

St. Catherine University

SOPHIA

Masters of Arts in Education Action Research
Papers

Education

12-2022

Creativity as a Gateway to Mental Health: A Burnout Recovery Journey

Sarah Keller

Follow this and additional works at: <https://sophia.stkate.edu/maed>



Part of the [Other Teacher Education and Professional Development Commons](#)

**Creativity as a Gateway to Mental Health:
A Burnout Recovery Journey**

Sarah Keller

Department of Education, St. Catherine University

EDUC 6670 Introduction to Action Research

Sarah Hassebroek

December 8, 2022

Abstract

This research explored creativity and flow state as a means of overcoming symptoms of burnout and supporting mental wellness. In this self-study the subject participated in creating art using a variety of media for seven weeks. Additionally, the subject kept multiple streams of data to closely examine the main symptoms of stress and burnout, including an in-depth look at sleep patterns. Other data collected included flow achievement, pre and post study surveys, daily journals, and individual session check-ins. Data suggested that over the seven-week period, sleep became more regular and the subject felt better immediately after participating in creative activities. Additional research over a longer period of time, along with a holistic recovery plan, may prove to be a form of stress reduction and burnout recovery.

Keywords: mental health, burnout, recovery, creativity, flow

Acknowledgements

I would like to express my sincerest gratitude to the St. Catherine faculty and staff. This year has not been easy, but the members of the community were available with smiles on their faces when I could not find mine. Thank you to my project coach, for having so much patience with me and seeing potential in all of my messiness. Next, I would like to thank my family and friends for their support and encouragement through this process, especially my partner, Reiner Engebretson. I'd like to personally name Dr. Christopher Hanson, Dr. Brandon Beck, Dr. Hilary Janysek and Angie Woodworth for pushing me to chase this dream from the beginning. Lastly, shout out to my cohort for teaching me, challenging me, and believing in me. We did it y'all!

This work is dedicated to all of the people who are going through each and every day carrying the heavy burden of mental health struggles. You are seen. You are worthy. You are enough. You are not alone.

When I was a young person, I knew I wanted to be a teacher. It was my dream job. Entering the profession in 2010, I was realistic about all the challenging aspects of the career, long hours, low pay, and seemingly endless amount of work, but the joy of teaching and being with the children made it worth it for many years. I, like many teachers, struggled financially to cover my expenses while also personally providing materials and supplies for my class. It is just something teachers do. I got very little sleep since I worked well past my contracted hours at school and then took work home so I could be ready for the children. It is just something teachers do. I came in on the weekends to take care of the work I could not get to during my contracted hours because I would often have to watch students during my break or planning time. It is just something teachers do. Over time, these little things and more really started to add up, taking a significant toll on my overall health.

I missed the early signs of burnout as those were times I was facing additional adverse impacts in my life. Within a year's time, two of my grandparents and my father passed away. Then, less than a year after my father's death, I started experiencing early signs of what turned out to be cancer. After that battle, I realized I needed to take my mental and physical health more seriously. I started seeing a therapist and tried setting boundaries. This boundary setting was incredibly hard: leave work at work, no more than 55 hours of work a week, and weekends (mostly) for me and my family. As I tried to hold firm to my boundaries, I started to feel the pressure of not being a "team player". I started hearing things like "but what about the kids" and "our expectation is that everyone comes to work and prep before you clock in so you are ready for the children". Through shame and guilt, I dropped my boundaries and began feeling resentment.

Then the COVID-19 pandemic began. I prepped for a virtual classroom during spring break and was ready to begin right away. This shift was a positive experience for me. I felt good about what I was able to put together and offer. I was learning new things every day and working through every problem on my own, which gave me confidence in my skills. There were of course many challenges at this time, but I felt I was able to handle them as I began relying on myself more and more. Despite these positives, I began to feel more alone and that I was not doing a good enough job.

Returning to the classroom brought new stressors and challenges and the symptoms of burnout were higher than ever before. I felt incredibly conflicted. I loved being with the children and felt a sense of accomplishment at the community I had built in our hybrid classroom. That year I had students at home and in-person. However, I elected to keep them as one community, using technology to complete group projects and class meetings together as one class. The in-person students completed physical work, but always had the option of digital work, as we were uncertain if our classroom or school would have to be closed again. I looked at this uncertainty as an opportunity to be flexible. During this year, we did have to close the class, but the work and spirit of the community were uninterrupted as I designed the system to function in this way. The students that were virtual all year still felt connected to their peers through their work and meetings. Together, the children and I made the best of the situation and we felt good about this work. However, constant pressures from the administration to change my model and keep virtual students completely isolated from their peers and other administration stressors pushed me to complete burnout. I ended up leaving the classroom.

I personally felt devastated and torn. I felt like I gave up on my dream to be a teacher; a dream for which I had dedicated my whole life. I missed being in the classroom and working

with students. I did not know what would be next, so I took on some private tutoring and went back to school. However, I was still feeling the symptoms of burnout even though I was no longer in the classroom.

I sought out information from other educators who were also in transition and came across information about burnout becoming a significant and long-standing issue educators are facing. The problem of burnout is high among teachers and many Americans. In a 2022 Gallop poll, 44% of K-12 employees “always” or “very often” feel the effects of burnout (Marken & Agrawal, 2022). Additionally, the burnout gap between educators and employees in other industries is on the rise. The American Psychological Association (APA) found that teachers and health care workers are predisposed to higher rates of burnout (Abramson, 2022).

The purpose of this research is to explore creativity as a method for my burnout recovery. I hoped to discover connections between flow theory, burnout recovery, and creativity in order to build up resiliency in myself to return to education. Additionally, it is my desire to help other individuals, educators or otherwise, find manageable creative ways to work through their personal journeys. As each person’s health is uniquely their own, I recommend first starting with seeking professional guidance. The methods used in this intervention, although based on research, are unique to my mental health and should not be a substitute for professional support.

Theoretical Framework

Specific interventions were designed and examined through the lens of Dr. Carol Dweck's growth mindset theory and Albert Bandura's self-efficacy theory. Using these theories allowed the researcher to examine the intervention's effect closely.

Dweck's growth mindset theory states that individuals possess two mindsets (Dweck, 2007). By activating a new mindset, the growth mindset, individuals can achieve their goals and

become lifelong learners. Individuals using the growth mindset overcome obstacles by seeing them as opportunities to practice and develop skills. It is important to note that individuals can choose their mindset so learning about the mindsets is essential to this theory.

Individuals who choose a growth mindset acknowledge their capacity to grow through persistency, effort, and hard work (Dweck, 2007). They also recognize that humans do not have a set level of intelligence and can develop throughout their lifetimes. People in the growth mindset appreciate feedback as it is an opportunity to learn. Although they recognize that change is hard, people in the growth mindset embrace the inevitable changes in our lives. As a result of this mindset, these people tend to have high resiliency and can bounce back for setbacks quickly. The other type of mindset is a fixed mindset.

