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Leading a Mindful Classroom: A Study on Increasing Student Understanding of Literature

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Leading a Mindful Classroom:
A Study on Increasing Student Understanding of Literature

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Abstract

In this study, the researcher utilized a mindfulness-based technique of silent reflection and guided thinking in order to see how mindfulness could affect students' responses to literature and students' behavior as part of the learning environment. Before taking part in the class routine of journal writing, students were asked to simply think and reflect on the topic to gather their thoughts before attempting to write their responses as well as potentially calm them down from the chaos of a high school hallway. This study was inspired by recent studies in the field of mindfulness that suggest that it can increase concentration, focus, empathy, and reduce stress (Carboni, 2012; Noggle, et al., 2012; Rosenthal, Grosswald, Ross, & N. Rosenthal, 2011; Van de Weijer-Bergsma, Formsma, De Bruin, & Bogels, 2011). This study adds to the growing field of research concerning mindfulness in the classroom, specifically the calming and focusing benefits that potentially help students gain a deeper understanding of literature as well as create an environment conducive to learning.

Leading a Mindful Classroom:**A Study on Increasing Student Understanding of Literature**

The day of the project presentation is here. The room is full of friends, acquaintances, the teacher, and even rivals. The poster is done; the notecards are in order, but they are held in shaking, sweaty hands. The name of this unpleasant sensation is anxiety, and students all over the world experience it on a regular basis with tests, presentations, and even simply trying to complete class work. The cause of the physical sensation associated with it is stress. The human body cannot tell the difference between the stress caused by giving a speech or the stress caused by being chased by a tiger (Hason & Mendius, 2009). That being said, the human mind can tell the difference, and it can help the body understand the difference through a technique called mindfulness.

Bhante¹ Gunaratana (2011) states that mindfulness may be a difficult concept for many people to grasp because it is pre-symbolic, meaning that it is a word not already shackled to schema that humans are used to. However, he continues that this does not mean people can not easily understand mindfulness if they tried. Bhante Gunaratana (2011) says simply, "Mindfulness is present-moment awareness... Mindfulness is watching things moment by moment, continuously. It is observing all phenomenon — physical, mental, or emotional..." without judgement of whether or not it is good or bad (p. 135). While mindfulness does originally stem from the Buddhist faith, the general concept and practice of mindfulness has evolved beyond reliance on any particular religion into a way of living. The purpose is for the practitioner to notice everything from washing, eating, walking, to breathing. One particular form of practice,

¹ Bante is a Pali title given to ordained Theravada Buddhist monks.

both religious and secular, is meditation. The word meditation, unlike the word mindfulness, has a strong schema attached to it. Bhante Gunaratana (2011) knows this as well and dedicates a chapter of his book to what meditation is not, saying “We are not going to teach you ... to chant secret syllables. You are not conquering demons or harnessing invisible energies... you don't have to shave your head” (p. 11). Mindfulness does not have to be an alien idea native only to a far away land. Instead it can be a technique which anyone can learn and potentially benefit from. Knowing what mindfulness is, and is not, helps to eventually prove why it is a useful tool worth researching.

Neurologically speaking, the human body is very susceptible to stress and anxiety in a particularly negative way. One way is that when experiencing stress, the adrenal glands produce the neurochemical cortisol which stimulates the amygdala and inhibits the functions of the hippocampus (Hanson & Mendius, 2009). The amygdala's function is to alert us to dangers and triggers fight-or-flight feelings and reactions (Hanson & Mendius, 2009). While the body is being alerted to the possible danger the stressful situation could cause, the hippocampus has begun to record the memory of why the body is being stressed for future reference (Hanson & Mendius, 2009). What this means is that we are more likely to remember the stressful situation than any resolution we find to the situation or benefit that comes from it. This also means that the human brain is predisposed to remember negative events and feelings over positive ones. According to one study, when lottery winners were compared to accident victims, the accident victims took considerably longer to return to their recorded baseline level

of happiness (Brickman, Coates, & Janoff-Bulman, 1978; Hanson & Mendius, 2009).

However, recent researchers suggests that mindfulness can intervene.

For example, if mindfulness can be implemented in the classroom, perhaps even if students have an unfortunate experience at school or because of school work, they will not focus solely on the fact that it was upsetting. Instead, they can become more aware of themselves and the situations around them for a healthier and more beneficial learning experience. While initially this self awareness could show a short-term increase in reporting stress, in the long-term they could identify causes and monitor their own behavior (Hanson & Mendius, 2009). Mindfulness also has the potential to teach students skills that might help them learn more deeply, such as empathy, allowing them to connect more deeply to literature and their peers for better understanding and a safer class environment. Another potential benefit here is that by calming the mind, it can help one concentrate, which is particularly important for students already diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD), or those who go through their lives undiagnosed and frustrated because they cannot seem to “think” as well as their peers. While there are medications available, there are also schemas against that, especially among their peer groups. While not all students suffer from ADD and ADHD, attention is something everyone struggles with sometimes, and giving them the tools they need to help them concentrate on school and do the best they can is a very appealing concept. In order to guide the research into this chasm of problems, I asked the research question, “How can a mindfulness class routine affect students’ responses to literature and students’ behavior as part of the learning environment?”

Literature Review

Research Methods

This literature review section has a broad scope of literature on the topic of mindfulness and its various uses in order to fully understand the concept well enough to apply it in a new setting. While it has been used in secondary classrooms before (Carboni, 2012; Hill, 2014; Noggle, et al. 2012; Van de Weijer-Bersma, et al., 2011), it has not truly been applied in an English classroom for the same purpose of this study. A number of databases were used in researching mindfulness in an educationally related setting such as: Academic Search Complete, Google Scholar, PsycINFO, Education Full Text, and JSTOR. However, due to the limited resources on the topic and the psychological nature of the intervention, only PsycINFO and Google Scholar were of much assistance. While research was conducted in the 1970s and 1980s (Brickman, Coates, & Janoff-Bulman, 1978; Parker, & Asher, 1987), the revival of research done on mindfulness is so recent that this review only focuses on studies done within the last five years (2009-2014) to maintain as much modern potential implementation as possible. There are a few exceptions, and these studies are necessary to understand the milestones of the field. Another advantage to working with current studies is the increase of feasibility studies which address participant acceptance or unwillingness to incorporate mindfulness practices into their schedule (Burke, 2009). Words used in searches included “Mindfulness,” “Schools,” “Secondary,” “Education,” “ADHD,” “Intervention,” “Meditation,” “Yoga,” “Body-scans,” “Curriculum,” “Study,” “Stress,” “Teacher(s),” “Adolescents,” and “Teenage.” These terms were used in varying combinations which each yielded different, and sometimes

no, results. The combination that seemed to work best was “Mindfulness AND Education,” and “Mindfulness AND ADHD.” Due to readjustments to the action research, the search terms “Mindfulness AND writing” as well as terms such as “Mindfulness AND reflect AND writing” were added to searches. However, combining too many of the terms would become too specific and often lead to no results. The following review has been organized according to the context mindfulness is studied in.

History of Mindfulness Measures

Mindfulness as an area of research is relatively new. Although there have been periods of interest in the different forms of mindfulness, including the Transcendental Meditation movement in the 1970s and 1980s, mindfulness as defined for the purposes of this study, meaning within the context of education, has only been studied heavily in the last five to ten years. In these studies, a number of self-report measures were used in order to collect data on mindfulness. As of 2013, there have been at least eight different self-reporting mindfulness measures in many different studies (Bergomi, Tschacher, & Kupper, 2013; Brown, West, Loverich, & Biegel, 2011; Burke, 2009; Carboni, 2012; Noggle, Steiner, Minami, & Khalsa, 2012; Rosenthal, Grosswald, Ross, & N. Rosenthal, 2011; Van de Weijer-Bergsma, Formsma, De Bruin, & Bogels, 2011).

The most common measures used in studies within this review are the Mindfulness-Based Stress Reduction (MBSR), the Mindfulness-Based Cognitive Therapy (MBCT), and the Mindful Attention Awareness Scale (MAAS) (Brown, West, Loverich, & Biegel, 2011; Burke, 2009). Additionally, most research in regards to mindfulness was conducted on adults and children, usually in a clinical setting. One of the more used interventions, MBSR, was developed in the late 1970s as an eight-week

intervention to treat individuals with chronic conditions such as pain (Burke, 2009). The MBSR was later changed into the MBCT in order to prevent the relapse of adults treated (Burke, 2009). Even though there was a small shift from MBSR to MBCT, MBSR is still widely used because of the positive results reported by Jon Kabat-Zinn, author of *Full Catastrophe Living* (2013), and the detailed curriculum of the intervention making the process easily repeatable for future researchers. Both of these styles of intervention are reliant on weekly practices including meditation, body scans, or yoga and are mostly based in secularized clinical research.

MAAS differs from the other two intervention styles discussed by being based more so in the historical and contemporary aspects of the Buddhist faith as well as in clinical science (Brown, et al., 2011; Van der Oord, Bo gels, & Peijnenburg, 2011). One study conducted by Brown, et al. (2011), modified the MAAS into the Mindful Attention Awareness Scale — Adolescents (MAAS-A). The researchers of this particular study found that while MAAS and other self-reporting strategies had been created and used with adults for many years, there was not a measure used specifically for adolescents. To create MAAS-A, the researchers changed MAAS from its original format because it included questions which the researchers felt would not apply to or be appropriate to ask adolescents about due to age restrictions such as ones pertaining to alcohol, smoking, or driving (Brown, et al., 2011). One draw-back of using MAAS-A as opposed to MBSR is that MAAS-A often studies mindfulness in the context of the Buddhist religion, which may not be as acceptable to use in a public school setting. However, this does not necessarily have to be the case as mindfulness, as a concept, is secular.

Of course, there are a number of limitations in regards to using self-reporting scales for a measuring system. Because there are so many different scales to choose from, and sometimes studies use multiple scales, it makes the comparison of data between studies much more difficult (Bergomi, et al. 2013). Also, while the scales are designed with validity and reliability in mind, it is impossible to guarantee the data is completely accurate due to the fact that the participants are reporting their own feelings as they see them, which may change moment to moment. This is especially true in situations where a participant may feel guilty for not completing the intervention as originally intended, or not continuing a practice in a follow-up interview (Nidich, Rainforth, Haaga, Hagelin, Salerno, Travis, Tanner, Gaylord-King, Grosswald, Schneider, 2009). However, when dealing with an intervention intended to emotionally assist an individual in any particular way, some variance must be expected. Due to the nature of mindfulness and its foundation in self-reflection and self-monitoring, self-reporting measures and interviews remain absolutely vital as the researcher cannot tell the participants what they are feeling.

A final measure used in a relaxation study is the Measure of Current Status (MOCS) which measured participants' perceived ability to relax (Phillips, Antoni, Lechner, Blomberg, Llabre, Avisar, Gluck, Dergagopian, & Carver, 2008). While the MOCS is important for understanding the participants perspective, these researchers were also able to back up their findings using medical research by measuring levels of cortisol in participants' blood and saliva (Phillips, et al., 2008). The cognitive-behavioral stress management (CBSM) intervention randomly assigned 128 female breast cancer patients to either the CBSM intervention or another single seminar (Phillips, et al.,

2008). Each session consisted of both stress management techniques such as cognitive restructuring, social support, anger management, and coping skills training, as well as relaxation training which involved meditation, deep breathing, and guided imagery (Phillips, et al., 2008). This study also utilized the collection of cortisol in order to determine the effects of the intervention on the participants (Phillips, et al., 2008). Cortisol naturally fluctuates throughout the day with levels decreasing at night, so the researchers chose to measure levels of the neurochemical in the late afternoon for consistency. Phillips, et al. (2008) found that the women in the intervention group showed a small but significant decrease in afternoon cortisol levels over time while the women in the control group showed no change. The researchers were able to find a correlation between the MOCS and the cortisol levels of the participants suggesting that the CBSM intervention had a beneficial impact on the participants.

