



Spring 2023 Research Summary



Teacher Name

Before we begin, we would like to thank you for your participation in the optional surveys. One benefit of conducting these studies is we learn what improvements to make to Finding Focus. It's thanks to teachers like you that we were able to receive this invaluable feedback and improve the course accordingly!

First, I wanted to give you a quick update about sample size this semester. From the digital interface, it appears that ___ of your students did Finding Focus. We received data from 484 students for the pre-course survey, 428 students for the post-course survey, and were able to match survey data across time using student IDs for 405 students. We embedded one "attention check" question within each survey to catch students who were not reading the survey questions carefully. This is a standard approach for ensuring high data quality. Of your 405 students, 73 failed one attention check and 48 failed both attention checks, so we had to discard their data for analyses. This left viable data for 266 students.

Below you will see a summary of the baseline results for your students. However, since our analyses require a large sample size, we had too few responses to analyze the changes from pre to post in just your students. Therefore, the changes across time reported below are the results that emerged from all students who participated in the Spring 2023 surveys across several schools. We collected over 250 student responses.

Note: In this summary, we report several correlational findings. The "**r**" represents the strength of the correlation from 0 to 1. Stronger correlations have bigger numbers. When there's a negative sign, it means that the variables are inversely associated with one another (when one is high, the other is low). The "**p**" represents the significance level. Typically, p values less than .05 represent a statistically significant finding. We also report changes from pre-test to post-test. For these results, the "**t**" represents the magnitude of the mean difference between the pre-course survey and the post-course survey, and the sample size for each test is included in parentheses.

Baseline Results

1. Emotion Regulation

Your students' average score on the emotion regulation questionnaire was 4.07 out of 6. In comparison the average score from the total sample this semester was 4.07. Higher scores indicate more skill at relating to emotions, such as by re-focusing their attention or re-evaluating situations to change how they feel.

2. Stress Management

Your students' average score on the stress management questionnaire was 3.93 out of 6. In comparison the average score from the total sample this semester was 3.93. Higher scores indicate greater skill in managing stress.

3. Resiliency

Your students' average score on the resilience questionnaire was 3.11 out of 5. In comparison the average score from the total sample this semester was 3.11. Higher scores indicate greater skill at recovering from difficulties.

4. Mind-Wandering and Multitasking

We tested how frequently your students engage in task-unrelated thought (also known as mind-wandering) during everyday life, class, and while doing homework.

Your students' average score on the mind-wandering questionnaire was 3.79 out of 6. In comparison the average score from the total sample this semester was 3.79. Higher scores indicate more frequent mind-wandering during everyday life.

Additionally, your students rated how much they mind-wander during class and while doing homework. Higher scores indicate more frequent mind-wandering during academic activities. Your students' average score during class was 2.71 out of 4. In comparison the average score from the total sample this semester was 2.71. Your students' average score during homework was 2.7 out of 4. In comparison the average score from the total sample this semester was 2.7.

Relatedly, we found that your students who mind-wander more during daily life are more likely to mind-wander during class ($r=0.5$, $p<.05$) and while doing homework ($r=0.46$, $p<.05$).

Lastly, we also assessed how often your students multitasked while in class and doing homework. Higher scores indicate greater use of electronic devices for unrelated tasks during academic activities. Your students' average score during class was 2.14 out of 4. In comparison the average score from the total sample this semester was 2.14. Your students' average score during homework was 2.52 out of 4. In comparison the average score from the total sample this semester was 2.52.

5. Beliefs about ability to focus attention and current focus levels

We also assessed 3 beliefs about focus: (i) whether students believed that their ability to focus can improve (growth mindset), (ii) if they knew how to improve their focus (self-efficacy), and (iii) the degree to which they want to improve their attention (motivation).

- Your students' average score on the growth mindset questionnaire was 4.71 out of 6. In comparison the average score from the total sample this semester was 4.71. Higher scores indicate more strongly believing that focus is a trainable skill.
- Your students' average score on the self-efficacy questionnaire was 3.93 out of 6. In comparison the average score from the total sample this semester was 3.93. Higher scores indicate greater confidence in improving their focus.
- Your students' average score on the motivation questionnaire was 4.48 out of 6. In comparison the average score from the total sample this semester was 4.48. Higher scores indicate greater motivation to improve their ability to focus.