In a fixed mindset, individuals believe that intelligence cannot truly change (Haimovitz & Dweck, 2017). They admit that an individual can learn more, but that does not equate to high intelligence. This concept applies to personal qualities too (Dweck, 2007). People that stay in the fixed mindset often need to prove themselves and are motivated by judgments of themselves and others. This judgment often leads to not trying new things and avoiding challenges. They also tend to easily give up and ignore feedback or only look at feedback as a personal flaw.

There is a potential conflict when adults guide children in the growth mindset theory. Dweck found that occasionally educators or parents who practiced and were trained in growth mindset theory still reverted to using techniques that would elicit responses from the fixed mindset (Dweck, 2007; Dweck, 2017; Haimovitz & Dweck, 2017). These techniques include but are not limited to praising the final product instead of the process. Dweck found that praise and feedback support a growth mindset; however, individuals should limit praise to an individual's action, effort, perseverance, or hard work. When praise is directed to the end result, or product,

or the individual as a person, it can result in an individual staying in the fixed mindset. In the research method, the researcher carefully monitored this potential conflict. Fundamental principles from this theory applied to this research include placing value on the process over the product, emphasizing growth over time, seeking out opportunities for reflection, embracing imperfections, and personally redefining genius.

Bandura's self-efficacy theory places value on the individual and their perceptions of personal capabilities as a determining factor of a successful outcome. In this theory, there are four primary sources of influence by which an individual develops their self-efficacy; performance outcomes, social role models, social persuasion, and emotional and physiological states. Later, Maddux added an additional source of influence to self-efficacy theory. It was labeled imaginal experiences or visualization (Maddux, 1986). Using visualization, a person uses their mind's eye to see themselves executing their goals, whatever they may be. People often couple this mental visualization with a physical manifestation of a vision board.

Believing that an individual can grow and change and have a theory that shows that this power comes from within the individual was vital to the success of this self-study research. There are not many things in this world that we are in control of, but by seeing ourselves as creatives, self-efficacy theory, and learning that we are in control of continuous change and growth within ourselves, growth mindset theory, are two critical ideas to support the participant through the research. By understanding these concepts, the participant will come to understand that they are in control and that they are creative person. This spark will activate the creative mindfulness flow during the interventions.

Literature Review

Exploring and developing avenues for mental wellness is a critical component for growth. This literature review aims to compile recent data that would prove and promote the hypotheses that engaging in flow through creativity promotes mental well-being and that simple art interventions are an accessible way to reach a flow or mindfulness state. This literature review will define key terms, the benefits and outcomes of living a creative lifestyle, and the current neuroscience research examining creativity. In addition, the literature examined the most popular arts interventions, their use in current fields.

Negative Effects on Mental Health

Stress can have a variety of effects on cognitive function (Golkar, 2014). Chronic stress may lead to anxiety, depression, and burnout. Golkar described occupation burnout as a “stress-related symptom among otherwise healthy and high-performing persons who report that they have not experienced any major negative life events” (p.1). In this case, many of the following symptoms have been reported: sleeplessness, extreme fatigue, memory and concentration problems, irritability, feeling emotionally drained, anxiousness, and body aches. Down-regulating negative emotions was difficult for individuals when experiencing periods of stress or acute stressors. The incapacity for down-regulation created an inability to cope with other stress stimuli. Golkar found that over time, chronic stress, particularly in individuals working sixty or more hours a week for a year, leads to a weaker connection between the amygdala and the medial prefrontal cortex and an altered limbic system. The diminished connection can increase over time, so individuals working in careers that require high time commitment are particularly susceptible to this condition. The medial prefrontal cortex makes connections to other areas of the brain responsible for decision-making, cognition, mood, social behaviors, and memory.

Creativity in the Brain

Researchers debate a single definition of creativity and what it means to be creative. Capous-Desyllas and Bromfield (2020) defined *creativity* as "using one's imagination to create meaningful ideas" (p. 201). Dietrich (2004) had a more neurological explanation, stating that "creativity is a fundamental activity of human information processing" (p. 1011). Dietrich added two main characteristics of creativity: producing novel and appropriate work so that work is both original and valuable. Additionally, Kim (2015) described creativity as "the ability to bring something new into existence. The human act of creating always involves a reshaping of given materials, whether physical or mental" (p. 197). Some also judge creativity based on the impact a creation or idea had on society (Richtel, 2022). With multiple definitions and judgments placed on people and their work, it may be challenging for some to try to be creative with the pressure of creating something that has to benefit society.

The understanding of neuroscience has evolved, and so has the human understanding of the intricate process creativity creates in the brain. Creativity stems from our ordinary mental processes (Dietrich, 2004; Duch, 2007). The prefrontal cortex could be the central structure responsible for our creative thinking. Dietrich explained that the prefrontal cortex "contributes highly integrative computations to the conscious experience, which enables novel combinations of information to be recognized as such and then appropriately applied to works of art and science." (p. 1011-1012). Examining neural links revealed that creativity, which is typically associated with the function of the left hemisphere, came from both hemispheres (Zaidel, 2014). Each hemisphere contributes different functions to the overall creativity of a task. Other neurological factors are also analyzed when creativity is researched.

Working memory also played a role in the creative thinking process (Dietrich, 2004). Since working memory stores relevant information based on the situation, it is in a state of buffering that is important for cognitive flexibility, planning, and abstract thinking. This allows our consciousness to experience what is happening in the present time. Duch (2007) also agreed that working memory played a role in the creative process, adding that working memory is an active part of the long-term memory network and not a subsystem of memory. Brain imagery confirms that the temporal, frontal, and parietal associative cortex are all involved in working memory. Overall chronic stress or high levels of stress leave individuals more susceptible to depression. The practice of mindfulness could help lesson these

Mindfulness and Flow

Creative practices are also linked to flow and mindfulness. Mindfulness practices have substantial benefits for people that struggle with anxiety, depression, and stress (Grossman, 2004). According to Grossman, “mindfulness is characterized by dispassionate, nonevaluative and sustained moment-to-moment awareness of perceptible mental states and processes” (p.1). When an individual practices mindfulness, they start to develop the ability to sustain attention and have a better perception of what is happening to themselves. This leads to a better sense of control, emotional processing, and coping strategies for stress. Additionally, it can lead to higher self-efficacy.

