

Keeping Growth in Mind: Teaching Mindfulness and Growth Mindset to Children with Learning Differences

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Introduction

Hill Learning Center

Hill Learning Center is a nonprofit, half-day program designed to support students with various learning differences. Located in Durham, NC, the program hosts more than 180 K-12 students from over 70 different public, private, and home schools. Some of the learning differences addressed include dyslexia, dysgraphia, dyscalculia, and ADHD. Hill uses their own research based, multisensory approach to teach students reading, writing, and math. With a 4:1 student teacher ratio, students are able to receive the individualized attention they need to succeed academically while also building self-confidence and social skills in a safe and supportive environmental setting.

Background

One major obstacle many children with learning differences face is feeling as though their learning differences hinder their academic progress. This can cause students to feel frustrated, defeated, or hopeless, and may result in an overall apathetic attitude (Tobia, Bonifacci, Ottaviani, Borsato, & Marzocchi, 2014). This can then become an actual detriment to their academic growth. Therefore, it is important to ensure students with learning differences understand metacognition and how to use it.

Metacognition means thinking about thinking (Jacobson, n.d.). Mindfulness and growth mindset both fall under metacognition. Mindfulness is the possession of awareness and reflection regarding one's current surroundings and feelings. Growth mindset is the belief that an individual has the power to change or improve one's abilities. A fixed mindset is the belief that an individual's basic abilities are stagnant and cannot be changed. An intermediate mindset falls in between growth and fixed, and is the belief that some abilities can be improved while others cannot.

Literature

Research shows that students with ADHD and learning differences experience compromised self-esteem and social skills, as well as increased anxiety (Novita, 2016). Growth mindset provides students with the tools necessary to persevere through academic and social challenges they may encounter, while mindfulness meditation techniques can mediate some of the aforementioned secondary symptoms. This may include increasing compliance and reducing the need for medications, increasing self-awareness and communication, and as a result, improving self-confidence and social exchanges (Singh et al., 2009; Milligan, Badali, & Spiroiu, 2015).

Problem and Research Goals

Currently, no regular or structured mindfulness or growth mindset lessons exist at Hill. This project seeks to teach a subset of the students at Hill Center strategies for implementing mindfulness and growth mindset within their daily routines to effectively achieve their personal and academic goals. An additional aim is to help participants develop healthier and more positive lifestyles.

