

EVALUATION REPORT

Plugged Into Mindfulness

Breathwork & Mindfulness Training

Provided to:

Butler Area School District

Prepared for:

***Healthy Body – Peaceful
Soul, Inc.***



Joni Sturgill

healthy body, peaceful soul

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Steven Heasley, MA

Independent Consultant and Evaluator

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Background

Healthy Body – Peaceful Soul Inc. (HBPS), provided a series of training sessions to school personnel employed by the Butler Area School District. The *Plugged Into Mindfulness (PIM)* training was voluntary and focused on teaching mindfulness and breathing exercises that might be used to reduce personal stress and minimize “burnout” as well as provide the participating teachers and administrators with techniques they might use with students. An eleven-session course was provided between October 14, 2019 and April 28, 2020. The course outline is provided for reference in Appendix A. Most sessions were provided in a group setting at the school; however, due to school closures and social distancing requirements imposed by the COVID 19 pandemic, the final 3 sessions were provided online. The course was sponsored by the Butler County Drug and Alcohol Program.

Methodology

The evaluation was conducted by an independent evaluator and was designed to assess the degree to which participants in the program increase their understanding of the concepts and practice of mindfulness as a result of the training. Additional information was also secured from the participants that can inform any future training sessions with similar groups. A pre-test – post-test design was used to collect evaluative data. Participants completed an on-line pre-test survey at the beginning of the eleven-session course and then completed the post-test survey after completion of all sessions. A Likert type scale was used to provide a quantitative measure of participant responses to statements. Eleven statements included in both the pre-test survey and post-test survey were scored on a scale from 1 to 5 with a value of 5 assigned to the most desired response and a value of 1 assigned to the least desired response. The quantification of the responses allows for both a pre-post item analysis of the change in responses as well as a statistical test¹ to determine the significance of any increase in scores observed in the post test as compared to the pre-test.

38 pre-test surveys were completed; however, only 29 post-test surveys were completed. Participant birthdates were used to match each pre-test and post-test pair to assure that the evaluation was based on the participants who completed both the pre-test and post-test. A few participants did not enter a birth date on either the pre-test or the post-test; therefore, responses from these participants were not included in the data used for the evaluation. After cleaning the data there were 27 matched pairs of pre-test and post-test data. The average number of sessions attended by these 27 participants was 9.8 or 89.1% of the total sessions provided.

The data secured through the pre-test and post-test surveys was analyzed using both quantitative and qualitative methods. In order to gain additional insight into how the course participants’ benefit from the “*Plugged Into Mindfulness*” course, information was secured from participants through the post-test survey about how the mindfulness training contributed to their personal and professional growth. This more qualitative data is discussed under the sub-heading “Additional

¹ A paired sample t-test was used to determine the level of statistical significance in the means of the pre and post test samples.

Findings”. Observations from the instructor were also obtained by the evaluator to further inform the evaluation.

Evaluation Findings

Difference in Pre-Test and Post-Test Scores

When the 27 matched pairs of pre-test and post-test scores were analyzed 26 of the 27 course participants scored higher on the post-test than they did on the pre-test. The maximum possible score on the 11 items included in the pre-test, post-test analysis is 55 (*11 items X rating score of 5*). The 27 participants who completed both the pre-test and the post-test had an average total score on the pre-test of 36.2, and these participants had an average post-test score of 45.6. Thus, on average, participants completing both the pre-test and the post-test increased their score by 9.2 points – a 25.4% increase.

There was a 25.4% increase in the average post test score of the Plugged Into Mindfulness participants when compared to the average pre-test score.

In order to confirm the statistical significance of the increase in post-test scores (i.e. difference not due to chance) and the level of such significance, a t-test was completed comparing the pre-test and post-test means. Results of the statistical analysis confirms the increase in post-test scores is significant at greater than the .001 level. The probability that the increase is due to chance is, therefore, less than one one-tenth of one percent.

The increased knowledge and self-efficacy of participants is significant at a statistical probability level exceeding 0.001.

We can be extremely confident that the “*Plugged Into Mindfulness*” course increases self-efficacy² of participants as measured by the 11 items assessed. Results of the paired two-sample statistical analysis of means is included in Appendix B.