Some occupations are more prone to burnout as hard-working individuals do not take time for themselves. Counseling, for example, is one of those fields (Coaston, 2017). Counselors rely heavily on compassion for their practice. However, burnout often comes when people go long periods without practicing self-compassion. Self-compassion is defined as "gentleness with oneself when faced with a perceived sense of inadequacy or failure" and should be looked at as

"positively relating to oneself" (p. 285). According to Coaston, the Buddhist construct of self-compassion is composed of three parts: self-kindness, mindfulness, and common humanity.

It seems that a key element to unlocking the path from creativity to better mental health is engaging in a mindfulness practice called flow. Csikszentmihalyi, a leading flow and creativity researcher, considered flow as the feeling "when you're doing things that are so enjoyable that you want to pursue them for their own sake" (Csikszentmihalyi, 2014, p.132). Csikszentmihalyi coined this state as flow which is described as a definitive state of engagement. When an individual is "in the zone" or having a flow experience, they often described it as enjoyable. They are engaged in a period of concentration that so focused they are able to forget their troubles and ego. They are in complete control of thought and body, and lose track of time. Csikszentmihalyi (2014) describes this as a type of ecstasy. When the mind and body are both engaged in an activity together as one the individual has no other thoughts or actions because they are in the present moment. This is where the overlap between flow and mindfulness begins.

Modern literature also compared flow theory to other theories. Martin and Colp (2022) made the connection between two theories: Betty Edward's Right-Mode Flow, from 1978, and Mihaly Csikszentmihalyi's Flow Theory, from 1975. Both theories contained similar characteristics for defining the flow-like state, but Edward's research was geared specifically towards artistic endeavors, while Csikszentmihalyi's work centered on creativity in general. Both theorists described the flow-like state as a time of immense concentration so much so that the participant often lost track of time. Some people in a flow state also experienced a period where "the mind and body are connected as one" (p. 169). Edward's talked of this as a "shift into a second mode of thinking,"(p. 159) where the individual would shift from processing on the left side of the brain to the right side, thus creating the term Right-Mode or R- Mode.

Csikszentmihalyi's research added that, although the individual is working very hard, they often leave the experience feeling refreshed or energized. Researchers looked for a way to use art to promote mental health. Martin and Colp tested four hypotheses in their research.

To conduct their study, Martin and Colp instructed participants to make intuitive brush strokes for twenty minutes. After, there was a 5-minute debriefing. Researchers found that twenty minutes was enough time for participants to enter the flow state. Participants included 104 school-based mental health professionals. Martin and Colp's intervention was completed online due to the COVID-19 pandemic. The data showed significant correlation between Flow and R-Mode. Additionally, there was an increase in Flow, R-Mode, and Mental Health Capacity (MHC) among the participants.

Other Functions of Art Interventions

Art interventions are common in the fields of social work, counseling, and therapy. They are often incorporated into self-care, meditation, or mindfulness practices for people of all occupations all over the world. In a 2020 field note, Capous-Desyllas and Bromfield reported on a study that incorporated an arts-based approach to the field instruction of social work to "enhance the understanding of the human condition and experience "(p. 202). In this seminar class, professors asked their students to create work that helped process their internship experiences, engage in self-reflections, identify client strengths and barriers, and create an awareness of social issues.

After their required journaling, students engaged in creativity through art to create work in various mediums. They later shared this work with each other and used creativity to further process their thoughts, feelings, and experiences. There were numerous potential positive outcomes as a result of these creative interventions. The social work students felt they were

better able to process their intern experience through art than through the traditional methods of only keeping a written journal. Students also felt better equipped to process their own past experiences, including childhood traumas. They also felt they were better at connecting with the clients at their intern sites. “The use of art and field education pedagogy allow further development of students’ critical reflection that may not be possible through more traditional approaches as the students in the larger classroom are also creating artwork and reflecting on their observations” (Capous-Desyllas & Bromfield, 2020. p. 207).

Creativity using art interventions is also used in counseling as a pedagogical strategy. The literature describes the creation of a personal guiding theory as a common practice in the field (Barth, 2021).

A personal guiding theory of counseling is a counselor’s foundational philosophy of how people grow, change, and develop that guides therapeutic work with clients. Developing a personal guiding theory is a process that involves counselors aligning their personal values and beliefs with a theoretical approach. Counselors then use their personal guiding theory as a foundation from which to navigate the counseling process. (p. 126)

Barth’s (2021) study utilized a constructive approach to create a visual representation for the development of a personal guiding theory for the participating counseling students. Students were asked to create a visual representation of their theory. Barth concluded that creating a visual representation "assisted students in a deeper understanding of themselves, the concepts they are learning, and their development as professional counselors" (p. 134). Additionally, because the students were allowed flexibility in their visuals and their creative process, their processes allowed for deeper reflection and personal understanding of themselves when creating their theories. This visualization technique is supported by Maddux’s addition to self-efficacy theory.

Community Effect

Communities and being in social settings may also influence mental wellness. The literature showed that research has been done to examine the effects on an individual in social settings. In a 2015 study, Kim selected three art projects using a variety of media for students to complete in a community setting. One notable project was a visual collage that was intended to represent their futures, which aligns with Maddux's visualization technique. Kim was able to provide supportive evidence to the theory by selecting this project. "By making a visual board, students were able to think about who they might be or what they might want to do in the future and become hopeful of the possibilities the future may hold for them" (Kim, 2015, p. 198). This study had overall positive results for the students involved.

Social and solitary environments have an effect on flow between introverts and extroverts (Lui & Csikszentmihalyi, 2020). Researchers, Liu and Csikszentmihalyi, sought to examine three hypotheses: "individuals experience solitary flow more frequently than social flow" (p. 2), "individuals experience social flow more intensely than solitary flow" (p. 2), and "extraversion moderates the relationship between activity type (i.e., solitary activity and social activity) and flow frequency" (p.3). The results of the study surprised researchers as the data did not support their first or second hypothesis. Specifically looking at the first hypothesis, there was statistically no difference between social and solitary flow. When these results were compared with the participant's personalities, introversion or extroversion, and the activity type there was an explanation for these findings.

Examining the second hypothesis found that individuals experience a more intense flow state in solitary conditions rather than in social conditions. This both supported and contradicted previous research. Researchers explained that prior to the study, there was a misconception that

social flow is more intense. However, when flow is conceptualized in seven or nine dimensions, as opposed to the previous one or two, solitary flow showed to be more intense. This research took into consideration that there are factors that could affect flow intensity in solitary and social situations. In social settings, participants may have perceived a higher flow intensity because of the feedback they were receiving from their peers. Additionally, the intense feeling could have been amplified due to emotional contagion. The third hypothesis was supported by the data. In their method, Liu and Csikszentmihalyi had participants complete a survey and then randomly assigned them a social or solitary condition. Based on the condition, participants were asked to think of situations when they experienced these conditions regularly. Participants rated the difficulty of thinking of the situations and completed a flow survey.