Student Stress and Concentration

According to the studies cited in Arsenio and Loria's study (2013), research over the past couple of decades has shown that children prone to negative emotional tendencies along with underdevelopment of emotional knowledge increases peer rejection and makes them less competent with interactions. This is particularly important because the academic implication of these issues is that students are two and a half times more likely to drop out of high school when compared to their non-rejected peers (Parker & Asher, 1987). However, that drop out rate of Parker and Asher's (1987) study is looked at as separate from the emotional confidence of students and how that changes their academic outcome; Arsenio and Loria (2013) sought to fill this gap. They wanted to look at students' emotional coping strategies in

the context of academic performance and stress. Parker and Asher (2013) categorized the coping strategies of middle school students into three overarching groups: primary, which involved problem solving and self-regulation; secondary, which involved acceptance and distraction; and disengagement, which involved denial. One-hundred nineteen students, primarily European American with household incomes just over \$200,000.00, between ninth and twelfth grade, participated in the study (Arsenio & Loria, 2013). While the study found that academic stress was not directly correlated with the students' GPAs, they did find that higher levels of academic stress had more negative moods overall (Arsenio & Loria, 2013). Arsenio and Loria (2013) also found a correlation in that students with more negative academics were much more likely to be using the disengagement coping strategies, such as denial of responsibility, while experiencing high levels of academic stress. While this study has a small sample size which lacks diversity in race and Socio-Economic Status (SES), the finds still imply that a student's mental and emotional state directly influences their academic performance.

The age of which most adults who suffer from mental illness began to develop their symptoms is in their childhood and adolescence. Roughly 7.5% of adolescents meet DSM-IV-TR criteria for one or more mental health conditions with stress being identified as one of the leading causes (Noggle, Steiner, Minami, & Khalsa, 2012). The "view of psychosocial stress centers upon an individual's cognitive appraisal of internal and external events as stressful, from which coping responses may follow" (Noggle et al., p. 193, 2012). Some of the more common coping mechanisms include deep breathing, yoga, body scans, and tai chi, with yoga and deep breathing being the most commonly used with children (Noggle, et al., 2012). While these techniques have been

identified by many researchers as likely highly effective (Carboni, 2012; Noggle, et al., 2012; Rosenthal, Grosswald, Ross, & N. Rosenthal, 2011; Van de Weijer-Bergsma, Formsma, De Bruin, & Bogels, 2011), a large amount of helpful research in the field is still difficult to locate, especially in regards to education.

Previous Studies on Mindfulness

Current literature suggests the negative cycle of stress and stress hormone production can potentially be stopped simply by paying attention to the moment at hand through mindfulness training. One way this can help is by activating the parasympathetic nervous system (PNS) for “rest-and-digest” (Hanson & Mendius, 2009, p. 62). Various techniques that activate the PNS include mindfulness practices such as meditation, deep breathing, quiet reflection, body scans, and yoga. The PNS is the system also responsible for feelings of caring towards children and empathy of others (Hanson & Mendius, 2009). So, while mindfulness practices can help remove one’s self from the negative cycle of stress for personal benefit, it is also beneficial for those around the practitioner as he or she becomes more caring and empathetic.

Mindfulness and stress. Rosenthal, Grosswald, Ross, and N. Rosenthal (2011) conducted a pilot study to see if using transcendental meditation (TM) would be an effective technique in treating veterans with post-traumatic stress disorder (PTSD). This technique was originally tested in a small, controlled study on Vietnam veterans with promising results, so this study focused on veterans of the Operation Enduring Freedom and Operation Iraqi Freedom to see if TM would be effective on modern veterans as well (Rosenthal, et al., 2011). The sample size was extremely small, with only five subjects completing the eight week intervention course. According to the

results in the study, one participant relapsed after stopping a medication he was on though he still showed some improvement. The other four participants improved by having less PTSD symptoms with an average change score in CAPS of 31.4 (Rosenthal, et al., 2011). Subjects were then checked at week 12 to see if they were continuing the TM practice. While no further measures were taken, all five participants reported that they were continuing bi-weekly meditations.

One study conducted in 2008 found promising results with a TM intervention focusing on 50 college students randomly assigned to intervention or wait-list (Travis, Haaga, Hagelin, Tanner, Nidich, Gaylord-King, Grosswald, Rainforth, & Schneider). Similar to the study conducted on the veterans, following the intervention, the researchers found a decrease in many areas measured including sleeplessness, stress, and no new habituations (Travis, et al., 2008). In comparison, all of these elements seemed to increase in the control group. In the following year, many of the same researchers looked at TM in relation to college students again, but this time focusing on physical ailments, like high blood pressure, caused by psychological distress. This randomized study was much larger with 298 university students randomly assigned to either TM intervention or wait-list control and were assessed at the end of the three month trial (Nidich, et al., 2009). The demographics of the study were uneven with 62% of participants identifying as Caucasian, and only 40% were male (Nidich, et al., 2009). The results of this study also showed an improvement on stress-based variables using the TM meditation technique. The average change in blood pressure was a decrease of -2.0 mm Hg versus an increase of +4.0 mm Hg for the control group (Nidich, et al., 2009). Both of these studies suggest that TM, and

possibly other forms of meditational practices, are potentially beneficial when used with adults.

Mindfulness and concentration. One somewhat obvious choice for study dealing with mindfulness, possibly because of its base definition relating to paying attention to the present moment, is on the effects of mindfulness intervention on children with Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD). Some patients and guardians seek out alternative treatments to medication due to the many side effects and stigmas associated with “taking meds.” Three recent studies focused on school-aged children diagnosed with ADHD (Carboni, 2012; Van der Oord, Bogels, & Peijnenburg’s, 2012; Van de Weijer-Bergsma, Formsma, De Bruin, & Bogels, 2011). These studies had very small sample sizes with the largest being 11 children and 22 parents. The first of these studies, conducted in 2011, focused on these 10 children aged 11-15, their parents, and their educators (Van de Weijer-Bergsma, et al., 2011). Van de Weijer-Bergsma, et al., (2011) offered mindfulness training to the adolescents with ADHD as well as a separate session on mindful parenting to 19 of their parents. Information regarding the children’s behavior was then reported by the parents and educators with a spike in improvement once the parents were given training as well (Van de Weijer-Bergsma, et al., 2011).

Another study conducted in 2012 found similar results as Van de Weijer-Bergsma, et al. Van der Oord, Bogels, and Peijnenburg’s (2012) study differed in that it focused children who were at high risk hereditary ADHD and their parents, but they found a similar result. When the parents were given training in mindfulness parenting, which involved them learning to be “(1) deliberately and fully present in the

here and now with their child in a non-judgmental way; (2) take care of themselves...; (3) accept[ing of] difficulties of their child; and (4) answer rather than react ... behavior of their child,” suddenly the children would show more improvement as well (Van der Oord, et al., 2012, p. 142). While some of the measurements were inconclusive, the findings still suggest that parental support is paramount to the success of mindfulness in helping students in regards to behavior and concentration. Carboni (2012) focused on four eight-year-old male children who were diagnosed with ADHD and were attending school in a general education classroom. This study relied on teacher and parent ratings of the child’s behavior. Due to the students’ young age, the intervention was modified from one 45-90 minute MBSR training session once a week to two 30-45 minute MBSR training sessions a week (Carboni, 2012). Carboni (2012) found that with the MBSR training, the participants’ average percent of on task behaviors increased from 40% to 60%. While each of the four participants reacted differently to the intervention, all showed some improvement leading the researcher to believe that the intervention was successful (Carboni, 2012).

Mindfulness in the classroom. Due to its religious origins, many people shy away from implementing mindfulness into the public classroom. However, the majority of the previously mentioned studies managed to implement a secularized form as an intervention which they proved to be, potentially, very beneficial. With this in mind, some researchers, unfortunately not very many, have already taken mindfulness into the classroom to view its benefits on secondary aged children in an educational context. Two particular studies attempted this on a large scale. Both of these studies did receive some resistance from their respective participant schools when requesting

information that could help make even more impact with the data received, such as attendance. One study looked at three 11 and 12 grade physical education (PE) classes with two classes participating in yoga sessions (Noggle, et al., 2012). The students were randomly assigned to the yoga classes or the other standard PE class. The yoga PE classes attended two to three yoga sessions a week with each taking up one class period for 10 weeks. The results seemed positive with a decrease in students' perceived stress as well as other positive growths in anxiety, depression, hostility, and vigor (Noggle, et al., 2012). However, the exact impact of the study is somewhat inconclusive due to the researchers' inability to gain certain information from the school in order to determine which students were present or how many sessions each student missed (Noggle, et al. 2012).

Another study conducted in the United Kingdom sought to study mindfulness on a large scale focusing on a total of 522 secondary school children aged 12 to 16-years-old (Kuyken, Weare, Ukoumunne, Vicary, Motton, Burnett, Cullen, Hennelly, & Huppert, 2013). Unlike Noggle, et al.'s (2012) study, Kuyken, et al. (2013) were attempting to prove whether or not mindfulness could be effectively implemented across an entire school. They found the results to be promising with a decrease in stress and depressive symptoms of the students immediately after treatment (0.004), and a further decrease (0.05) at the follow up (Kuyken, et al., 2013). In this study, mindfulness was offered in place of religious studies, electives, and health education with some of the students participating in the control group (Kuyken, et al., 2013). Unfortunately, because this study was conducted in the UK, the researchers used yet another measurement scale, the Warwick-Edinburgh Mental Well-being Scale and the

Perceived Stress Scale, making data comparison even more difficult (Kuyken, et al., 2013). However, due to the enormous sample size, this study is very important in that it helps to see the potential in implementing mindfulness on a large, academic scale.

Mindfulness as a teaching technique. A graduate student from the University of Mary Washington was able to apply mindfulness to her own student teaching action research. As part of the class of 2014, Erin Hill applied the teaching practice of Guided Visualization (GV), a technique based in the purposeful attention aspect of the mindfulness practice. Hill researched the effects of GV on student perception of their learning and retention of the content while student teaching in a secondary World Geography classroom (2014). This research relied heavily on quantitative means of measurement utilizing pre and posttests as well as Likert scales for feedback on the teaching technique itself (Hill, 2014). While the results on the pre and posttests appear to be fairly inconclusive, there is a lot of potential the researcher was able to uncover; also, the sample size was much smaller compared to the other studies which were conducted within a classroom — one with 522 students (Kuyken, et al., 2013), and the other with 51 students (Noggle, et al., 2012). This was partly due to constraints of the program which resulted in 29 participants, potentially influencing the data as well (Hill, 2014). The students who had the GV technique reported that most of them felt that they were comfortable during the activity, many reported feeling like GV helped them remember content, almost 70% reported feeling more focused on the content, and 86% either agreed or strongly agreed that GV was a welcome change from the standard class activities (Hill, 2014). As a result of Hill's (2014) study, it can be determined that the mindfulness teaching technique helped change their view of themselves as learners

in a beneficial way. Another way a mindfulness based teaching technique could benefit students is to help with increasing their empathy for their peers creating a more secure learning environment. While so studies can be found on this topic specifically, some researchers have begun to theorize the potential for using mindfulness in an educational setting in order to increase empathy.

Empathy is an important skill for children to develop socially (Arsenio & Loria, 2013; Parker & Asher, 1987), but it could also be useful for them when applied in the academic setting. Mindful writing has been discussed for use in the medical classroom to increase empathy in future physicians. According to the researchers, the medical profession is already a heavily reflective field, so implementing reflective writing should not be an issue (Shapiro, Kasman, & Shafer, 2006). More importantly, they think that the writing, which allows the students to acknowledge vulnerabilities, find their voice, and share emotions that they would not ordinarily be able to (Shapiro et al., 2006). Also, allowing the students to share their journals in a group setting could potentially help them with risk taking, and witnessing in a respectful, attentive, non-judgmental way, which they refer to as mindfulness (Shapiro et al., 2006). While these researchers have theorized this change in pedagogy in order to prevent the shift into cynicism for many primary care physicians in training, there could be a use for this kind of writing in other forms of education as well, such as the English classroom. It is not uncommon for some students to complain about literature in the English classroom saying it is “boring” or “dumb,” but perhaps by creating an empathetic connection to the characters of the work, students will be more open to the literature, allowing them to engage more and deepen their understanding.