Item Analysis and Discussion

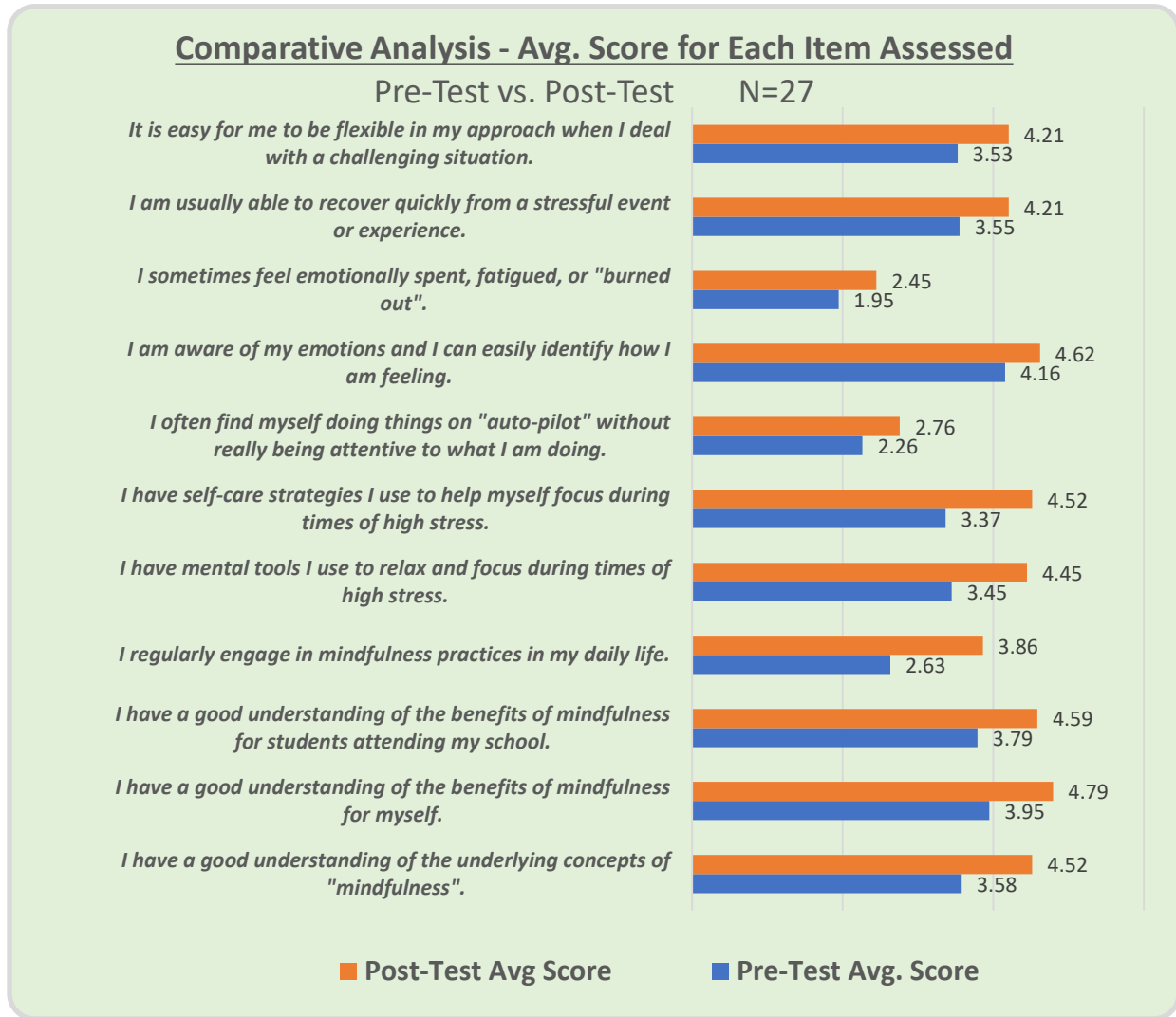
Examination of the differences in how participants rated the individual items included in the pre-post analysis provides additional information about which items are more or less impacted by the mindfulness training.

One measure of change is the increase in average raw score on the post-test as compared to the pre-test. When the average raw score of the 27 participants included in the evaluation on the pre-test is compared to the average raw score on the post test for each of the 11 items assessed, the positive change in responses to each statement is apparent. There was an increase in the average raw score of the course participants for all 11 items assessed.

² For purposes of the evaluation “participant self-efficacy” is defined as the extent participants believe mindfulness concepts and practices improve their well-being and ability to effectively manage life and work situations.

Chart 1 summarizes the increase in the average raw score for each test item.