The literature outlined some common art interventions used in research. These specific art interventions have had successful outcomes in increasing mindfulness, engaging flow and creativity, and aiding in personal reflection. These art interventions are mainly used in social work and counseling practices. However, there is some overlap in flow research. The literature did not specify one intervention over another. Nevertheless, there is strong evidence in the literature that supported Maddux's visualization theory, which suggested the creation of a vision board as a positive art intervention. Creating a vision board allowed the individual the opportunity to visualize where they see themselves in the future and displayed a visual representation of that image. Some would call this manifestation, however it falls in line with Bandura's self-efficacy theory. Other art interventions included photography, poetry, collage making, scribble art, and visual journaling.

Although this research is aimed at engaging mindfulness through art interventions, the literature also endorsed a wide range of other activities. Coaston (2017) encouraged the creation

of a self-care plan that incorporates at least one activity for the mind, spirit, and body to build maximum resilience and fortitude. For the mind, recommendations are made for a regimented mindfulness practice, learning new information, reminiscing over fond memories, writing or journaling, and writing permission slips. Exercise, stretching, walking, yoga, dance, and gardening are strong alternatives for body movement (Coaston, 2017). For the spirit, it is reported that many people practice religion or spirituality. An alternative to this is finding a community that suits the individual. Additional options for nurturing the spirit are grounding, spending time in nature, and engaging in creative art interventions.

When analyzing the literature, it is important to be mindful that although this mindfulness work has ancient Buddhist roots, there is not a right or wrong answer. Humans are very unique beings and many process feelings and emotions differently. In general, the literature, and overwhelming anecdotal evidence, shows that humans have reached a point where we need reexamine our priorities in order to take the time to take care of ourselves.

Methodology

This research was created as an experiment set to evaluate the relationship between achieving flow, by participating in creative art interventions, and the symptoms of burnout and stress. This self-study research was conducted by a 35-year-old female experiencing burnout. A former teacher of 13 years, I currently work outside the field of education. The research was conducted in Central Texas at my residence. I completed a variety of process-based and product-based art in a wide variety of media. During process-based art, my goal was strictly the experience of making art or experimenting with an art technique. In contrast, product-based art had the goal of completing a specific project. I was granted the freedom to choose the art projects and the time frame to complete the projects. A variety of data tools were used including a daily

journal, sleep surveys, intervention checklists, flow achievement survey and an overall survey were used to collect data.

The research started with a pre-intervention survey that was also repeated in the middle and at the completion of the research. This survey examined my overall impression of my mental health, interpretations of burnout symptoms, 30-day sleep patterns, and feelings about returning to the field of education.

I completed a morning and evening sleep survey to look for patterns in sleep and sleep interruptions. The morning sleep survey tracked the overall amount and quality of sleep along with any sleep interruptions that may have occurred. It also examined the causes of the interruptions and how long the disturbance occurred. The evening sleep survey assessed daytime habits that could affect the quality of sleep. These included the consumption of caffeine throughout the day and liquids or food nearing bedtime. Additionally, it tracked exercise patterns, medications, vitamins, or supplements taken in the day, and if I followed a bedtime routine.

I kept a daily journal that was a hybrid of pre-determined data-driven questions and personal reflection. Questions collected data on the day's creative experience and flow achievement. A Likert scale with burnout statements was used to analyze daily feelings of burnout and a yes/no checklist was included to track physical manifestations of burnout and stress.

Before and after each art intervention I completed a quick check-in survey. This survey prompted me with different emotions and potential causes of stress. I checked these emotions and stressors if they felt relevant at the time. This survey also included a blood pressure data point to monitor any physical effects of the art intervention along with a reflection opportunity.

Additionally, after each art intervention, I completed a flow achievement survey. This survey prompted me with yes/no questions targeting the eight characteristics of flow as described by Csikszentmihalyi. Using this information, I could determine if flow was achieved during the intervention. Each intervention session started with the completion of the check-in survey and a brief meditation and goal-setting intention period. Then I worked on my choice of art for the day. At times this included completing a portion of a larger art project. After the session was completed, times for each session varied, I completed the check-in survey again along with the flow achievement survey.

Key variables that were examined in the research included other factors that contributed to the overall stress levels I was experiencing. These other factors were examined closely using the entries in the daily journal. It was important to remember that the process of burnout recovery and reducing stress takes time and progress is not necessarily linear. In the seven weeks of data collection, I focused on the overall trends and not the day to day to assess the bigger picture.

Data Analysis

The purpose of this research was to learn about the potential connections between achieving flow through creativity interventions and possible relief of burnout symptoms and recovery. The research design used quantitative and qualitative data tools that included journals, surveys, and checklists. Using the tools from the previous section, I collected data for a period of seven weeks. The qualitative and quantitative analysis of that data has been collected into three emerging themes.

Burnout Symptoms

I gathered data in a daily journal (Appendix C) that was kept throughout the data collection process. The following, Figure 1, is from the check in portion of this form. It targets the common symptoms of stress and burnout. A Likert scale was used to quantify responses, 1 to 5 strongly disagree to strongly agree. The weekly scores are given as an average score for the week. Common symptoms of burnout and high stress include fatigue, memory loss, struggles with concentration, irritability, anxiousness, body aches, and feeling emotionally drained.

Figure 1

Weekly Averages of Daily Journal Check In Questions

<u>Check In Questions</u>	<u>W1</u>	<u>W2</u>	<u>W3</u>	<u>W4</u>	<u>W5</u>	<u>W6</u>	<u>W7</u>
I felt mentally ready for today/not tired.	1.6	1.4	1.7	2.0	2.0	2.1	3.0
I was able to easily complete my work today.	3.1	3.9	3.5	4.4	3.5	4.6	4.1
Recovery after work was easy today.	2.2	2.3	2.1	2.4	2.6	3.1	3.1
I was able to get out of bed quickly and start my day.	2.2	2.0	1.9	1.9	2.0	2.3	2.7
I was happy to work today.	4.0	3.4	3.6	4.1	4.3	4.3	4.4
I was cynical about my work today.	2.0	3.4	2.9	1.9	1.9	1.5	1.3
I was able to focus on work today.	4.1	2.1	3.6	3.7	4.1	4.3	4.3
I felt forgetful at work today.	1.9	2.7	2.3	1.9	1.6	1.6	1.4
I had a hard time concentrating today.	2.9	3.7	3.1	2.7	2.9	2.9	1.9
I doubted myself or my abilities.	4.1	4.4	4.0	3.9	3.6	3.0	2.9

Note: The data indicates that there was marginal change in categories related to fatigue and memory/concentration. However, there was significant decrease in self-doubt over the course of the study.