Summary and Potential for Future Research

While mindfulness is a recently more active field of research, many of the studies are still limited and much of the research conducted has been on adults and young children. There is an evident lack of research in the mindfulness field in regards to secondary school aged children. studies on mindfulness have shown that the techniques can lower PTSD symptoms in war veterans and blood pressure in at-risk college students (Nidich, et al., 2009; Rosenthal, et al., 2011). Mindfulness interventions have also helped young children suffering from ADD and ADHD with concentrating and maintaining on-task behaviors (Carboni, 2012; Van der Oord, et al., 2012; Van de Weijer-Bergsma, et al., 2011) Due to its religious origins, many people still shy away from implementing mindfulness into the public classroom. However, the majority of the previously mentioned studies managed to implement a secularized form as an intervention, which they showed to be beneficial. With this in mind, some researchers have already taken mindfulness into the classroom to view its benefits on secondary aged children in an educational context. However, this research is much more sparse. These researchers have found that yoga (Noggle, et al., 2012) as well as body scans, meditation, and GV (Hill, 2014; Kuyken, et al., 2013) are beneficial to students in regards to stress and concentration. However, implementing these kinds of interventions is more difficult due to the time constraints of a public classroom.

That being acknowledged, there is a lack of research dealing with mindfulness in the classroom setting despite some public schools implementing mindfulness-based programs across the United States. This is an issue that needs to be rectified due to the effects that stress can have on students' success both socially — in a time when

finding individual identity is at its peak — and academically (Arsenio & Loria, 2013; Parker & Asher, 1987). Two studies found that parents seemed to report seeing more change in the children's attentiveness and behavior than teachers did (Carboni, 2012; Van de Weijer-Bersma, et al., 2011). This raises the question of why this seems to be the case. Either the teachers cannot identify changes as easily, or perhaps the children are less mindful about implementing their training while around peers at school. A researcher's journal has been added to the methods of this study because of these ideas in order to assist in finding an answer.

Methods

In order to understand the effects of mindfulness on the secondary student, I conducted the following study. The guiding question for this study was: How can a mindfulness class routine affect students' responses to literature and students' behavior as part of the learning environment? Because of time constraints in the classroom, this study utilized the class routine which the students were already familiar with, a journal warmup, only organized slightly differently. This study was designed to see if mindfulness could be implemented using calming and reflective techniques in order to help students concentrate on big ideas to further understanding while promoting a conducive learning environment in the classroom. This study was be conducted over one unit of teaching, which took one marking period.

Site and Participants

This study took place in a large high school in a suburban county in central Virginia. The high school has over 1000 students in attendance for grades 9 through 12. Roughly 45% of enrolled students identify as a minority race with the majority of these students identifying as black or hispanic. While very close to the state average of diversity, this high school is considered to be less diverse. Economically speaking, nearly 40% of the students in the school are eligible for free or reduced lunch making it one of the highest schools in the area in regards to the number of students considered to be living at or below poverty level. Academically this school has achieved Adequate Yearly Progress (AYP) and a graduation rate of over 85%, which is higher than the state average. There was an original potential for roughly 70 student

participants in the study. However, through the assent and consent form process the number of participants sharply dropped.

While all students took part in the learning experience, only 27 students returned all forms necessary to use their data: 13 in period A and 14 in period B. A further subset of 5 students each from period A and B were selected for the researcher to review their journals in more detail. These students were semi-randomly selected based on attendance during journal days, behavior, and participation during the experiment.

Data Collection

Data was collected during the researcher's time as a student teacher at this high school. The initial permissions were given during an A/B class period as well as surveys for all students including the MAAS and feedback surveys. Any additional interviews were collected during the school's homeroom period in order to preserve as much class time as possible. In order to do this, students were specifically requested through the school's system to come to the researcher's assigned room during the homeroom period. While quantitative data was collected using surveys, qualitative data was also collected during this study including student interviews, researcher observations and reflections, and journals written by the students. Observations of student behavior and participation, as well as the silent thinking and writing of the journals, took place during class instruction.

Procedure

As part of the control, the first two journal warmup activities were unchanged from the standard class routine in order to assess the depth and change of their

connections compared to the changed routine. During this period, I also observed behaviors to determine a baseline; only data about students who returned both consent and assent forms were compiled for comparison. During the study, the participating students also took part in surveys and interviews, as well as having their journals specifically analyzed for growth. After permissions were gathered, students were given a modified Mindful Attention Awareness Scale (MAAS) adapted for adolescents, for use in a secular study, and to include questions regarding stress (appendix A) in order to establish a baseline for the participating students. Due to the intention of the warmup activity to calm and focus the students, it is relevant to allow them to offer feedback on how stressed they feel or how well they feel they can concentrate. This survey was given only twice during the study: at the start as a control, and following the last silent reflection.

Mindful journal starters. This exercise was designed to calm students down and get them focusing on big ideas that appear within the lesson for the day. These were done a minimum of one time a week and collected once the students reached ten completed entries. The whole journal exercise was silent. For the first minute, students were asked to put their pencils and pens down. They were offered the opportunity to close their eyes if it helped them concentrate, or if they felt comfortable doing so. Following a breathing exercise, students were guided into thinking about the journal topic and instructed to just think about the topic, silently. For sample guided thinking questions, see appendix C. This step was designed to help calm the students after the busy experience of the hall and to give their minds an opportunity to refocus in on the tasks classes ask of them academically. The following time was used in

sustained silent writing. If they finished before time was up, then they were allowed to sit silently and continue to think about the topic while their peers finished. This may have given them an opportunity to think of new ideas to write down.

Surveys, observations, and interviews. The MAAS in this study has been modified for a secular study as well as for easier understanding and answering by adolescents. Interviews (appendix B) were originally meant to be conducted at the end of the study to be recorded using audio only, however, due to inclement weather these were not formally conducted. An additional option to give feedback was given to all students who complete the study (appendix D). Students had the option to opt out of an interview session or survey if they felt that they needed to. All students were given the surveys to take, although only forms filled out by those students who had returned both assent and consent forms were kept and analyzed. Any observational notes taken were taken during, or closely following, a class session. These included student behavior and participation and were recorded in the form of a researcher's journal to measure the calming and focusing effects of the opening routine on student behavior. The hope with this journal was that, because of my experience and training in mindfulness, I may have been more adept at noticing mindful changes within the students I taught when compared to educators who had not been trained in mindfulness at all (Van de Weijer-Bersma, et al., 2011).

Analysis. The results from the interviews as well as the students' journals and class participation were originally intended to be separated from the modified MAAS, however this was changed due to the similarities and differences between student self-reflection and their performance in the classroom. Journals were analyzed using a

rubric (appendix E), which was also compared to the class participation. The rubric was entirely separate from the grades students received for their journal completion due to the fact that the students were not be given this rubric and it was for research purposes only. The guided thinking was meant to guide students towards making connections within the rubric, and as the journals were considered a formative assessment, they were not given grades according to the rubric.

One specific item which was looked for was if students were bringing what they were writing in their journals to the class during discussions, or visa versa. Another step was to see if the students were using the reflections they wrote in their journals to influence their projects and assignments. One more stage of analysis was to see if student ideas became more organized within their journal reflections when silent thinking was engaged as a tool. This allowed me to compare any patterns that arose in the students' journals individually, and then to compare them to each other to find overall trends of understanding. For this section of the analysis, only four to five journals were selected for closer analysis due to time constraints.

The addition of the researcher's journal allowed for another level of analysis in regards to addressing the issue of educators not seeming to notice differences in student behavior with mindfulness intervention (Carboni, 2012; Van de Weijer-Bersma, et al., 2011). This helped me understand changes in student behavior, participation, and understanding in regards to the content during class periods as well as understand some of the feedback received. This also was analyzed so students could be compared to find trends among their peers. Finally, any identified trends were compared not only to each other, meaning student journals to researcher journals, but

also to the MAAS. This allowed for more of a generalization of the gathered data and to identify any correlation between student perception of themselves and the perception of them by the instructor.

Findings

Measuring stress and mindfulness in class A. The following surveys were arranged in a series of statements ranging from “I feel anxious when I get new assignments from school” to “I forget a person’s name almost as soon as I’ve been told it for the first time” (see appendix A for a complete list of questions). These questions contain two types: stress-based questions and mindfulness-based questions. Stress-based questions are questions that deal more with the amount of stress and anxiety a person feels while the mindfulness-based questions focuses on mindful behavior as defined by mindfulness (see introduction). Below each question or statement, students circled a number between 1 and 6, 1 being “almost always (experience what this statement describes),” 3 being “sometimes,” and 6 being “almost never.” The data collected was split into two parts for analysis: 1 - 3 being “almost always” to “sometimes” which are considered higher rates of stressed event occurrence, and 4 - 6 being “not very often” to “almost never” which are the rates of mindful occurrences, or a lessening of stressed behavior. The higher the number circled, the more mindful a person is according to this instrument of measure.

This first chart illustrates the pre-survey given to all students in class A. Data from fourteen students from class A was collected for analysis. Ten out of nineteen questions had a majority (over seven) of answers in the stressed range. Four out of nineteen were evenly split (seven - seven) between stressed and mindful ranges. Five

out of nineteen questions had the majority of answers in the mindful rates range. Six out of the ten questions with the majority in stressed traits had ten or more students in that range making them obvious concerns for many of the students. For ease of identifying them on the chart below, these specific questions have been numbered.

They are:

5 - I feel anxious when I get new assignments from school.

7 - I feel like things are piling up and I can not overcome them.

11 - I'm afraid of letting down those I care about.

14 - I feel overwhelmed by all the things I need to do.

15 - I find myself preoccupied with the future or past.

19 - I have trouble falling asleep because I'm worried about the next day.

Numbers 5, 7, 11, and 14 are stress-based questions while 15 and 19 are mindfulness-based questions. The highest question was question 11, with 12 students answering in the stressed range. This question had 11 students in either “almost always” or “very often” afraid that they would let down the people they care about. Question 5 was next with 12 students also reporting that they “almost always,” “very often,” or were “sometimes” anxious when they receive new assignments from school. Nine of those students reported being “almost always” or “very often” anxious about new assignments. The next highest, with 11 students answering in the stressed range, was number 15. Here, 8 of the students answered that they “sometimes” find themselves preoccupied with the future or past, with only 1 in “almost always” and 2 in “very often.” Finally, numbers 7, 14, and 19 all had 10 students answer within the

stressed range. Numbers 7 and 19 both had 6 students answer “almost always” or “very often,” while number 14 had only 2 in “almost always,” and 7 in “sometimes.”

Below is also a complete table of results for class A’s pre-survey. Questions highlighted in red are considered within the most stressed range with 10 or more responses in that range. Orange reflects the majority of answers are within the stressed range, however the total number of responses within that range are under 10. Questions marked in blue do not have a clear majority. Questions highlighted in green have a majority within the mindful range, meaning 7 or more responses in most cases.