Furthermore, students who are currently struggling to focus on class have more room to grow, especially if they wish they focused more, so we measured your students current versus their ideal levels of focus and the demands they are currently facing.

- Your students estimated that they kept their undivided attention on class 65.79% of the time, but they would ideally keep their undivided attention on class 72.25% of the time. Importantly, 56.94% of your students reported focusing less often than they felt they should, indicating room for growth. In comparison, students from the total sample currently keep their undivided attention on class 65.79% of the time, but they would ideally keep their undivided attention on class 72.25% of the time. A total of 56.94% of students reported focusing less often than they felt they should.
- Your students' average response when rating the demands they were facing at the time of the survey was 3.55 out 5. In comparison, the average response across the whole sample was 3.55. Higher scores indicate greater demands.

Changes Across Time:

Note: The following results are from all students who participated across schools. The y-axis has been altered so that the changes from pre to post are more apparent and doesn't reflect the minimum or maximum value possible on a questionnaire.

Figure 1: Average Changes in Emotion Regulation, Stress Management, and Resilience

Fig 1.a

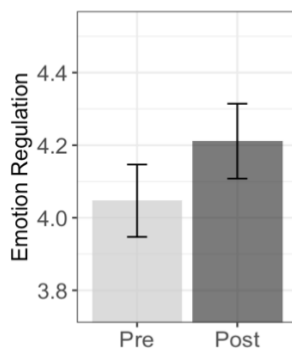


Fig 1.b

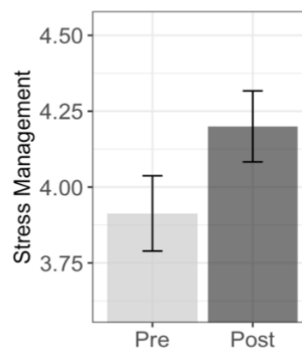
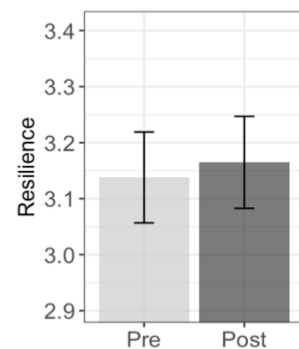


Fig 1.c



- Fig 1.a: We found a significant increase in emotion regulation, $t(265) = 3.39$, $p = 0.001$.
- Fig 1.b: We found a significant increase in stress management, $t(262) = 5.94$, $p < .001$.
- Fig 1.c: We did not find a significant change in resilience, $t(264) = 0.67$, $p = 0.505$.

Figure 2: Average Changes in Mind-Wandering

Fig 2.a

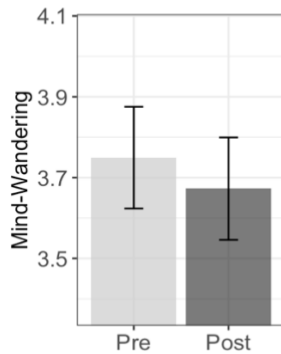


Fig 2.b

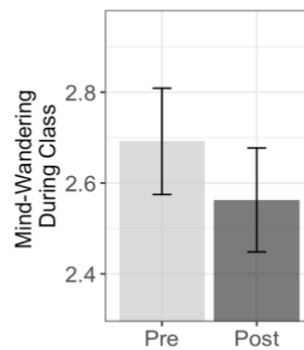
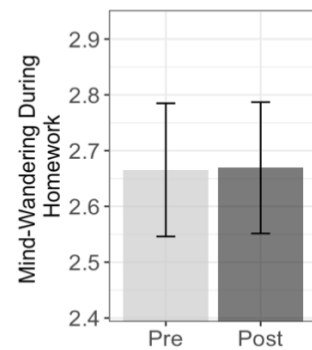


Fig 2.c



- Fig 2.a: We did not find a significant change in mind-wandering during everyday life, $t(262) = -1.52$, $p = 0.129$.
- Fig 2.b: We found a significant decrease in mind-wandering during class, $t(262) = -2.71$, $p = 0.007$.
- Fig 2.c: We did not find a significant change in mind-wandering during homework, $t(262) = 0.21$, $p = 0.838$.