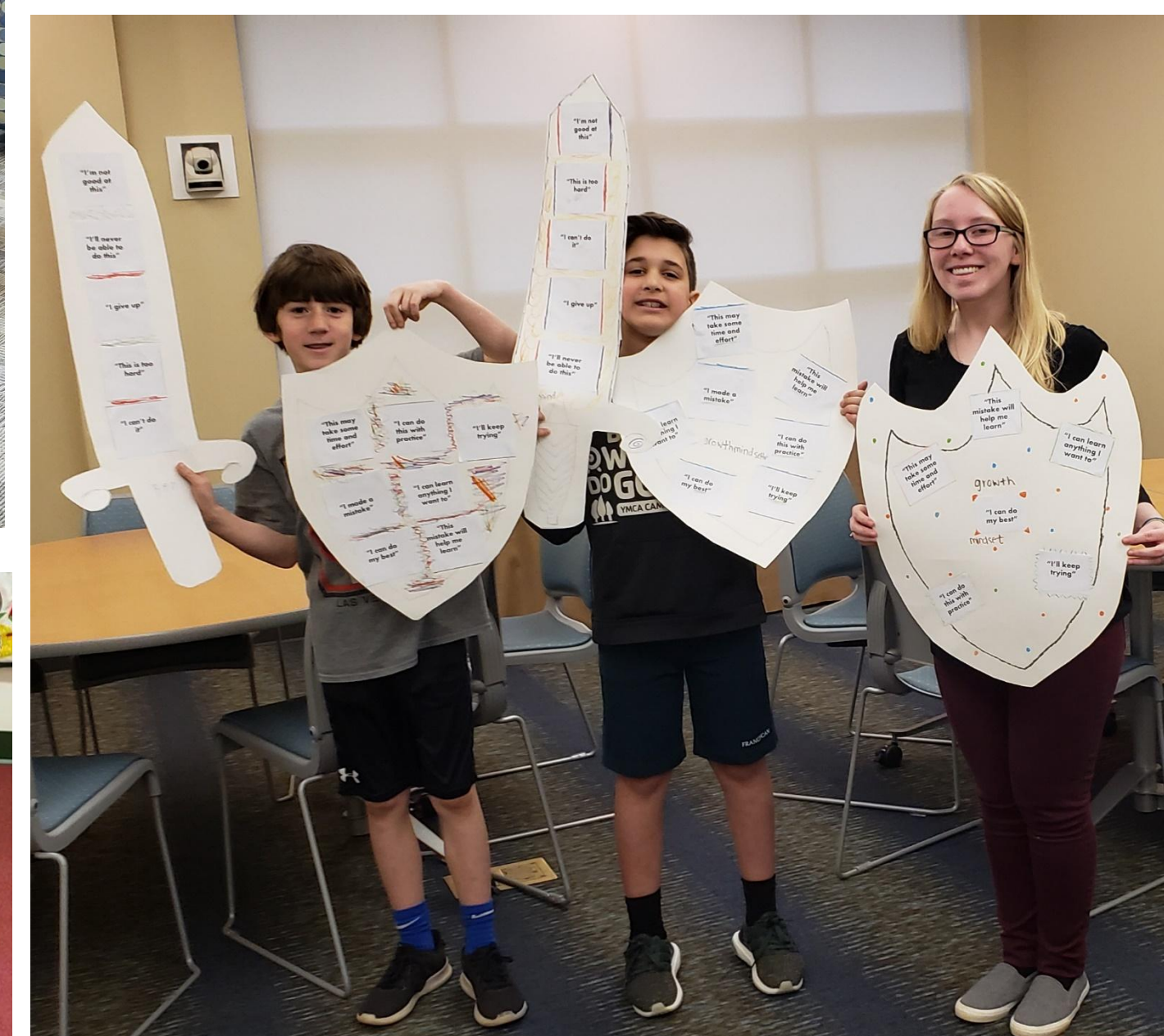
Methods and Materials

Participants

- There were a total of 22 students from Hill Learning Center; 5 from lower/elementary school, 8 from middle school, and 9 from upper/high school. Of these participants, 13 were morning students, and 9 were afternoon students.
- All participants had some learning difference or ADHD. Students were recommended by teachers and participation was optional. Signed parent permission forms were received for all participants.