The data indicates that throughout the process I continued to feel tired or fatigued. This is supported by the data collected by the session check in form (Appendix D). Although this is clear, my responses to feeling not tired did shift from “strongly disagree” to “neutral”.

When looking at memory loss and struggles with concentration the results indicate positive trends. While the feeling of forgetfulness remained steady at “strongly disagree”, my

trouble concentrating shifted from “disagree” to “strongly disagree”. Additionally, my irritability or cynicism also decreased from “disagree” to” strongly disagree”.

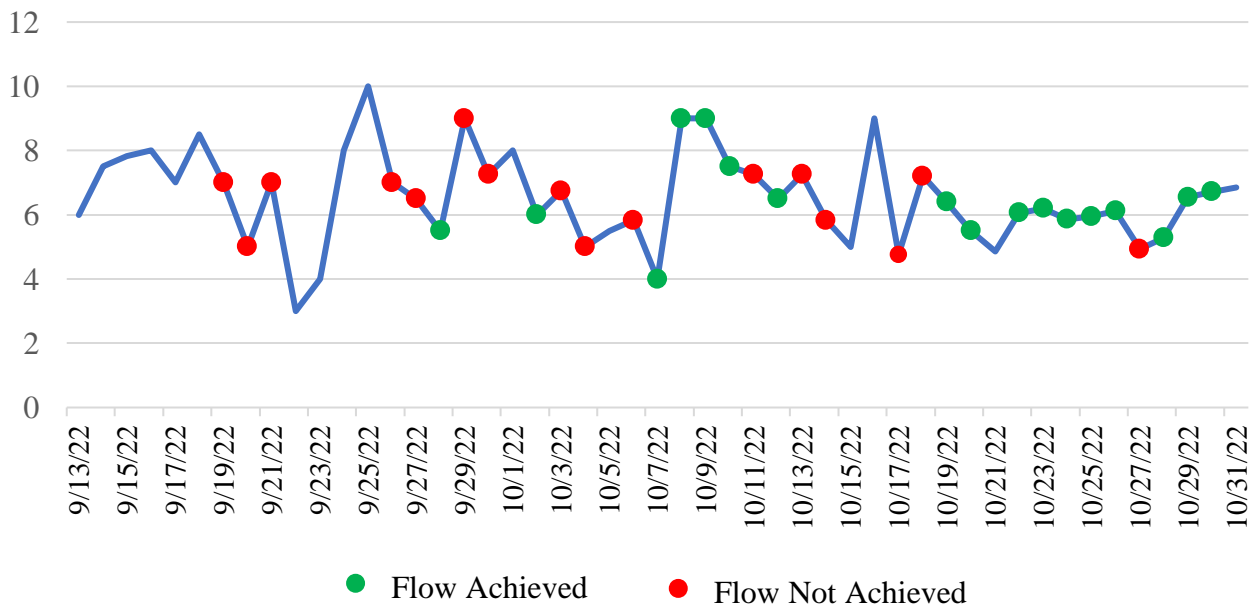
The strongest indicator of change is my self-perception. At the beginning of the data collection phase I indicated that I “agreed” with the statement “I doubted myself or my abilities.” At the conclusion of the data collection, I responded “disagree.” This would imply a more positive self-perception.

Sleep Patterns

As fatigue and insomnia are common symptoms of high stress and burnout, I monitored my sleep closely over the seven-week data collecting period using a morning and nighttime surveys. The series of figures that examined sleep is found in figure series two.

Figure 2.1

Time Asleep Vs Flow Achievement

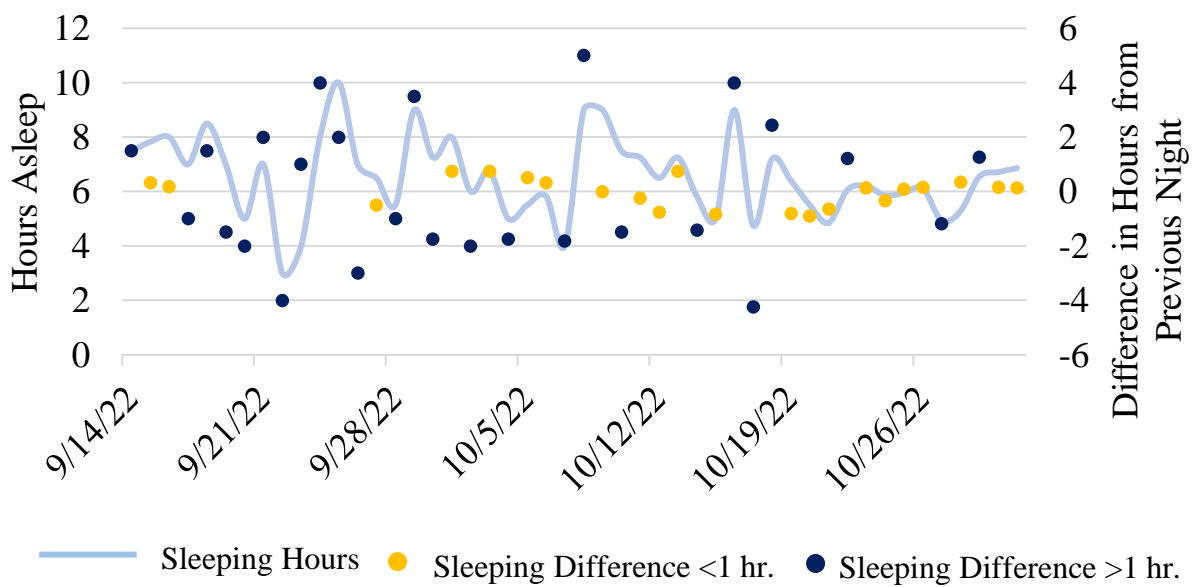


Note: Although sleep patterns started erratic, they began to even out towards the end of the study. This coincided with a period of time I was achieving flow more regularly. Further investigation is necessary to determine if these two things are dependent or occurred inadvertently.

Over the course of the data collection period, my sleep patterns began to level out. Starting at the beginning of the data collection phase and continuing through the middle, my time asleep was very irregular. Additionally, during this data period I had two episodes of extremely high anxiety and stress. As the data shows, over time my sleep started to become slightly more level and consistent in the last 10 days of data collection. This more regular sleep also came as I started regularly achieving flow which signals a connection between the two. However additional research is needed for more definitive conclusions.

Figure 2.2

Time Asleep and Consistency of Sleep Hours



Note: Data shows that my time asleep each night was within an hour of the night before beginning early October and remained consistent throughout the month. This indicates that my sleep was becoming more stable over the course of the study.

Figure 2.2 again shows the amount of sleeping hours, but also has an indicator marking the difference in the amount of sleep from the night before. When the time difference was more than an hour different, using absolute value, a dark blue indicator was used and when the time

was less than an hour a yellow indicator was used. These indicators are centered around the secondary axis 0, or no change in sleep time.