Pre Questions	1 Almost always	2	3	4	5	6 Almost n
1 break or spill things beause of carelessness, not paying attention, or thinking of something else	1	0	0	6	4	
2 feel angry or anxious when things are out of my control.	1	2	6	2	2	
3 find it difficult to stay focused on w hat's happening in the present	0	0	6	3	4	
4 tend to walk quickly to get where I'm going without paying attention to what I eperience along the way	1	3	2	4	2	
5 feel anxious when I get new assignments from school	2	7	3	2	0	
6 forget a person's name almost as soon as I've been told it for the first time	4	2	2	0	4	
7 feel like things are piling up and I can not overcome them	2	4	4	2	2	
8 t seems I am "running on automatic," without much awareness of what I am doing.	0	1	6	4	3	
9 rish through activities without paying attention to them	0	1	6	4	1	
10 I do jobs or tasks automatically, without being aware of what I'm doing	1	0	5	3	3	
11 I'm afraid of letting down those I care about	6	5	1	0	1	
12 find myself listening to someone with one ear, doing something else at the same time	1	1	7	3	2	
13 become upset because of unexpected things (one response cast out for having 2 answers)	3	1	2	5	2	
14 feel overwhelmed by all the things I need to do	2	1	7	2	1	
15 find myself preoccupied with the future or past	1	2	8	1	1	
16 When I have an important assignment or presentation, I think of all the things that can go wrong	2	3	4	1	2	
17 find myself doing things without paying attention	0	0	7	5	1	
18 snack without being aware that I'm eating	2	2	1	2	0	
19 have trouble falling asleep because I'm worried about the next day	4	2	4	0	4	

Figure 1a: Pre-survey table class A

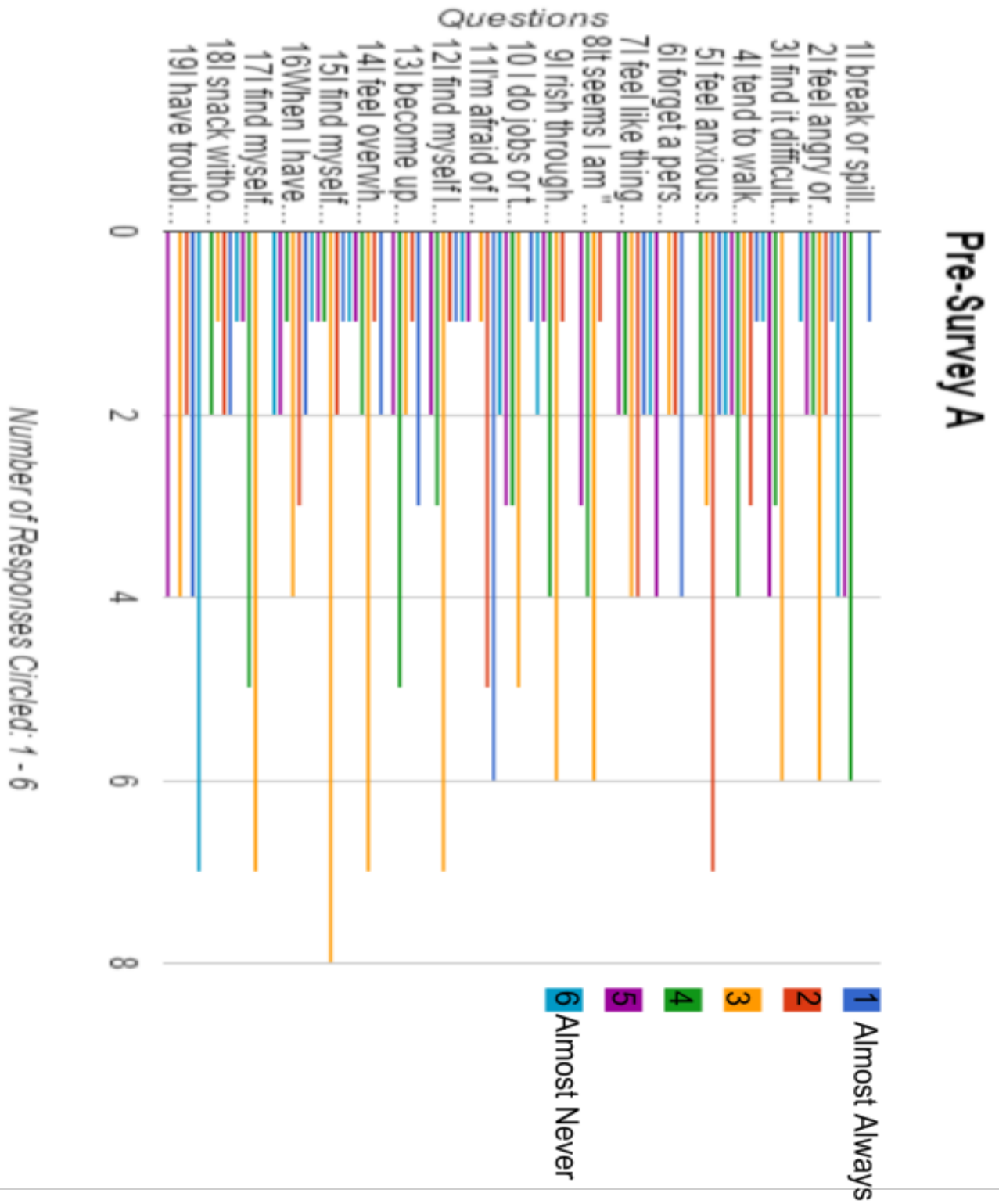


Figure 1b: Pre-survey chart class A

The following chart illustrates the same survey given to class A after a minimum of one mindfulness-based warm-up a week totalling to five. This section ranged between 13 and 11 students who responded to the survey due to some failing to complete the back of the sheet or due to absences. Four questions were highlighted as having the majority of responses reporting within the stressed range. This is a change from the 6 of the pre-survey A. In addition, there are 12 out of 19 questions with the majority of answers (over 6 students) falling into the mindful range, and 3 who are tied. The four questions that are still within the stressed range are:

2 - I feel angry or anxious when things are out of my control.

4 - I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.

5 - I feel anxious when I get new assignments from school.

11 - I'm afraid of letting down those I care about.

In this case, questions 2, 5, and 11 are stress-based, and 4 is mindfulness-based. The highest question remained number 11 with 9 students responding within the stressed range. However, 9 is down from the original 12 from the pre-survey. The majority of these students, 7, reported that they were either “almost always” or “very often” worried about letting down those they cared about. Question number 5 also remained with the majority of responses in the stressed range, but decreased to only 2 students who “almost always” and 5 students who “sometimes” feel anxious about new assignments in school. Numbers 2 and 4 both changed from either neutral or mindful to having the majority of students reporting in the stressed range. Number 2 has the majority of students within the stressed range reporting that they “sometimes” feel angry or

anxious when things are out of their control, 2 students said they are “very often,” and 1 reported that was “always” the case. Number 4 changed from having the majority of students responding in the mindful range to the majority being stressed. As a result, 3 students reported that they “always” walked too fast and did not pay attention to anything along the way, 2 reported they “very often” did this, and 4 stated that they “sometimes” did this.

Post Questions	1 Almost Always	2	3	4	5	6 Almost Never
1 break or spill things because of carelessness, not paying attention, or thinking of something else	0	0	2	1	4	
2 feel angry or anxious when things are out of my control	1	2	6	2	1	
3 find it difficult to stay focused on what's happening in the present	0	0	2	5	4	
4 tend to walk quickly to get where I'm going without paying attention to what I experience along the way	3	2	4	1	2	
5 feel anxious when I get new assignments from school	2	0	5	0	3	
6 forget a person's name almost as soon as I've been told it for the first time	3	0	3	0	6	
7 feel like things are piling up and I can not overcome them	1	1	2	6	0	
8 It seems I am "running on automatic," without much awareness of what I am doing	0	0	2	5	5	
9 rush through activities without paying attention to them	0	0	3	1	6	
10 I do jobs or tasks automatically, without being aware of what I'm doing	0	0	2	2	4	
11 I'm afraid of letting down those I care about	3	4	2	0	1	
12 find myself listening to someone with one ear, doing something else at the same time	0	0	5	1	3	
13 become upset because of unexpected things	1	0	3	3	2	
14 feel overwhelmed by all the things I need to do	1	0	3	4	1	
15 find myself preoccupied with the future or past	1	0	2	1	6	
16 When I have an important assignment or presentation, I think of all the things that can go wrong	2	2	2	1	5	
17 find myself doing things without paying attention	0	0	4	4	1	
18 snack without being aware that I'm eating	2	2	2	1	1	
19 have trouble falling asleep because I'm worried about the next day	1	1	0	5	2	

Figure 1c: Post-survey table class A

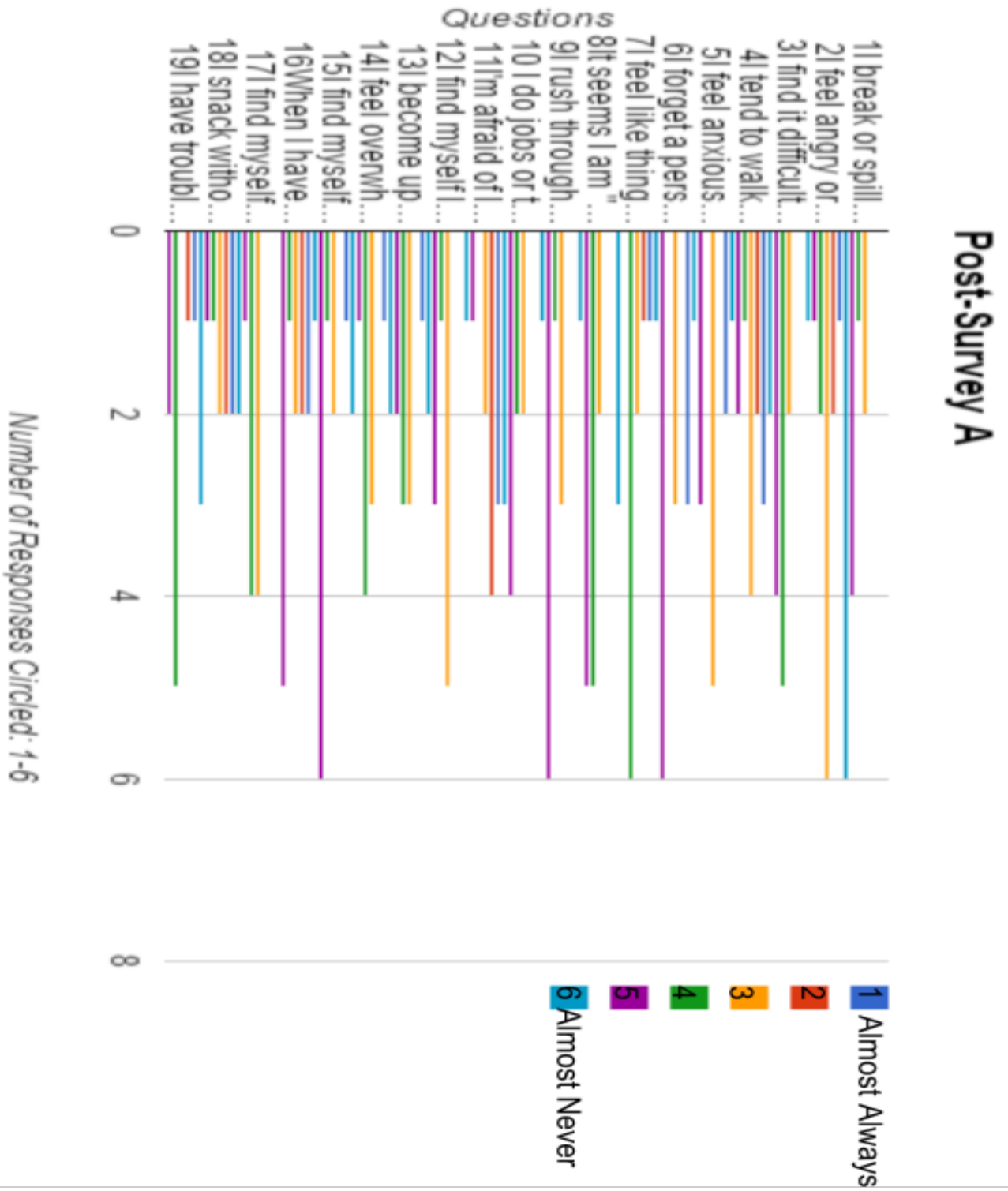


Figure 1d: Post-survey chart class A

The next chart includes feedback received from class A regarding the mindful warmup and reflection process. The feedback survey had eight questions. Students circled a number beneath each question in a similar format to the MAAS surveys above, 1 being “Strongly Disagree,” 3 being “I don’t know,” and 5 being “Strongly Agree.” These questions discussed how students felt about specific things through the mindful warmup and silent reflection. Some of these questions included “I feel comfortable during the silent reflection period,” and “I think the silent reflection helped me organize my thoughts before writing in my journal” (for a complete list of questions see appendix D).

An immediately noticeable pattern for class A is that none of the 13 students who completed the survey selected “strongly agree” or any statements. Two questions that are most obvious, as no students chose “agree” or “strongly agree” are numbers 5 and 6:

5 - I think the silent reflection and warmup could help me in other content areas/school subjects.

6 - I would like to use silent reflection and journals in future English classes.

Number 5 had 2 students who “strongly disagreed,” 4 who “disagreed” and 5 who “did not know.” Number 6 had 4 students who “strongly disagreed,” 4 who “disagreed,” and 5 who “did not know. The questions with the next most number of “strongly disagree” and “disagree” are:

1 - After the silent reflection and journal warmup, I feel calmer than when class started.

2 - I think the silent reflection helped me organize my thoughts before writing in my journal.

8 - I think the silent reflection and journal activity will help with my overall grade.

