenses related to injuries resulting from an accident.

Today's Date: _____ Teacher: _____

Parent signature _____

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