Looking at the change, or difference, in hours slept, there is a more consistent trend starting near the middle of the data collection period. The occurrence of yellow indicators starts a slight increase at the beginning of October and then becomes much more consistent as the month ends.

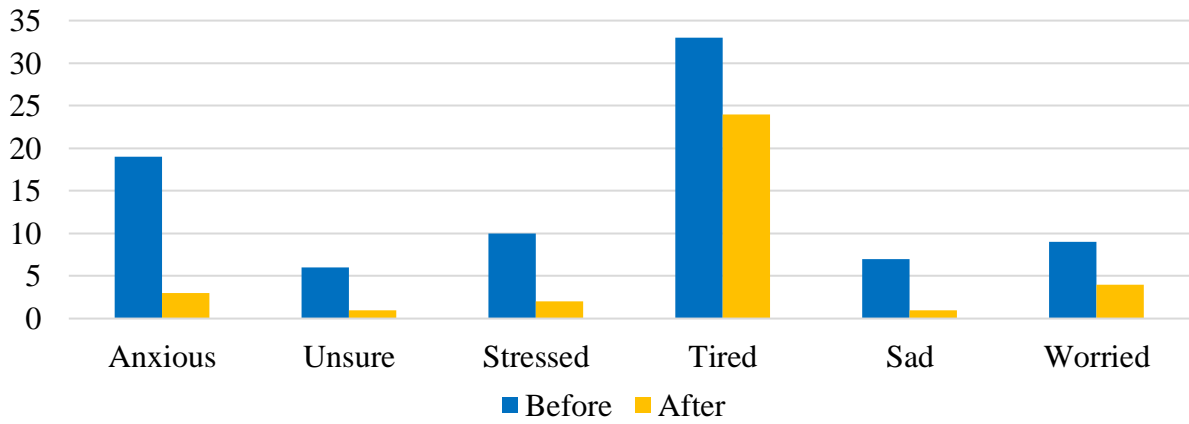
Feelings Immediately Before and After Creativity Session

In order to examine the effectiveness of each intervention and the study as a whole, I dove deep into examining my feelings. Using the session self-check in form (Appendix D), I measured my feelings immediately before and after each session to study short- and long-term data. The responses were selected from a predetermined list and I had the option of adding additional identifiers. Data is shown in Figure series 3.

The data in this series shows how I was feeling immediately before and after each session. By filling the form out at the start and end of each session, I was able to gather accurate, in the moment, data. It is important to note that for all three of these figures, the response of “worried” was not an original selection in the form. However, I used the term “worried” or “worry” so many times I felt this response needed to be categorized as if it was an available option. The same data has been displayed in three ways intentionally. Figure 3.1 best shows the individual feelings compared to themselves over the course of the data collection period. Figure 3.2 best shows all possible responses compared to timing, either before or after the session. Finally Figure 3.3 best displays the feelings were most prominent before and after the sessions.

Figure 3.1

Decreased Feeling Responses Before and After Intervention

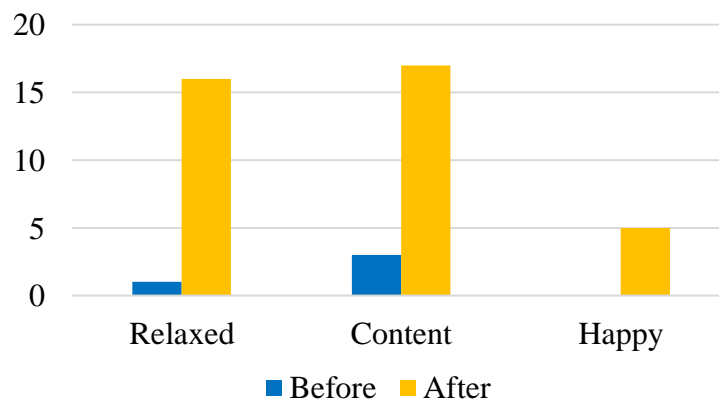


Note: The responses anxious, unsure, stresses, tired, sad, and worried all decreased immediately after engaging in creativity time.

When examining the before and after feeling response data, several trends emerged. More than any other response I feel tired, which indicated fatigue, one of the most common symptoms of burnout. However, after my creative time I reported feeling less tired than before. There was also a significant decrease in feeling stressed, unsure, anxious, sad, and worried. The feeling of anxiety dropped significantly from 58% down to 9% after a creative period.

Figure 3.2

Increased Feeling Responses Before and After Intervention



Note: The responses relaxed, content and happy all increased immediately after engaging in creativity time indicating positive movement in my burnout recovery journey.

Additionally, some feelings increased immediately after a creativity session. The data shows that I felt more relaxed and content after a creative period. I responded “relaxed” 3% of the time prior to my creative time and 48% of the time after. Notably, I responded “happy” only after interventions during this entire seven-week process.

Figure 3.3

Word Cloud of Before and After Feeling Responses



Note: This figure is included to show a more visual representation of common feeling responses. While tired was still a top response, other responses became more prominent after creativity time.

These results show that I was feeling better after a creative session. These feelings may not have lasted throughout the entire day, however the temporary relief of stress and anxiety during the creative session helped me feel good enough to indicate happy and excited for the next session. This is supported in an entry from my journal from October 20. It reads:

I'm feeling good! I don't really feel worried about anything which is pretty rare. I totally lost track of time and feel like I might be late to work so I need to get going. Feels like it might be a good day.

This short note conveys positive energy and even the feeling of hope for a good day.

Discussion

This study examined the connections between creativity and mental wellness, particularly looking at stress relief and burnout recovery by achieving flow. While the data shows that I still feel tired, one of the largest symptoms of burnout, there is a trend that suggest that over a longer

period of time, I may begin to feel less tired as my sleeping patterns begin to even out and my time asleep becomes more consistent. Looking at the data from the lens of Dweck's growth mindset theory, applying the principles of process over product and emphasizing growth over time, there was evidence to suggest that my mental wellness was beginning to improve and that I was in a better mental state immediately following a creativity session.

Additionally, in the data, the more I achieved flow nearing the end of the data collection period, the more I begin feeling better. This indicates that there is at least a connection between the two that future research is necessary.

There were setbacks in the process, especially regarding my feelings of the amount of time I was spending on myself. In the beginning of the process, I felt guilty for spending so much time on myself. These feelings did subside slightly towards the end of the data collection period. I believe that ideally this process would take place over a longer period of time, allowing the subjects more flexibility withing their weekly schedule to block out time that makes sense and more time to track data, as the stress relief or burnout recovery process can take months if not years.