Number 1 had 3 students who “strongly disagreed,” 4 who “disagreed,” 5 who “did not know,” and one who “agreed.” In response to question 1, one student stated that she “felt the same,” and that is why she disagreed. Number 2 had 1 student who “strongly disagreed,” 6 who “disagreed,” 3 who “did not know,” and 3 who “agreed.” In question number 8 there were 3 students who “strongly disagreed,” 4 students who “disagreed,” 4 who “did not know,” and 2 who “agreed.” The question with the most about of “I don’t know” is:

4 - I think the silent reflection and journal warmup helped me with my bigger projects.

In number 4, 1 student “strongly disagreed,” 4 students “disagreed,” and 8 students “did not know.” The questions with the most “agree” responses are:

3 - I feel comfortable during the silent reflection period.

7 - The silent reflection and journal activity helped me make connections to the text.

In question number 3 there was 1 student who “strongly disagreed,” 2 who “disagreed,” 6 who “did not know,” and 4 who “agreed.” In question 7 there were 2 students who “strongly disagreed,” 2 who “disagreed,” 5 who “did not know,” and 4 who “agreed.”

One student who circled the number 3 for “I don’t know” the whole way down their survey stated as additional comments, “I don’t care if we do silent reflection or if we don’t do it.” Another male student mentioned that “It made me want to sleep since

this class is so early. Also, my air ran out before I got to 10.” A female student stated that “The silent warmup did help me calm down, but nothing else changed.” Finally, a female student who circled 1 for all eight questions stated only, “I hate silent reflection.”

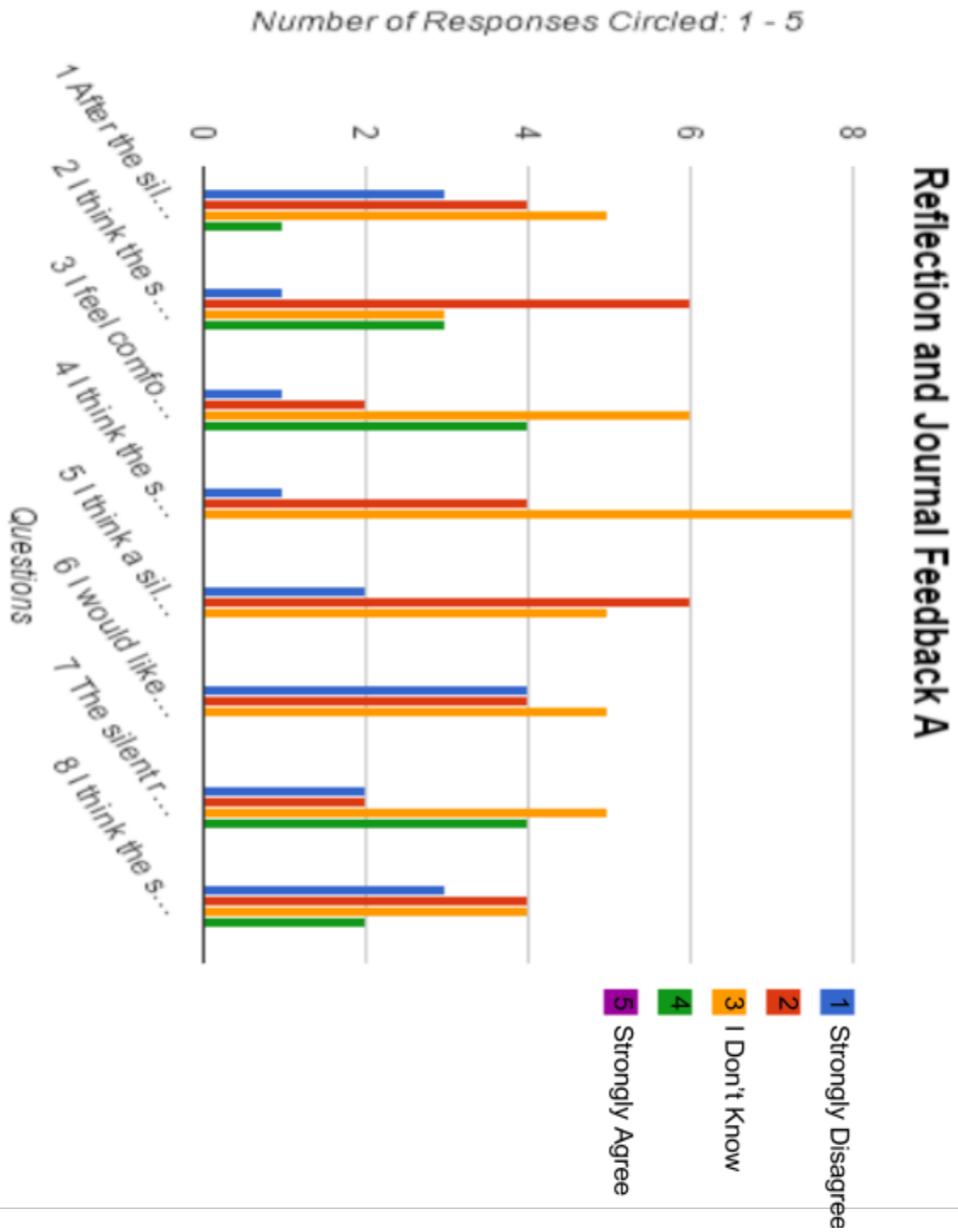


Figure 1e: Feedback survey class A

Measuring stress and mindfulness in class B. The following charts and tables reflect responses to surveys from class B. There were 14 students who completed the pre-survey, charted below. For the pre-survey, 12 of the 19 questions had the majority of responses in the mindful range, and 7 of the 19 had the majority of responses in the stressed range. The questions that were most noticeable as stressed were:

2 - I feel angry or anxious when things are out of my control.

4 - I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.

5 - I feel anxious when I get new assignments from school.

8 - It seems I am "running on automatic," without much awareness of what I am doing.

11 - I'm afraid of letting down those I care about.

12 - I find myself listening to someone with one ear, doing something else at the same time.

14 - I feel overwhelmed by all the things I need to do.

Questions 2, 5, 11, and 14 are stress-based questions, and questions 4, 8, and 12 are mindful-based questions. However, the most negative of these questions were 2, 11, and 12, making 11 the question most in common with class A at this point.

Beginning with question 2, 2 students reported that they "almost always," and 5 students reported that they "very often," feel angry or anxious when things are out of their control. Another 3 stated that they "sometimes" feel this way. Number 11 was the highest in the stressed range with 4 students circling that they "almost always," 2

stating they “very often,” and 6 circling that they “sometimes” are afraid of letting down those they care about. Finally, number 12 has only 1 student who “almost always,” 6 who “very often,” and 5 who “sometimes” feel that they listen to someone with one ear while doing something else at the same time.

Below is also a complete list of results for class B’s pre-survey in figure 2a.

Pre Questions	1 Almost Always	2	3	4	5	6 Almost Never
1 break or spill things because of carelessness, not paying attention, or thinking of something else.	0	1	2	3	2	
2 feel angry or anxious when things are out of my control	2	5	3	1	2	
3 find it difficult to stay focused on what's happening in the present	1	1	3	4	5	
4 tend to walk quickly to get where I'm going without paying attention to what I experience along the way	0	3	5	3	3	
5 feel anxious when I get new assignments from school	1	2	6	0	3	
6 forget a person's name almost as soon as I've been told it for the first time	0	1	4	5	1	
7 feel like things are piling up and I can not overcome them	0	2	3	6	2	
8 it seems I am "running on automatic," without much awareness of what I am doing.	1	2	5	2	3	
9 rush through activities without paying attention to them	0	1	3	4	3	
10 I do jobs or tasks automatically, without being aware of what I'm doing	0	1	4	3	4	
11 I'm afraid of letting down those I care about	4	2	6	1	0	
12 find myself listening to someone with one ear, doing something else at the same time	1	6	5	1	1	
13 become upset because of unexpected things	1	0	1	7	3	
14 feel overwhelmed by all the things I need to do	1	3	4	2	4	
15 find myself preoccupied with the future or past	0	2	4	6	1	
16 When I have an important assignment or presentation, I think of all the things that can go wrong	2	1	3	2	4	
17 find myself doing things without paying attention	2	0	3	4	3	
18 snack without being aware that I'm eating	2	1	2	1	2	
19 have trouble falling asleep because I'm worried about the next day	1	2	1	1	5	

Figure 2a: Pre-survey table class B

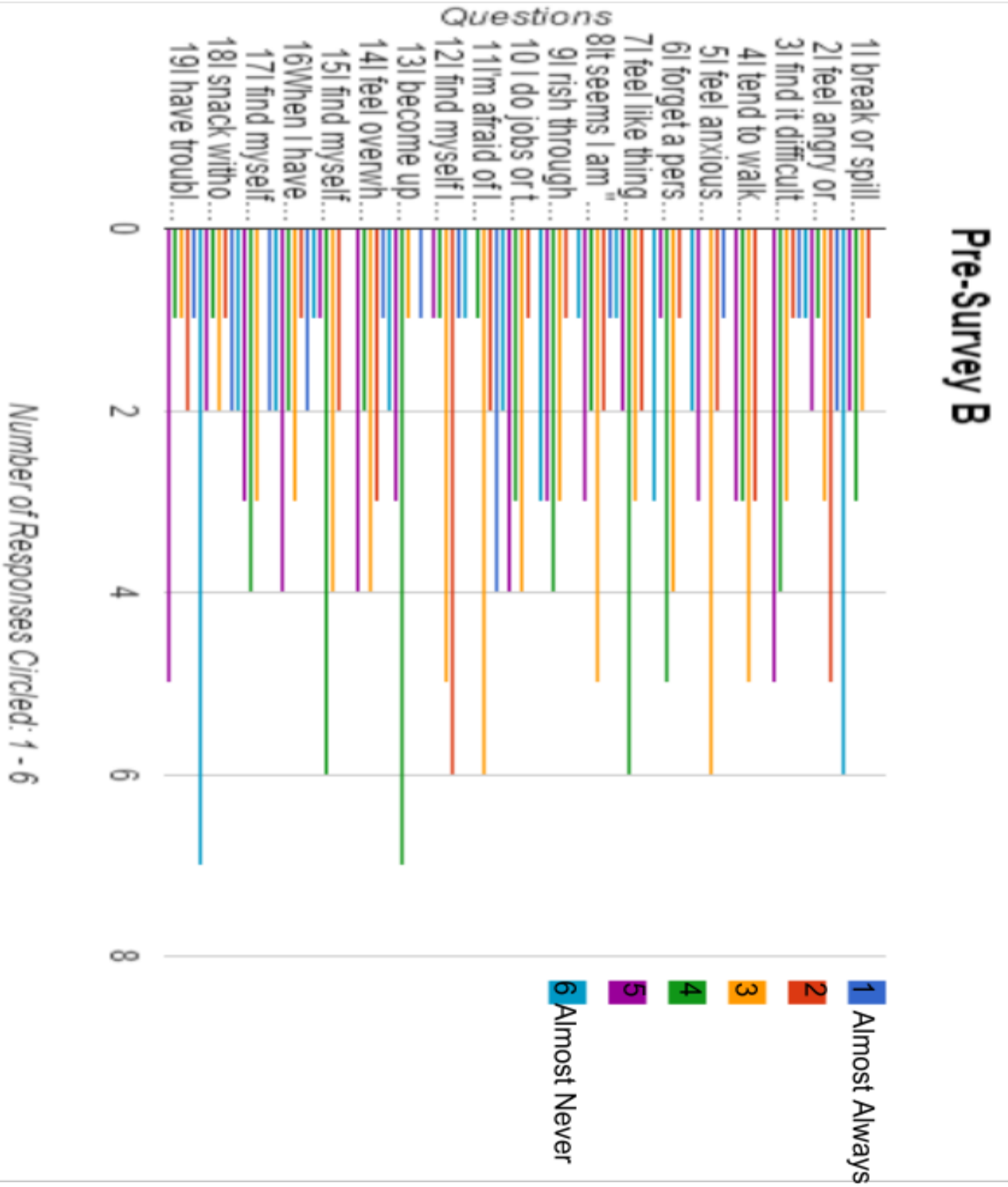


Figure 2b: Pre-survey chart class B

Next is the chart and table illustrating the post-survey for class B. The same 14 students completed the post-survey as the pre-survey. This class showed a surprising shift into reporting on their surveys in the stressed range. The majority of questions, 13 out of 19, fell with responses mostly in the stressed range. Six of these questions had 10 or more responses in the stressed range. Two questions fell into the category of an unclear majority, and 4 of the questions had students reporting mostly in the mindful range. This shift into the self reporting of stressed traits is not entirely unexpected and will be discussed further at a later point. The questions within the most stressed range were:

2 - I feel angry or anxious when things are out of my control.