Figure 3: Average Changes in Multitasking

Fig 3.a

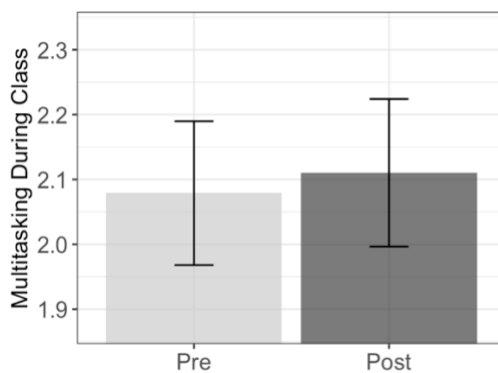
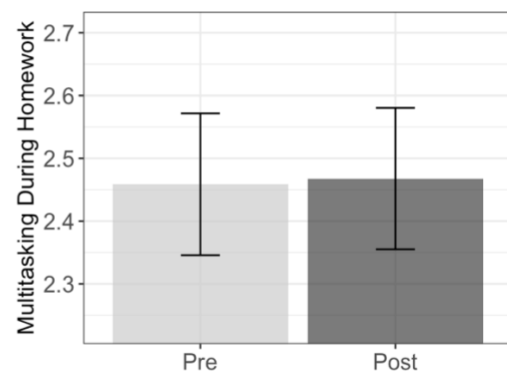


Fig 3.b



- Fig 3.a: We did not find a significant change in multitasking during class, $t(262) = 0.6$, $p = 0.55$.
- Fig 3.b: We did not find a significant change in multitasking during homework, $t(262) = 0.29$, $p = 0.775$.

Figure 4: Average Change in Growth Mindset, Self-Efficacy, and Motivation

Fig 4.a

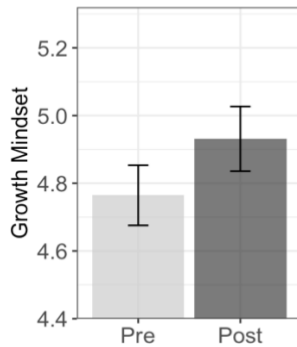


Fig 4.b

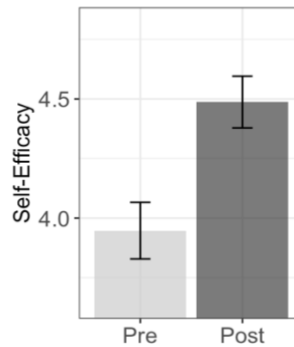
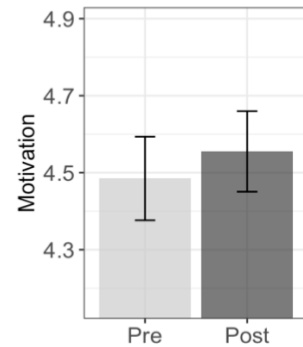


Fig 4.c



- Fig 4.a: We found a significant increase in growth mindset, $t(261) = 3.71$, $p < .001$.
- Fig 4.b: We found a significant increase in self-efficacy, $t(261) = 8.36$, $p < .001$.
- Fig 4.c: We did not find a significant change in motivation, $t(262) = 1.43$, $p = 0.153$.