Chart 1



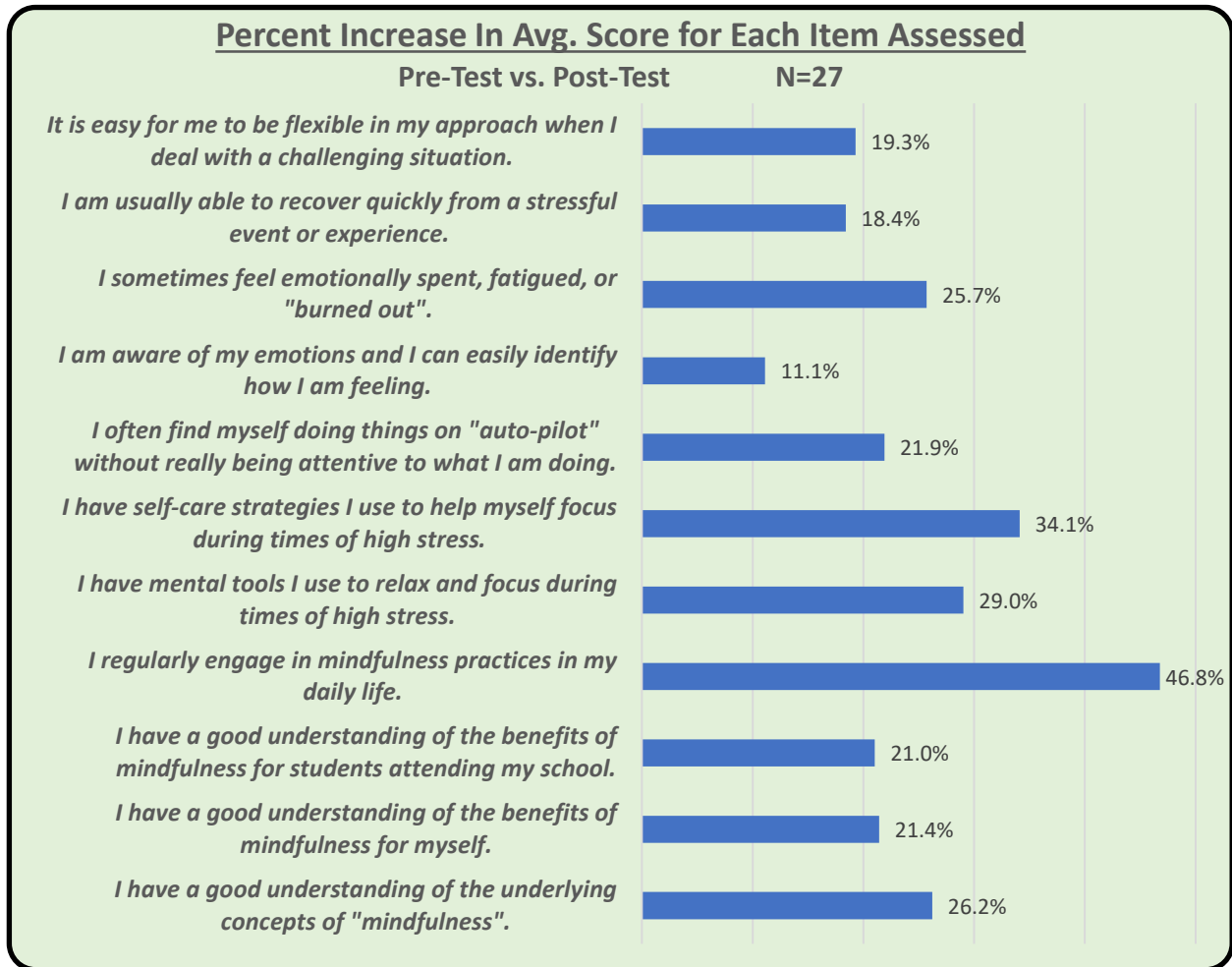
The extent to which participants in the “*Plugged Into Mindfulness*” training increase their raw score on the post-test as compared to the pre-test is determined in part by the degree to which they are familiar with and practice mindfulness techniques prior to participating in the eleven session course. When the pre-test rating is relatively high for a test item there is less opportunity to increase that rating (raw score) on the post-test. Given this, the percentage of increase (difference in pre-test and post-test score divided by pre-test score) is the best metric to assess change in each of the test items included in the assessment. This metric is more informative than the actual increase in the raw score of the post-test over the pre-test.