3 - I find it difficult to stay focused on what's happening in the present.

5 - I feel anxious when I get new assignments from school.

7 - I feel like things are piling up and I can not overcome them.

8 - It seems I am "running on automatic" without much awareness of what I am doing.

11 - I'm afraid of letting down those I care about.

Numbers 2, 5, 7, and 11 are stress-based while numbers 3 and 8 are mindful-based questions. The questions still with a majority of responses in the stressed range also include 4, 9, 10, 12, 14, 15, and 17. Number 14 is stress based, and numbers 4, 9, 10, 12, 15, and 17 are all mindful-based questions, which shows an increase in students recognizing and reporting less-mindful behaviors. The number of students who reported experiencing number 2 either "always" or "very often" total 6 with 5 who "sometimes" feel angry or anxious when things are out of their control. Number 3 had the majority of

answers in “sometimes” with 8 students who find it difficult to pay attention to the present moment, and 1 in each “always” and “very often.” Number 5 Similarly has the most answers under “sometimes” feel anxious about new school assignments with 7 student responses, 1 under “almost always,” and 2 for “very often.” Number 7 has 9 students who “sometimes” feel like things are piling up, and one who “always” feels this way. Question 8 has 7 students who “very often” feel like they are “running on automatic” without much awareness of what they are actually doing, and 3 students who “sometimes feel this same way. This makes number 8 the question with the most responses in a more severe stress range. Number 11 has 2 students in “almost always,” 3 in “very often,” and 7 in “sometimes” for being afraid of letting down those they care about. While the numbers shifted categories, the number of students concerned about letting down those they care about remained the same from the pre-survey. However, the responses did shift to more students feeling “sometimes” concerned rather than “almost always” or “very often” worried. For a complete list of results, please see figure 2c.

Post Questions	1 Almost Always	2	3	4	5	6 Almost Never
1I break or spill things because of carelessness, not paying attention, or thinking of something else.	0	1	6	4	2	
2I feel angry or anxious when things are out of my control	2	4	5	2	1	
3I find it difficult to stay focused on what's happening in the present	1	1	8	2	1	
4I tend to walk quickly to get where I'm going without paying attention to what I experience along the way	1	4	4	4	0	
5I feel anxious when I get new assignments from school	1	2	7	2	2	
6I forget a person's name almost as soon as I've been told it for the first time	0	1	2	4	5	
7I feel like things are piling up and I can not overcome them	1	0	9	4	0	
8It seems I am "running on automatic" without much awareness of what I am doing	0	7	3	3	1	
9I rush through activities without paying attention to them	0	3	6	1	2	
10 I do jobs or tasks automatically, without being aware of what I'm doing	0	3	5	2	3	
11I'm afraid of letting down those I care about	2	3	7	0	0	
12I find myself listening to someone with one ear, doing something else at the same time	2	4	3	2	3	
13I become upset because of unexpected things	1	0	3	2	5	
14I feel overwhelmed by all the things I need to do	1	1	7	3	0	
15I find myself preoccupied with the future or past	1	3	5	3	2	
16When I have an important assignment or presentation, I think of all the things that can go wrong	1	2	3	5	1	
17I find myself doing things without paying attention	0	3	5	2	3	
18I snack without being aware that I'm eating	1	0	1	1	5	
19I have trouble falling asleep because I'm worried about the next day	2	1	4	2	2	

Figure 2c: Post-survey table class B

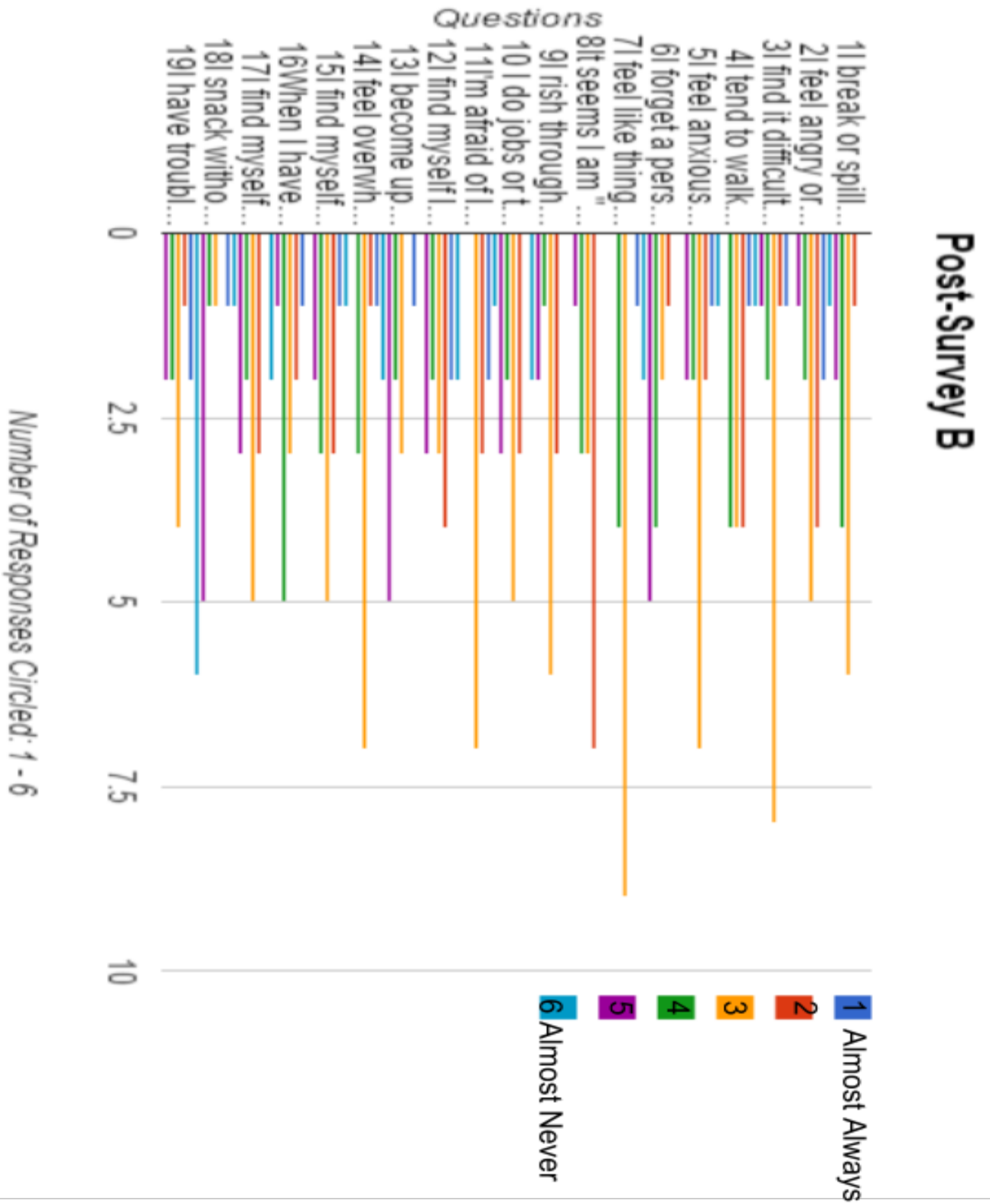


Figure 2d: Post-survey chart class B

Below is a graph of the feedback survey received from class B. Unlike class A, class B had a very different response to the silent reflection and journal activity, which will be discussed more in depth at a later point. 14 students completed the feedback survey for class B. Class B had no responses under “strongly disagree” and only 2 total responses under “disagree.” The questions with the majority of students responding with “agree” or “strongly agree” and without any disagreeing responses are:

1 - After the silent reflection and journal warmup, I feel calmer than when class started.

3 - I feel comfortable during the silent reflection period.

5 - I think a silent warm up could help me in other content areas/school subjects.

6 - I would like to use silent reflection and journals in future English classes.

7 - The silent reflection and journal activity helped me make connections to the text.

Number 1 had 4 students respond with “strongly agree,” 5 who also “agreed,” and 5 who “did not know.” Number 3 had a large majority with 9 who “agreed” and 3 who “strongly agreed that they did feel calmer after the warmup, with only 2 who “did not know.” Question 5 also had a large majority of 10 students who either “agreed” or “strongly agreed” with 4 who “did not know” if a silent warmup would help in other subjects. Number 6 had the best response with 8 students who “strongly agreed” and 4 who “agreed” that they would like to use the silent reflection and journal activity in future English classes, with 2 students who “did not know” how they felt. Finally, number 7 had 2 students who “strongly agreed,” 6 students who also “agreed,” and 6 students

who “did not know” about the reflection actually helping them make connections to the text. The question with the majority of responses in “I don’t know” is:

4 - I think the silent reflection and journal warmup helped or will help me with my bigger projects.

Questions number 4 had 9 students who “did not know” if the activity helped with their bigger projects, while 3 still “agreed” and 2 “strongly agreed” that it did help them.

The questions with the majority of responses in “agree” or “strongly disagree” with responses also under “disagree” are:

2 - I think the silent reflection helped me organize my thoughts before writing in my journal.

8 - I think the silent reflection and journal activity will help with my overall grade.

Questions number 2 was still one of the highest ranked questions with 9 students who “agreed” and 3 who “strongly agreed” that the silent reflection helped them organize their thoughts before beginning their journal. However, 1 student “did not know” and 1 student “disagreed.” Question 8 was slightly lower with only 6 students who “agreed” and 2 who “strongly agreed,” while 5 students “did not know” and 1 student “disagreed” with the idea that the silent reflection and journal would help their overall grade.

Two students chose to include additional comments on the survey. One student stated “I think in English it’s very useful, but I can’t picture how we’d use this warmup in other classes.” Another student also expressed an opinion about how to transition from the silent journal into class with, “We should go over them after we are done.”