Design

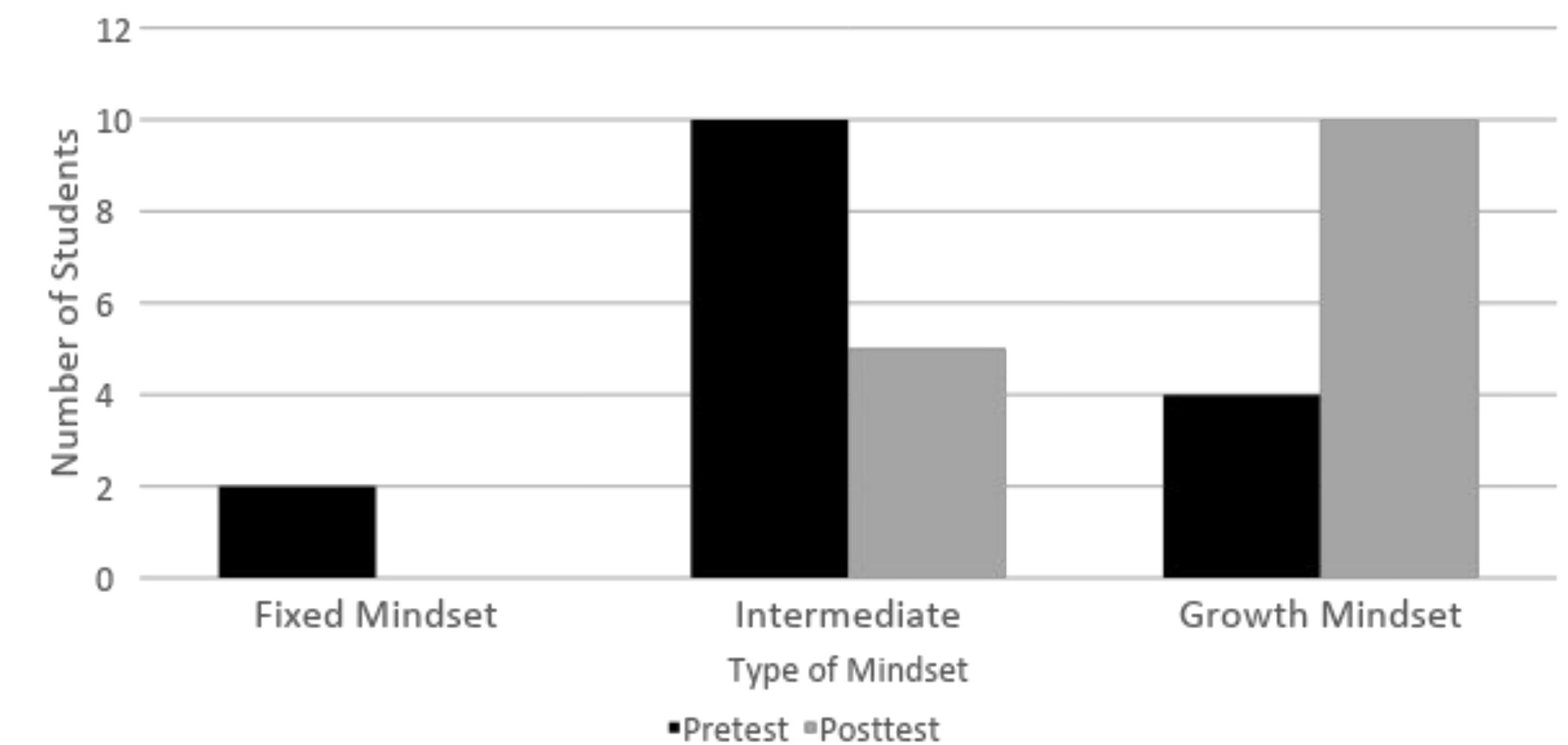
- Students participated in three 30-minute sessions over the course of three weeks. Session one focused on mindfulness, session two focused on growth mindset, and session three focused on connecting the two. Session one and session three utilized the same activity for all students, while session two was a different age appropriate activity for each level.
- A pretest was given at the start of session one and a posttest was given at the end of session three. The tests given were Mindfulness Awareness and Attention Scale (MAAS) and PERTS Growth Mindset Assessment.