The percentage increase in raw score ranged from 11.1% to 46.8% (see chart 3). The most notable increases were observed in items related to practicing techniques taught through the *PIM* training. A 46.8% increase was observed in how participants scored the statement “*I personally engage in mindfulness practices in my daily life*”. The participants also were more likely to agree with the

statement: “*I have self-care strategies I use to help myself focus during times of high stress*” and “*I have mental tools I use to relax and focus during times of high stress*”.

A summary of the percent change in raw score is provided below (Chart 2) for each of the 11 test items.

Chart 2



Additional Findings from the Pre and Post Surveys

Participants in the *PIM* training were asked to what extent they agreed with several statements prior to beginning the training that were designed to assess their attitudes about the training and readiness to engage in the *PIM* sessions. These statements included:

- I believe mindfulness training will help me be more effective in my job.
- I believe mindfulness training will be helpful to me in my personal life.
- I believe mindfulness training will help me to better manage day-to-day stress.
- I am looking forward to participating in the mindfulness training we are about to embark upon.

All participants either agreed or strongly agreed with each of these statements indicating a strong belief among the educators participating that the training would be beneficial to them and that they were looking forward to the *PIM* sessions.

Chart 3

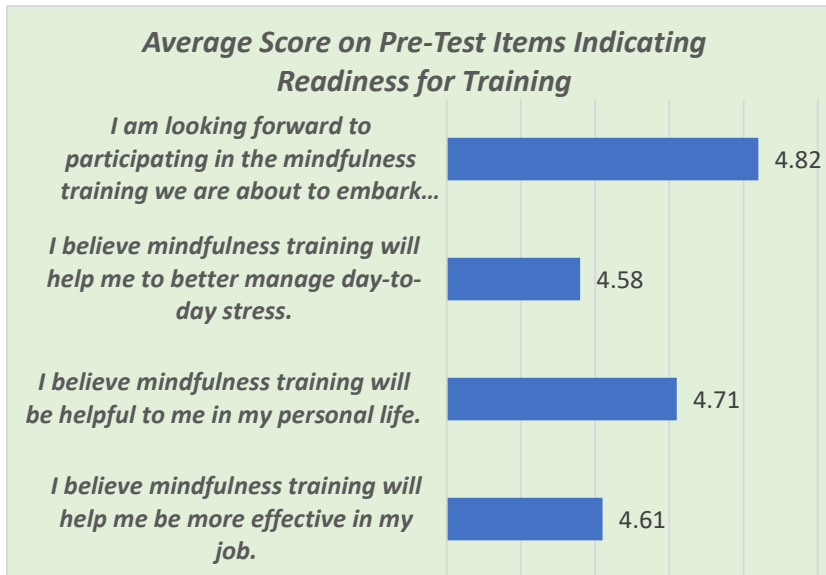


Chart 3 summarizes the average score for all participants completing the pre-test survey for each of the 4 statements.

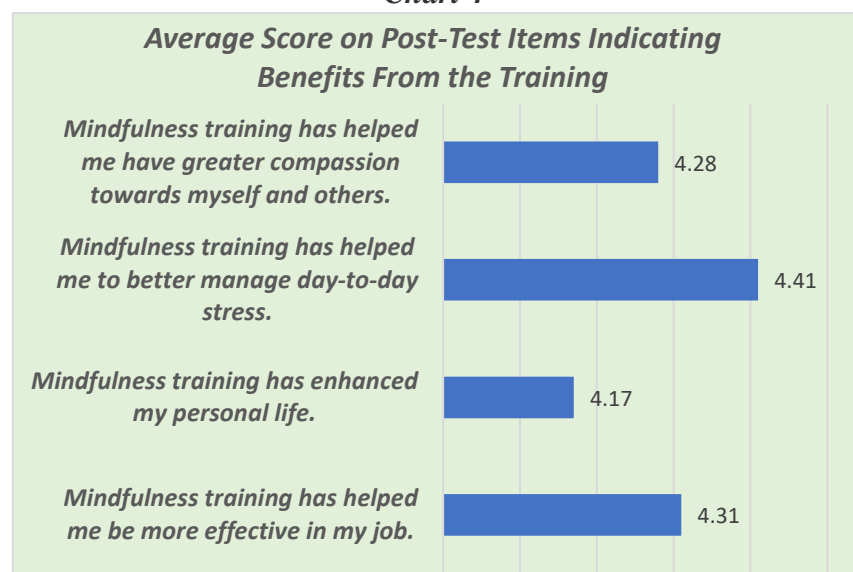
At the conclusion of the mindfulness training course, the education professionals who participated in the *PIM* training were asked to rate their level agreement with statements about how the training sessions had benefitted them and how they

thought the training would impact their personal and professional life.