Examining the data tools used in this study, they could be used in future studies. However, adjustments should be made to the flow achievement chart to give the user more of a guideline instead of a strict yes or no. Often times, I would feel like I had achieved flow, however during the creativity session I would have a random thought about a worry, instead of thinking about what was happening in the moment. Then I would mark a no indication to flow achievement because my mind wandered for just a moment, even if I had felt as if I had achieved flow during another part of the session. This data tool did not allow for opportunity for discussion, instead gathered data on bilateral thinking which is short sighted. Additionally

concerning the data tools, researchers should consider the use of the pre and post survey (Appendix A) weekly in order to acquire more data.

Recommendations

This researched explored creativity to reach a flow state as a way to overcome symptoms of burnout and support positive mental health. As shown by the data, this work is not a complete cure for burnout, but could have positive effects if added as one part of an individual's burnout recovery program. I would suggest that any individual seeking stress relief or burnout recovery consult a professional first in order to establish a baseline and holistic plan of action. While creativity is shown in the research and in this study to help, it is best coupled with other avenues to promote overall wellness, which was not a consideration reflected in this study.

Limitations

This self-study does contain limitations. As the subject of the study is intended for educators, I started a new job outside the field of education prior to the beginning of the data collection period. While I believe this was the best decision for my mental health at the time, my current occupation does not provide the same emotional and physical triggers I was facing in education. This could have impacted the results as I was able to spend my workdays in an environment that feels very supportive of me and my journey. Having the privilege to step into another field to recover is not always possible for other educators; they are often trying to do recovery work while remaining in the same environment that is responsible for their stress or burnout.

Another limitation in this study is the time spent. I felt it very constraining to be working on creative projects so much throughout the week. In future studies, steps should be taken to protect subject's time so this type of study does not feel like a burden upon the subjects.

Along those lines, prior to the start of the data collection process did not participate much in self-care practices. Once I began the intervention, I felt keeping up with so much time devoted to myself to be bothersome for a variety of reasons. It wasn't until the fifth week I started truly accepting it.

Lastly, other stress factors, outside of my control came into play and are reflected in the data. Mostly visible in my sleep patterns and check in responses in week two of the data collection, September 21, I felt very down this week especially. This is the human element of the research. On my journey through burnout recovery and overall stress reduction, I must keep in mind that it is just that, a journey. I am ultimately on my own time and at my own pace. There will be times that will push me to my limit and times where I can breathe a little easier.

References

- Abraham. (2021). Creativity understood: From neuromythology to neuroscience. *American Journal of Psychology*, 134(1), 111–114. <https://doi.org/10.5406/amerjpsyc.134.1.0111>
- Abramson, A. (2022). Burnout and stress are everywhere. *Monitor on Psychology*. Retrieved September 11, 2022, from <https://www.apa.org/monitor/2022/01/special-burnout-stress>
- Aguilar, E. (2018). *Onward: Cultivating emotional resilience in educators*. Jossey-Bass.
- Bandura, A., & Adams, N.E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research* 1(4), 287–310. <https://doi.org/10.1007/BF01663995>
- Barth, A. L. (2021). Constructing personal guiding theory using visual representation: An innovative pedagogical strategy. *Journal of Creativity in Mental Health*, 16(1), 125-137.
- Benedek, Christensen, A. P., Fink, A., & Beaty, R. E. (2019). Creativity assessment in neuroscience research. *Psychology of Aesthetics, Creativity, and the Arts*, 13(2), 218–226. <https://doi.org/10.1037/aca0000215>
- Capous-Desyllas, M., & Bromfield, N. F. (2020). Field note - exploring the use of arts-informed journaling in social work field seminars. *Journal of Social Work Education*, 56(1), 201-209. <https://doi.org/10.1080/10437797.2019.1627259>
- Coaston, S. C. (2017). Self-care through self-compassion: A balm for burnout. *Professional Counselor*, 7(3), 285-297. <https://doi.org/10.15241/7.3.285>
- Crowder, R., Lock, J., Hickey, E., McDermott, M., Simmons, M., Wilson, K., Leong, R., & De Silva, N. (2020). Art as meditation: A mindful inquiry into educator well-being. *The Qualitative Report*, 25(3), 876-890.
- Csikszentmihalyi, M. (2002). *Flow: The classic work on how to achieve happiness*. Random House.

- Csikszentmihalyi, M. (2014). Flow and Education. In *Applications of Flow in Human Development and Education* (pp. 129–151). https://doi.org/10.1007/978-94-017-9094-9_6
- Dietrich, A. (2004). The cognitive neuroscience of creativity. *Psychonomic bulletin & review*, *11*(6), 1011-1026. <https://doi.org/10.3758/BF03196731>
- Dweck, C. S. (2016). *Mindset: The new psychology of success*. Random House.
- Dweck, C. S. (2017). The journey to children's mindsets—and beyond. *Child Development Perspectives*, *11*(2), 139-144. <https://doi.org/10.1111/cdep.12225>
- Duch, W. (2007). Creativity and the brain. In *A handbook of creativity for teachers*. World Scientific Publishing. Chapter 27.
- Elkis-Abuhoff, D. L., Gaydos, M., Rose, S., & Goldblatt, R. (2010). The impact of education and exposure on art therapist identity and perception. *Art Therapy*, *27*(3), 119-126.
- Gillam, T. (2013). Creativity and mental health care. *Mental health practice*, *16*(9). <https://doi.org/10.7748/mhp2013.06.16.9.24.e807>
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of psychosomatic research*, *57*(1), 35-43. [https://doi.org/10.1016/S0022-3999\(03\)00573-7](https://doi.org/10.1016/S0022-3999(03)00573-7)
- Haglund, M., Cooper, N., Southwick, S., & Charney, D. (2007). 6 keys to resilience for PTSD and everyday stress. *Current Psychiatry*, *6*(4), 23-30.
- Haimovitz, K., & Dweck, C. S. (2017). The origins of children's growth and fixed mindsets: New research and a new proposal. *Child Development*, *88*(6), 1849-1859. <http://www.herschwilson.com/wp-content/uploads/2020/12/Haglund-article.pdf>