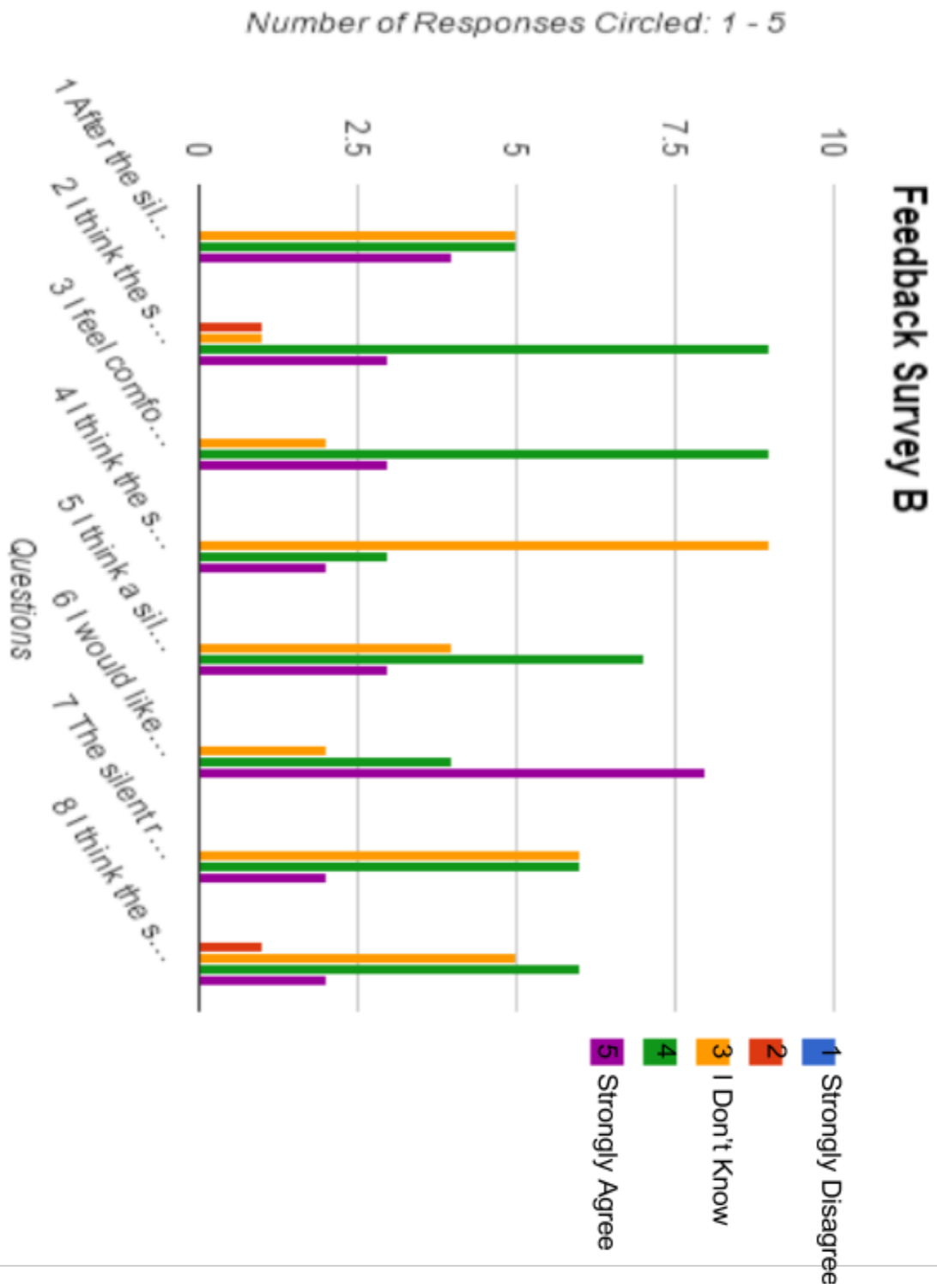


Figure 2e: Feedback survey chart class B

Student journals class A. Five individual journals were selected from class A after considering student behavior in order to narrow the pool, and then randomly selected from that pool. The result was two female students, henceforth referred to as Nicole and Alyssa, and three male students, henceforth referred to as Ben, Matt, and Dale. The journals were assessed separate from student grades using a rubric (see appendix E). The rubric looks for four different types of connections, a connection to something within their own life (personal), a connection to another piece of literature (literary), a connection to something we discussed in class (class), and a connection to another film or media (other). Each section of the rubric allowed for a maximum of 6 points for multiple connections, 3 points for one or incomplete connections, and 1 point for little or no connection making a maximum of 24 potential points.

Nicole. Beginning with Nicole, during the two control journals, she made some shallow connections. Her first journal was assigned a P3 (personal connection 3) while her second one only received a C1 (class 1) because she stated “Romeo crashing the party was a poor idea.” However, she did not continue the thought to explain why this character made a poor decision. However, once the mindfulness intervention was started, those journals contained at least two types of connections each, usually personal and class connections. By the fourth and fifth intervention journals, she was awarded P3 and C6 on both. In the fourth journal, “Girls and Secrets,” she was responding to a prompt asking about Juliet’s reaction to learning she has to marry a second man. Her personal connection was awarded because she connected with the character and wrote, “She will probably be upset with her dad...” She received a C6 with “She doesn’t have much of a say about who she marries, but she is already

married...” because of its connection to the history we discussed and the actions in the play.

Alyssa. The next student to be discussed is Alyssa. Alyssa was chosen because of her behavior during the control period. She was often observed often failing to complete assignments, especially warmups, due to off-task behaviors like talking and horseplay. While the first control journal for her was completed, there were no real connections made. The second control journal was incomplete with only one sentence written when students are required to write five to six sentences. The first intervention journal was also incomplete with no connections, and it was evident she had not re-read the section of text it was asking about. However, from this point on, she not only began completing journals, but the quality of journals improved in regards to the number of connections made. Her last journal entry was awarded a C3 and an L3, was correctly formatted, and over the minimum length requirement. She was awarded C3 for “Juliet is devastated! I think Juliet will tell her dad about Romeo because he is her true love,” due to the connection to class discussions dealing with if they were in love or not. L3 was given for use of evidence from the text, “So when her father tells her she has to marry Paris in 2 days she isn’t surprised.”

Matt. The next student chosen was Matt. Matt was chosen as a higher achieving student to see if he would benefit from the mindfulness exercise or not. His first journals did make some connections, and it was clear that he had a strong grasp of the material. However, he would only make one connection per paragraph with the first being a P3 and the second journal containing C6 connections. By Matt’s last two journals, he had been assigned P3 and C6 for both. He received a C6 for references to

characters and the fact that “Their love could possibly end the hate between families.” He was assigned a P3 for his statement, “It doesn’t matter what their parents think, as long as they are happy together,” because the statement shows an empathetic connection to the characters and their happiness.

Ben. The next student, Ben, was chosen because of observed motivation problems as well as failure to complete assignments correctly. During the control period, his journals were not completed with the correct format, however they did meet the minimum sentence length requirement. However, once the mindful journals began, the formatting issue was immediately remedied. His first few journals did not contain any personal or academic connections and acted more as a way for the student to vent about the difficulty of the text. By the last journal, Ben was more passionate about the text and his opinions on the matter earning him a P6 and C6. He was assigned these marks for the overall journal which explains how Romeo and Juliet are correct in being together, even in death, for the greater good of their future society and future lovers. This shows a personal connection to the characters and their motivation and a connection to an overall society, as well as an understanding of the text.

Dale. Finally is Dale, who was part of the students selected at random. Dale’s journals did not show much change overall. His formatting issues remained, in one case failing to answer the prompt correctly, and the length remained roughly around the minimum requirement. The last two journals did make some connections including C3 and P3 connections for statements such as: “Juliet must do what her father says because women did not have many rights back then.”; “If both families could see their children together with one another they would see the feud is pointless.”

Student journals class B. Five individual journals were selected from class B after considering student behavior in order to narrow the pool, and then were randomly selected from that pool. The result was three females, henceforth called Lilah, Elsa, and Irene, and two males now called Vincent and Don. The journals were assessed separate from student grades using a rubric (see appendix E).

Don. Beginning with Don, his journal was randomly selected. His first two entries for the control did not show any particular connections. While his connections did seem to increase over the course of the mindfulness warmup, it was not a consistent growth. While he made more connections on the third and fourth journals, he failed to make any meaningful connections on the fifth and sixth, with a P3 and C6 for the last journal.

Vincent. The next student whose journal was looked at more closely was Vincent. Vincent was selected due to observing his behavior and noticing that he often would not complete the journal or other warm up activities, and struggled with big ideas in class. During the control period, he failed to complete the minimum number of sentences or the proper format of the journals. He also failed to make any meaningful connections. While his formatting and length requirements did not improve through the mindfulness intervention, he did begin making some connections. For example, he wrote, "Mercutio's [Queen Mab] speech lets us know that Mercutio and Romeo's relationship is very strong," which was an idea hinted at during a previous class receiving a C3 because he failed to continue to elaborate on the idea. By the last journal, his length did increase, though he was still below the minimum of five sentences.

Lilah. The next student, Lilah, was more consistent in her journals. She was also selected at random. Her first control journal was well constructed, however the following control journal failed to meet the minimum length and had no meaningful connections. However, all following mindful warmup journals made at least one connection to something previously discussed in class with some being assigned C6, some P6, and some P3 and C3. She received the P3 and C3 on the last intervention journal: "It should only matter if they're happy. I think that if their parents truly cared they would be fine with Romeo and Juliet being together because they're happy." While this shows she makes an emotional connection to the characters and a topic discussed in a previous class, she does not go into more depth.

Elsa. The next student is Elsa. She was selected as one of the stronger students to compare if she at all benefited from the mindful journal warmup. Elsa's control journals both had somewhat meaningful connections being assigned P3 and C3. On the first intervention journal she received a P3 and C6 for "First, it shows that Romeo trusts Mercutio enough to vent all of his feelings. It also shows that Mercutio is a good friend, but is also a slight joker." She maintained these connections with one O3 on the fourth control journal with referencing how her sister tarnished a relationship with a friend through anger, she ended with a quote, "If you speak out of anger, you will give the greatest speech you will ever regret." However, she does not continue the thought or explain where the quote originated. She also received a P6 and C3 on the final journal with "You should not, however, let strife come between a relationship...Therefore Romeo and Juliet are doing the right thing by defying their parents' expectations."

Irene. Finally is the student Irene, who was chosen at random. In her control journals, she did make some general references to class discussion, or something in her personal life, but did not continue the thoughts into any depth. However, by the last two journals, she was making different types of connections and elaborating on them. For the fourth intervention journal she received a P6 and C6 for, “Girls during the timeline of Romeo and Juliet didn’t have many rights... She will be shocked and upset when she finds out about it. It wouldn’t be fair to set someone up with another when they are already married.” For her final journal she received a P6 and C3 for “[Romeo and Juliet] are obviously happier when they are together, as seen throughout the story... If you think about pleasing others too much, then you might end up getting stepped on all the time, as you put other peoples’ happiness before your own.”

Discussion

Unfortunately, whether or not the information collected in this study supports findings in previous studies is still unclear. This could be because of a number of limitations which will be discussed. The research results were still interesting in a number of ways and important in the sense that not many implementations of mindfulness have been studied in the secondary classroom. Below I will discuss parts of the data that stood out as important in each class, and also patterns that both classes share.

Review of Data

Class A reported, in a large majority, that they either had no opinion or did not like the exercise. However, their MAAS-A surveys almost seem to clash with the students' opinions. On the pre-survey, they reported ten out of 19 questions within the stressed range, but by the post-survey they had shifted to only four out of 19 questions being answered within the stressed range. This shift also was evident in question responses within the mindful range beginning with five out of 19 in the pre-survey and 12 out of 19 in the post-survey. This shift suggests some kind of benefit for the students from this exercise. It is important to note that the post-survey was given after a mindful warmup which could attribute some to the shift towards more mindful responses. In addition, when comparing the five journals collected from class A, all five showed some sort of improvement in regards to making connections. While the student feedback may disagree with the surveys and journals, student feelings are important to consider with a mindfulness exercise. While some of the students did leave additional comments, not many were specific about why they did or did not enjoy the exercise.

One simply stated that she “hate[s] silent reflection,” while another said, “I don’t care if we do it or if we don’t.” Without the addition of interviews asking for more specific details, which unfortunately were cut due to time constraints, it is impossible to know exactly why there is this disagreement among the data. However, because it did prove beneficial for the students in some regard, it would be worth investigating how to make it more enjoyable for this particular group of participants. Class B had a very different opinion and response to the mindful warmup.

Class B reported in a large majority that they either had no opinion or did enjoy the activity. Despite that, the students’ MASS-A scores almost seem to be in opposition to their feedback. With their pre-survey, class B answered mostly in the mindful range with 12 out of 19 questions, and only 7 out of 19 in the stressed range. However, by their post-survey, also following a mindful warmup, they had a noticeable shift with 13 out of 19 questions now with the majority of answers in the stressed range and only 4 out of 19 in the mindful range. However, despite this shift, the students reported that none of them felt uncomfortable during the silent reflection activity, and 12 out of 14 would like to continue to use the mindful warmup in future English classes. One explanation for this, according to Bhante Gunaratana (2011), would be that it is because the students are becoming more aware of stressors in their lives as well as taking ownership of their behavior. This idea is supported by Hanson and Mendius (2009) with the idea that, initially, the newfound self awareness could show an increase in reported stress, but in the long-term the practitioner could identify causes of stress to decrease their effect and monitor their own behavior. One student said, “I think in English it is very useful, but I can’t picture how we’d use this warmup in other

classes,” and another’s only criticism was that he would like to share the journals with each other once they were written. So even though the class reported more stressed and less mindful behaviors, they thought that the activity was benefiting them in some way. According to the sample journals collected, this is true. Vincent was the only student out of the five who did not have any noticeable improvement in his journals. While most likely not the cause, this student was also considered an English Language Learner at some point, but is no longer receiving services. That is another topic that may be interesting to investigate at another point. However, the other four students did improve with the connections they made in their journals.