- Mindfulness training has helped me be more effective in my job.
- Mindfulness training has enhanced my personal life.
- Mindfulness training has helped me to better manage day-to-day stress.
- Mindfulness training has helped me have greater compassion towards myself and others.

Chart 4

Chart 4 summarizes the average score for all participants completing the post-test survey for each statement related to perceived benefits from the training provided. Nearly all participants agreed or strongly agreed with these statements after the training sessions had been completed.

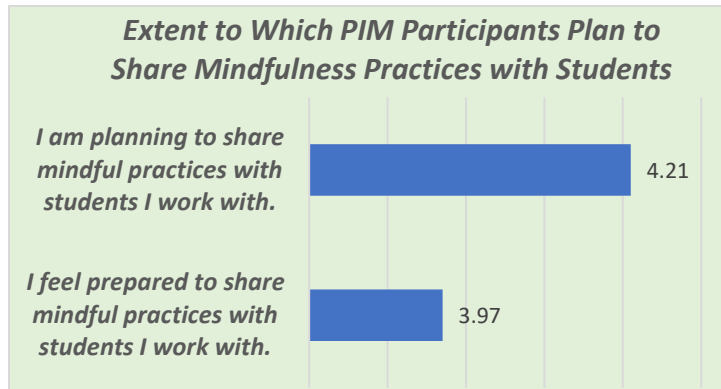


The post-test survey also included statements to assess how prepared the education professionals were to share what they had learned with their students. These statements included:

- I feel prepared to share mindful practices with students I work with.

- I am planning to share mindful practices with students I work with.

Chart 5



Seven (7) of the education professionals strongly agreed that they felt prepared to share mindful practices with their students and an additional 17 agreed with the statement. Thus, 82.8% of the 29 people completing the post-test survey indicated they felt prepared to some degree to share what they had learned with students.

Participants were also asked if they had any suggestions about how the mindfulness training might be improved in the future. These comments are listed verbatim in Appendix C.

Observations of the Instructor

The course instructor was asked to provide her observations about the course – specifically what went well with the PIM sessions and what challenges or problems may have been encountered.

The following points were identified by the instructor:

- Verbal feedback from course participants indicated people enjoyed the discussions during the face-to-face sessions.
- Sharing within the group helped the educators to better understand they had similar experiences related to stress and struggling to focus.
- The instructor received positive feedback about the book participants read during the training and using the manual as a resource.
- There was some reluctance to share in person among the group and the instructor requested that course participants e-mail her their thoughts and experiences with the training.
- Several course participants indicated (through e-mail) they were reluctant to share their feelings in the group for fear that they would be judged by others.
- When the last few sessions were moved online because of the pandemic, attendance declined somewhat.
- The content of the online sessions shifted more toward ways to handle the very stressful circumstances related to school closure and online instruction.
- There was less emphasis on ways to teach and lead students in mindfulness practices than was desirable since those issues would normally have been focused on during the final few sessions that were moved online.

Conclusions

- ✓ The *Plugged Into Mindfulness* training appears to be most effective in:
 - Increasing the regular practice of mindfulness techniques, and
 - Increasing participant understanding of benefits of mindful practices and the underlying concepts discussed.
- ✓ The *PIM* training sessions improve participants' ability to engage in the regular practice of mindfulness techniques.
- ✓ Participant self-efficacy related to belief in one's ability to enhance personal well-being and effectively manage stress experienced in life and work situations is improved through the training.
- ✓ The effectiveness of the training is confirmed through a statistical analysis of pre-post scores.
- ✓ The course participants believe the training has helped them have greater compassion toward themselves and others and they believe the training will help them be "more effective" in their job and personal life.
- ✓ There appears to be a positive impact as measured by the difference in pre-test and post-test scores related to reduced feelings of fatigue or "burnout", self-awareness of emotions/feelings, ability to recover from stressful events, and flexibility in dealing with challenging situations; although, the change in these areas is somewhat less than in areas related to understanding benefits and practicing mindfulness techniques.
- ✓ Most participants in the training report they have some level of comfort related to sharing mindful practices with students.
- ✓ Nearly all participants plan to share mindfulness concepts and practices with students,