Figure 5: Average Change in Actual Classroom Focus, Ideal Classroom Focus, and Demands

Fig 5.a

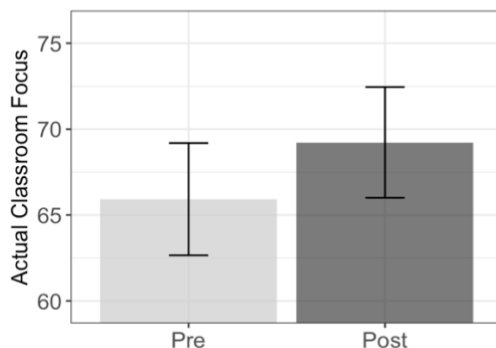
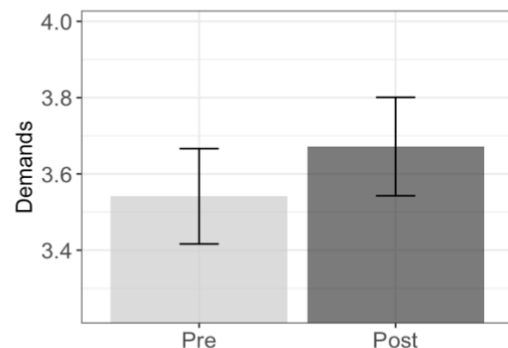


Fig 5.b



- Fig 5.a: Although levels of focus did not significantly change across the entire sample, among the 56.94% of students with any discrepancy between ideal and actual focus at pretest, We found a significant increase in students' levels of actual classroom focus, $t(153) = 2.38$, $p = 0.019$.

- Fig 5.b: We found a marginally significant increase in demands, $t(261) = 1.97$, $p = 0.05$.

Feedback

In addition to assessing how your students changed after using Finding Focus, we also asked them for feedback on the app. Here is what they had to say:

1. 76% of your students said Finding Focus was helpful.
2. When rating how likely they were to recommend Finding Focus to a friend or classmate, your students responded with a 6.06 on average on a scale from 0 to 10.
3. 77% of your students think the strategies they learned in Finding Focus will help them academically.

Comprehension Quiz

Lastly, we assessed how much your students learned from the course with a 3-question comprehension quiz. Your students' average score on the comprehension quiz was 67%, whereas the average for this semester's whole sample was 67%.

Here are the questions from the comprehension quiz for reference with the correct answer choices bolded:

1. If you were to anchor your attention on music, like you do in a Daily Beat, which of the following would be distractions?
 - a. the lyrics
 - b. the rhythm of the song
 - c. **the voices of students around you**
 - d. all of the above
 2. In Finding Focus, what does "fueling the fire" mean?
 - a. **Our thoughts and evaluations increase the intensity of our emotions**
 - b. We can fire up our motivation to be more productive through anchoring on the task at hand
 - c. Training attention increases our focus just like fuel increases the size of a fire
 - d. Circumstances beyond our control fuel the fire of our emotions
 3. What is the difference between thoughts and thinking?
 - a. Thoughts happen in the present moment; thinking is in the past
 - b. Thoughts are ongoing; thinking is temporary
 - c. **Thoughts are short-lived; thinking is when you engage with a thought and turn it into a train of thoughts**
 - d. Thoughts and thinking are the same thing
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Conclusion

Across the whole sample, students experienced: (1) increased self-efficacy, (2) increased growth mindset, (3) improved stress management skills, (4) improved emotion regulation, (5) decreased mind-wandering during class, and (6) improved classroom focus among the students who reported a discrepancy between their ideal and actual levels of focus. For a 10-day course, we find this quite exciting!

To explain these results in a different way, after completing Finding Focus, students feel more confident in their ability to improve their focus using the tools from the course. Additionally, students believe their levels of focus can be strengthened with deliberate effort. They also have more skills in managing their stress, which is especially important given that chronic stress can have detrimental effects on mental and physical health. Relatedly, students learned how to skillfully relate to their emotions by re-focusing their attention or re-evaluating situations. They also spend less time thinking about things off-topic during class, and among the students who focused less than they ideally would at baseline, they experienced increased levels of classroom focus.

Despite this positive impact on students, there's still more work to be done to optimize Finding Focus. Eventually, we hope to observe significant increases in motivation and actual focus in the classroom across the whole sample. With this goal in mind, our team is currently building a new feature to further help your future students put the skills of anchoring, focusing, and releasing into practice while they're in class. This new feature will launch soon, and we'll be running another study in the fall to measure its impact.

Thank you again for facilitating Finding Focus. By doing so, not only do your students benefit, but it also helps our team learn how to refine the tool so that it will someday help hundreds of thousands of students across the country.