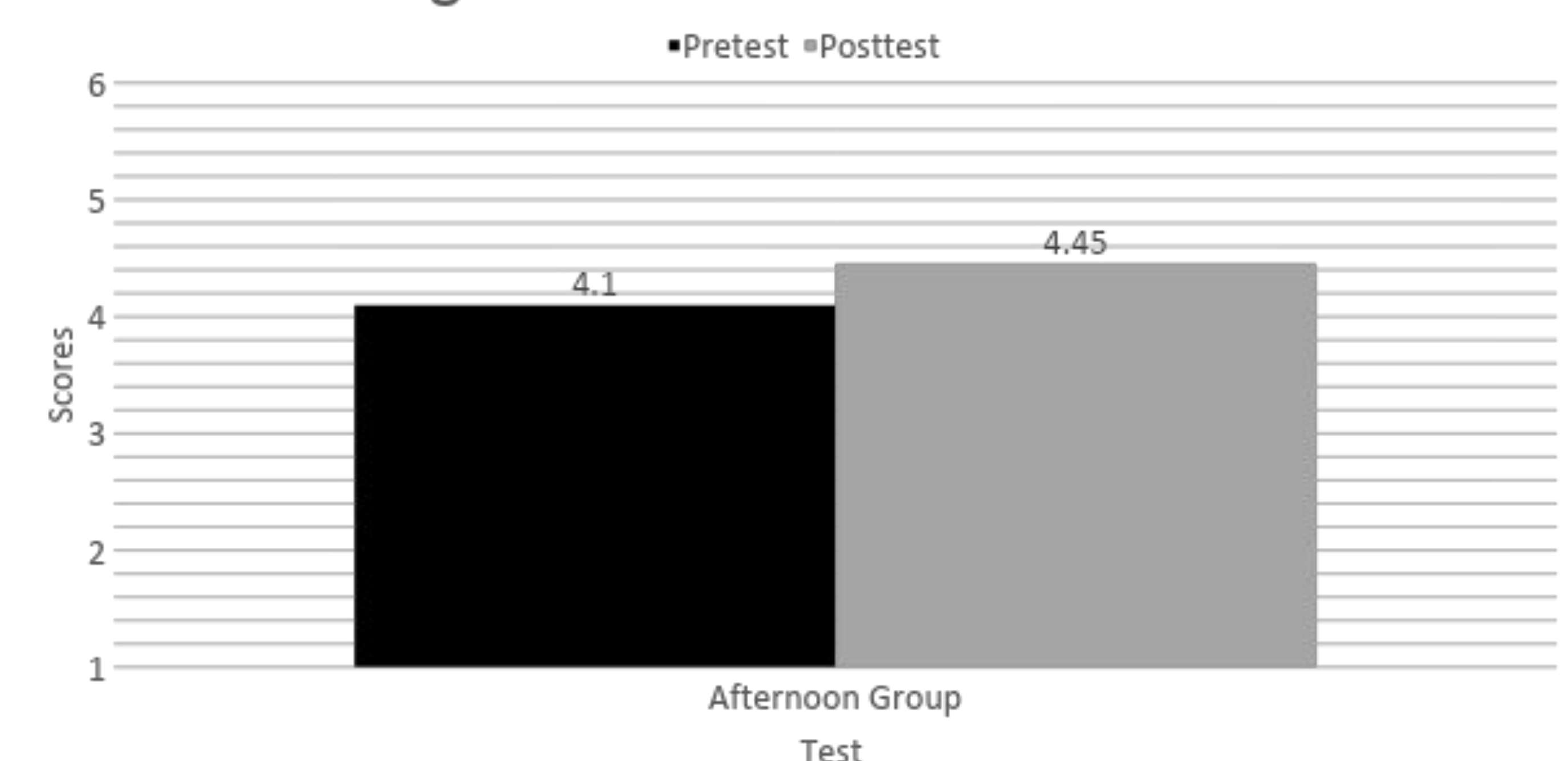
Results

- From pretest to posttest, the number of students with a fixed mindset decreased from 2 to 0 and the number of students with an intermediate mindset decreased from 10 to 5, while the number of students with a growth mindset increased from 4 to 10.
- The average MAAS pretest score for the afternoon group was 4.1, while the average posttest score was 4.45. This indicates a .35 point, or 5.8% increase in dispositional mindfulness.
- Note: The discrepancy in results and participation reported is due to student absences.

PERTS Growth Mindset Assessment Scores



Average MAAS Assessment Scores



Discussion

- In as little as three sessions, students improved in mindset and mindfulness.
- The increase in mindfulness and growth mindset indirectly suggests that at least some of the participants will more easily reach their goals through their newly increased awareness and more positive mindset.
- Based on the literature, it is likely that with more sessions, mindfulness would show a greater increase over time.
- Student feedback further demonstrates success of the program. Several students were excited to participate and sad to see it end, while others chose to hang their work in their classrooms.
- Limitations in this study include a lack of consistency in participation due to many student absences and flawed data collection.
- Future research may wish to examine how a more concrete longitudinal program could impact student mindfulness and growth mindset. Another study may compare the program's effect on students with learning differences to students without learning differences.

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