Appendix A – Plugged Into Mindfulness Course Outline

Session 1

- Intro to Mindfulness
- Science/Neuroscience behind mindfulness practices
- Introduction to breathing practices for managing stress
- Difference between breath awareness and breathing techniques
- Deep breathing; 4:8 breath, with sound and without
- For next class, read through Mindfulness Theory section in manual and p. 47 in Kabat-Zinn; home practice homework

Session 2

- Mindfulness Theory - acceptance & non-attachment
- Body Scan
- Internal Awareness
- Discuss readings; For next class, read in Kabat-Zinn to p. 80

Session 3

- How mindfulness can help ease pain and suffering
- Direct experience and reaction chain
- Discuss Flow activities and informal practice
- SOBER breathing space
- Walking Mindfulness Meditation
- Discuss readings; for next class, read in Kabat-Zinn to p. 126

Session 4

- Internal Awareness & Planes of Contact practice
- Revisiting the practice of acceptance and non-attachment in life as mindfulness
- Positive thought practice
- Discuss readings; for next class, read in Kabat-Zinn to p. 169

Session 5

- Mountain Meditation
- Lake Meditation
- Loving Kindness meditation
- How do these help you cope with challenge?
- Discuss readings; for next class, read in Kabat-Zinn to p. 216

Session 6

- Informal Practice: reporting on home/daily practice
- Obstacles of seated practice
- Breath - movement practice
- Discuss readings; for next class, read in Kabat-Zinn to p. 270

Session 7

- Discussion of self-care practices other than mindfulness
- Mindful yoga movements
- Breath awareness
- Discuss readings; make sure you've read up through The Importance of Your Practice in manual

Session 8

- Breathwork practices
- Square, alternate nostril
- Breath awareness practice
- Internal Awareness / Planes of Contact
- Troubleshooting

Session 9

- Basics of sharing mindfulness
- SOBER breathing
- Acceptance / Non-attachment
- Practice Share time
- Read research and articles Joni emails

Session 10

- Mindfulness for Recovery outline
- Troubleshooting
- Practice Share time
- Oral Quiz on mindfulness, research, breath, science

Session 11

- Body Scan
- Practice Share time
- Q&A
- Post-Survey

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Appendix B – Statistical Test Paired Two Sample for Means

Participant	Pre-test	Post-test	t-Test: Paired Two Sample for Means		
1	30.03	41.03	alpha =.001		
2	38.00	40.04			
3	24.97	40.04			
4	24.97	37.95			
5	39.05	37.95			
6	37.95	44.00			
7	25.96	48.95			
8	39.05	44.99			
9	35.97	42.02			
10	36.96	42.02			
11	36.96	48.95			
12	44.99	50.05			
13	33.99	45.98			
14	36.96	44.99			
15	40.04	44.99			
16	32.00	37.95			
17	31.02	50.05			
18	39.05	44.00			
19	31.02	43.01			
20	39.05	48.95			
21	31.02	43.01			
22	37.95	42.02			
23	42.02	51.04			
24	40.04	44.99			
25	39.05	46.97			
26	20.02	47.96			
27	43.01	48.95			
				<i>Pre-test</i>	<i>Post-test</i>
			Mean	35.22592593	44.55
			Variance	37.4274943	15.7179
			Observations	27	27
			Pearson Correlation	0.264631116	
			Hypothesized Mean Difference	0	
			df	26	
			t Stat	-7.631147501	
			P(T<=t) one-tail	0.0000000212	
			t Critical one-tail	3.434997182	
			P(T<=t) two-tail	0.0000000424	
			t Critical two-tail	3.706611743	
			Reject null hypothesis of no difference in the paired sample.		
			Gain in scores is statistically significant at greater than 0.001 level.		

Appendix C – Open Ended Comments

- Joni is great! I need to stay on top of my practices more, and hope to do so in the future!
- Smaller groups
- More specific strategies for use in the classroom.
- none it was fantastic
- Great job I enjoyed it.
- None. It was always worthwhile; complete and whole. Insight and illumination was always presented to us.
- This was wonderful! Thank you, Joni!
- I know we were cut short because of COVID - but more practice sessions with our colleagues. I would have also liked to know the process of how to make my own mindfulness video to share with my classes.
- There was a lot of reading for initial sessions that was overwhelming. Maybe easing into that would help more people jump into the book. I enjoyed the sessions and I do feel like I have grown from it.
- Joni did a great job presenting. Even though we had no idea that the Covid-19 would be affecting us as it has, the Mindfulness Training has been extremely helpful to share with students and families.