Relationship with teacher. One pattern that may or may not have affected the students was their differing relationships with the teacher. While neither class was disliked by me, nor seemed to openly or actively dislike me as their teacher, they did take different amounts of time to adjust and accept me as their educator. Class B was eager and willing to take me on as their teacher, whereas class A was a little more apprehensive and seemed to test their limits in the beginning. This does mean that with class A, especially in the beginning of my time with them, I was a little more strict than I may have been with class B. While, as an educator, I like to think all of my students would understand and continue to love me unconditionally, I know this is not always true. So there is a possibility that class A reacted differently to the mindful warmups and took the surveys at varying levels of seriousness due to their slightly different relationship with the educator and experimenter. There were some points where class A did not seem to be as accepting of the experiment as class B, which could also amount to why class A seemed to benefit slightly while class B seemed to be

learning how to become more mindful. For example, the student above that stated “I don’t care if we do it or if we don’t” also circled only the number three on the feedback survey as well as the second half of the post-survey for class A. Similarly, the student who said, “I hate silent reflection” circled one the whole way down the feedback survey, leading me to believe the students were not taking the surveys as seriously as I was hoping. This could be the result of not having as strong of a relationship with this class, or perhaps these students, as the other class. While these students did show signs of not caring about the experiment or the activities at times, they did not show any open disdain, distrust, or complaints about keeping up with class work, which could be considered another limitation.

School and stress. A pattern arose with the MAAS-A surveys between the two classes. While they both shifted between stressed and mindful responses, number 11 remained in the stressed position consistently for both classes. This tells me, as a researcher and an educator, about the students. The majority of both classes were consistently “almost always” or “very often” concerned with letting down those they cared about. Part of this could be from the fact that they were all advanced English 9 students with some kind of support system from home. This could also be considered one of the more difficult causes of stress to overcome, especially as a teenager trying to balance home, social life, and school, which is why it remained among the highest questions with responses in the stressed range. Another pattern that was evident was that the mindful warmup did successfully calm students and seemed to encourage some to participate more. For instance, Matt started out as a quiet student who was very shy, but knew the material. He performed fairly well on written assignments, but

would not volunteer to share in class. However, after three mindful exercises, Matt had started to raise his hand to answer questions. After the fourth he even volunteered to take part in an acting day where students were asked to wear costumes and read from the play aloud in front of their peers. While this could also be attributed to Matt simply becoming more comfortable with me as an educator, he did have a shift in confidence compared to previous observations I had taken of his behavior (Carboni, 2012; Van de Weijer-Bersma, et al., 2011).

Limitations and future research

A risk that is evident in nearly all mindfulness studies is self-reporting scales (Bergomi, et al., 2013; Brown, et al., 2011; Burke, 2009; Carboni, 2012; Noggle, et al., 2012; Phillips, et al., 2008; Rosenthal, et al., 2011; Van de Weijer-Bergsma, et al., 2011). These scales rely on the participants answering honestly, not how they think they should feel about a topic, how they would like to feel, or how they expect the researcher to feel. It is impossible to fully control this variable. Another limitation was a small bit of remaining confusion among some of the students. Despite the time allotted to explaining the experiment to the students, I feel that some of them were still confused about how the process was supposed to help them. As a result, a couple students never really took the experiment seriously. While this may be a risk that comes with working with teenagers in general, it was more of an issue with class A than class B, which lead me to think it was due to confusion.

Time and inclement weather were other limitations of this study and resulted in reworking many parts of it. Originally students were meant to have two to three mindful warmups per week for a full exposure to mindfulness. This would have amounted to a

mindful warmup every day of class. However, with closures and delays due to snow, this became impossible. In order to keep the classes' exposures as similar as possible, the mindful warmups were limited to once a week, resulting in five completed journals. Also, on days when the school district had a two-hour delayed opening, there was a greater chance that the journal warmups would be cut so the students could continue with the class material. To remedy this in future studies, I would like to conduct a similar study over the course of a year. This way, the students would have a more consistent and longer exposure to mindfulness. This would also allow me to see if there were any lasting effects or benefits to the mindful warmup if I were to stop the mindful warmups and continue to monitor the students. Many studies had mindful interventions lasting a minimum of eight weeks with weekly or bi-weekly sessions with long-term follow-up measures (Burke, 2009; Rosenthal, et al., 2011); however, my students only received five sessions without long-term follow-up measures. Because of the limited time frame of the experiment, it was not possible to determine if the mindful warmups would have any lasting benefits for the students.

Finally, another limitation of this study which should be considered for future research is the fact that the students could not see the implication of a mindful warmup outside of the English classroom. This was because the warmup my classes participated in was rooted in the unit in order to help them connect more to the literature. However, it is possible to use mindfulness outside of the English classroom. For example, the previous study conducted by Erin Hill (2014) took place in a World Geography class. I would like the students to understand the flexibility of mindfulness along with its benefits. Another study even implemented mindfulness, in the form of

yoga, into a Physical Education setting (Noggle, et al., 2012). Mindfulness is flexible enough to fit into any setting, but helping the students recognize that can be difficult. Part of this could be remedied with year-long exposure as students potentially begin to accept ideas that aren't immediately clear to them. Another way to look into this issue would be to work in collaboration with teachers in other content areas. While this may become difficult for a number of reasons, it would be interesting to see the change in students who are exposed to mindfulness multiple times a day. In addition, I would like to see experiments done specifically with English Language Learners. Learning a language on top of adjusting to a new culture or trying to do well in school is probably very stressful, so perhaps mindfulness could have a positive impact on school performance.

Conclusion

While the data collected shows no clear conclusion, after taking the limitations into consideration and reviewing the data collected, I have determined as researcher that both classes did, in fact, benefit from the mindfulness exercise, even if they did not personally enjoy the exercise to its fullest. However, I also believe that class A benefitted while class B learned. Class a benefitted immediately from the intervention. They began to experience less stressed behaviors after only five mindful warmups. The sample of five journals collected from class A also showed an increase in the number of connections made. However, these gains are considered to be short-term. While class A did benefit, judging by their feedback, they did not connect any decrease in stressed behaviors or increased ease in writing their journals to the mindful

interventions. Essentially, they felt better, but were not sure why. This is what makes their benefit short-term.

Class B, however, was learning to become more mindful, which would become a long-term benefit if the experiment were able to continue. Their self-reporting scales showed that they were becoming aware of what was causing their stress as well as the less-mindful behaviors they were exhibiting. By becoming aware of these challenges, they would eventually be able to begin to change them (Gunaratana, 2011). While only four out of five of their journals showed improvement in regards to literature, nearly all students reported that they enjoyed the activity in some way. It is this attitude towards the mindfulness that leads me to believe that class B could potentially have had a long-term benefit. I believe my experiment shows that while mindfulness has a lot of potential for use in the classroom, there is still a considerable amount of research that needs to be explored.

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Appendix A

Modified MAAS: This scale was altered by the researcher using various sources with the base form and many questions from the MAAS in the references.

Day-to-Day Experiences

Instructions: Below is a collection of statements about your **everyday** experience.

Using the

1 - 6 scale below, please indicate how frequently or infrequently you currently have each

experience. Please answer according to **what really reflects your experience** rather than what

you think your experience should be. Please treat **each item separately from every other item.**

1	2	3	4	5	6
Almost Always	Very Often	Sometimes	Not Very Often	Rarely	Almost Never

I break or spill things because of carelessness, not paying attention, or thinking of something else.

1 2 3 4 5 6

I feel angry or anxious when things are out of my control.

1 2 3 4 5 6

I find it difficult to stay focused on what's happening in the present.

1 2 3 4 5 6

I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.

1 2 3 4 5 6

I feel anxious when I get new assignments from school.

1 2 3 4 5 6

I forget a person's name almost as soon as I've been told it for the first time.

1 2 3 4 5 6

I feel like things are piling up and I can not overcome them.

1 2 3 4 5 6

It seems I am "running on automatic," without much awareness of what I'm doing.

1 2 3 4 5 6

I rush through activities without paying attention to them.

1 2 3 4 5 6

I do jobs or tasks automatically, without being aware of what I'm doing.

1 2 3 4 5 6

I'm afraid of letting down those I care about.

1 2 3 4 5 6

I find myself listening to someone with one ear, doing something else at the same time.

1 2 3 4 5 6

I become upset because of unexpected things.

1 2 3 4 5 6

I feel overwhelmed by all the things I need to do.

1 2 3 4 5 6

I find myself preoccupied with the future or the past.

1 2 3 4 5 6

When I have an important assignment or presentation, I think of all the ways it can go

wrong.

1 2 3 4 5 6

I find myself doing things without paying attention.

1 2 3 4 5 6

I snack without being aware that I'm eating.

1 2 3 4 5 6

I have trouble falling asleep because I'm worried about the next day.

1 2 3 4 5 6

Appendix B

Sample Interview Questions (Not Conducted)

How hard do you think it is to concentrate on school work?

What kinds of things make concentrating difficult?

What do you think would help you concentrate?

What kinds of things might make you feel stressed?

Do you think school is or is not stressful for you?

On a scale of 1-10, 1 being not very much, 10 being super a lot, how much stress do you feel about school?

What do you think about the new warm up for class?

What do you like about it?

How do you think it could be improved?

Are there any other comments you would like to share with me?

Are there any questions you would like to ask me?

Appendix C

Sample Guided Reading Script

Once students are seated (after pledge)

“Good morning ladies and gentlemen. We’re going to start our journals. Please put all pencils down and don’t begin writing until I ask you to. As you know, the number one rule is no talking. If you feel comfortable you may close your eyes. We’re going to start with our breathing.”

(As you talk students through the next part, slow down your speech and talk more quietly. Allow time for students to roughly count to 5 and 10 between requests. Repeat breathing 3x.)

“As you breathe in, count to 5... and as you breathe out... count to 10.”

(After breathing)

“I want you to continue your breathing, but as you do, I’m going to give you some things to think about.... It’s a secret that Romeo and Juliet are married. How long could Romeo and Juliet keep it a secret? Think about the life of a young girl. What kind of rights would a young girl have had back then? Does Juliet think she’s doing her best to be happy, even though it’s against her parents’ wishes? We know that Her father has decided to let Paris Marry Juliet so the prompt I want you to focus on is --- What do you think Juliet’s reaction will be when her father tells her that she will be marry Paris in two days time?”

Appendix D

These statements will help me understand how you feel about the silent reflection and journals. Please be honest. You will NOT be graded on your answers.

Strongly Disagree	Disagree	I don't know	Agree	Strongly Agree
1	2	3	4	5

After the silent reflection and journal warmup, I feel calmer than class started.

1 2 3 4 5

I think the silent reflection helped me organize my thoughts before writing in my journal.

1 2 3 4 5

I feel comfortable during the silent reflection period.

1 2 3 4 5

I think the silent reflection and journal warmup helped me with my bigger projects.

1 2 3 4 5

I think a silent warmup could help me in other content areas/school subjects.

1 2 3 4 5

I would like to use silent reflection and journals in future English classes.

1 2 3 4 5

The silent reflection and journal activity helped me make connections to the text.

1 2 3 4 5

I think the silent reflection and journal activity will help with my overall grade.

1 2 3 4 5

Additional Comments:

Appendix E

Numbers assigned to the rubric are for research purposes only.

Type of connection to text	6	3	1
Personal	Student makes one or more personal connections to the literature with a compelling or meaningful explanation. Exp: "I agree with Romeo because I like girls."	Student makes a personal connection to the literature but it lacks depth or explanation. Exp: "I agree with Romeo because I like girls."	Student fails to make a personal connection to the plot, characters, or events of the literature.
Literary	Student makes one or more connections to another literary source for a meaningful reason. Exp: "Juliet is like Katniss because she tries to take control of her destiny."	Student makes a connection to another work of literature, but it lacks depth or explanation. Exp: "Juliet is like Katniss because she's cool."	Student fails to make a connection to another piece of literature.
Class	Student makes one or more connections to something discussed in class and elaborates on the concept.	Student makes a connection to something discussed in class, but fails to elaborate on the idea.	Student fails to make a connection to something from a class discussion.
Film/Media/Other	Student makes a meaningful connection to a film/media/other and explains it thoroughly.	Student makes a connection to a film/media/other but fails to elaborate. Leaves the reader wondering "why?"	Student fails to make a connection to a film/media/other.