- Kim, H. (2015). Community and art: creative education fostering resilience through art. *Asia Pacific Education Review, 16*(2), 193-201. <https://doi.org/10.1007/s12564-015-9371-z>
- Liu, & Csikszentmihalyi, M. (2020). Flow among introverts and extraverts in solitary and social activities. *Personality and Individual Differences, 167*, 110197–. <https://doi.org/10.1016/j.paid.2020.110197>
- Maddux, J. E. (1995). Self-efficacy theory. *The Plenum Series in Social/Clinical Psychology, 3–33*. doi:10.1007/978-1-4419-6868-5_1
- Maddux, J. E., & Stanley, M. A. (1986). Self-efficacy theory in contemporary psychology: An overview. *Journal of Social and Clinical Psychology, 4*(3), 249-255. <https://doi.org/10.1521/jscp.1986.4.3.249>
- Marken, S., & Agrawal, S. (2022). K-12 workers have highest burnout rate in U.S. *Gallup.com*. Retrieved September 11, 2022, from <https://news.gallup.com/poll/393500/workers-highest-burnout-rate.aspx>
- Martin, B. H., & Colp, S. M. (2022). Art making promotes mental health: A solution for schools that time forgot. *Canadian Journal of Education/Revue canadienne de l'éducation, 45*(1), 156-183. <https://doi.org/10.53967/cje-rce.v45i1.5017>
- McDonnell, R. (2014). *Creativity and social support in mental health: service users' perspectives*. Springer.
- Metzl, E. S., & Morrell, M. A. (2008). The role of creativity in models of resilience: Theoretical exploration and practical applications. *Journal of Creativity in Mental Health, 3*(3), 303-318. <https://doi.org/10.1080/15401380802385228>
- Paintner, C. V. (2011). *The artist's rule: Nurturing your creative soul with monastic wisdom*. Sorin Books.

- Park, N. S., Song, S. M., & Kim, J. E. (2020). The mediating effect of childcare teachers' resilience on the relationship between social support in the workplace and their self-care. *International Journal of Environmental Research and Public Health*, *17*(22), 8513. <https://doi.org/10.3390/ijerph17228513>
- Poppa, K. (2019). Self-care is soul care. *Journal of Spiritual Formation and Soul Care*, *12*(1), 50-70. <https://doi.org/10.1177/1939790918795633>
- Price, E. W., & Swan, A. M. (2020). Connecting, coping, and creating: An expressive arts group for first year college students. *Journal of Creativity in Mental Health*, *15*(3), 378-392. <https://doi.org/10.1080/15401383.2019.1685924>
- Saggar, Volle, E., Uddin, L. Q., Chrysikou, E. G., & Green, A. E. (2021). Creativity and the brain: An editorial introduction to the special issue on the neuroscience of creativity. *NeuroImage (Orlando, Fla.)*, *231*, 117836–117836. <https://doi.org/10.1016/j.neuroimage.2021.117836>
- Sawyer. (2011). The Cognitive Neuroscience of Creativity: A Critical Review. *Creativity Research Journal*, *23*(2), 137–154. <https://doi.org/10.1080/10400419.2011.571191>
- Slattery, M., Attard, H., Stewart, V., Roennfeldt, H., & Wheeler, A. J. (2020). Participation in creative workshops supports mental health consumers to share their stories of recovery: A one-year qualitative follow-up study. *Plos one*, *15*(12), e0243284. <https://doi.org/10.1371/journal.pone.0243284>
- Suni, E. (2022). *Sleep diary: How and why you should keep One*. Sleep Foundation. Retrieved September 6, 2022, from <https://www.sleepfoundation.org/sleep-diary>
- Walrond, K. (2021). *The Lightmaker's manifesto: How to work for change without losing your joy*. Broadleaf Books.

Zaidel, D. W. (2014). Creativity, brain, and art: biological and neurological considerations. *Frontiers in human neuroscience*, 8, 389.

<https://doi.org/10.3389/fnhum.2014.00389>

Appendix A

Overall Pre and Post Survey

The following questions take a closer look at general emotional health, resiliency, mental energy, work-related exhaustion, and general feelings about relationships and community. How do you feel you relate to the following statements? Please use the scale 1- completely disagree, 2- disagree, 3- neither agree nor disagree, 4- agree 5- completely agree					
I believe am in a good state of overall general health.	1	2	3	4	5
I am in a good state of physical health.	1	2	3	4	5
I am in a good state of mental health.	1	2	3	4	5
Reflecting on the past month, my overall sleep quality is good.	1	2	3	4	5
I regularly participate in reflective practices.	1	2	3	4	5
The thought of returning to the classroom stresses me out.	1	2	3	4	5
My energy level right now is high.	1	2	3	4	5
I am excited about what tomorrow will bring.	1	2	3	4	5
I am hopeful about the upcoming year.	1	2	3	4	5
I slept well last night.	1	2	3	4	5
I regularly participate in self-care practices.	1	2	3	4	5
I have a strong community I can rely on.	1	2	3	4	5
I tend to bounce back quickly after hard times.	1	2	3	4	5
I work in a stressful field.	1	2	3	4	5
Every day is a new opportunity to grow and learn.	1	2	3	4	5
I have a hard time making it through stressful events.	1	2	3	4	5
It does not take me long to recover from a stressful event.	1	2	3	4	5
I often multitask while working.	1	2	3	4	5
It is hard for me to snap back when something bad happens.	1	2	3	4	5
I am a spiritual person.	1	2	3	4	5
I usually come through difficult times with little trouble.	1	2	3	4	5
I tend to take a long time to get over setbacks in my life.	1	2	3	4	5
I put myself first.	1	2	3	4	5
I love teaching.	1	2	3	4	5
I feel mentally capable of handling a classroom job.	1	2	3	4	5
I am excited to look for a job as a classroom teacher.	1	2	3	4	5
I am often emotionally drained after work.	1	2	3	4	5
I mostly rely on myself when handling challenges.	1	2	3	4	5
I am worn out after a typical workday.	1	2	3	4	5
I feel anxious about going back into a classroom.	1	2	3	4	5
I often think of work-related things in my personal, or off, time.	1	2	3	4	5
In the past month, I have felt restlessness during bedtime.	1	2	3	4	5
In the past month, I have been worried about the future.	1	2	3	4	5
In the past month, I have felt anxious when I think about returning to a classroom.	1	2	3	4	5
In the past month, I have felt low.	1	2	3	4	5
I have a hard time concentrating.	1	2	3	4	5
I have a hard time “turning off” when I get home.	1	2	3	4	5
I take time to learn new things.	1	2	3	4	5

Appendix B

Daily Sleep Surveys

Morning							
Week of:	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
What time did I get into bed?							
What time did I try and go to sleep?							
How long did it take to fall asleep?							
What time did I wake up this morning?							
How many times did you wake up during the night?							
How long was I awake?							
Last night I slept a total of:							
Rate the quality of sleep: Very Poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Very Good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was my sleep disturbed by any factors? (ex. allergies, sickness, noise, pets, discomfort/pain, etc.)							
Any other comments about your sleep worth noting?							

Appendix C
Daily Journal

Date _____

Today's creative work _____

Goal _____

Intervention Experience Description:

Flow Achieved? _____

Quick check - How do you feel you relate to the following statements? use the scale 1- completely disagree, 2- disagree, 3- neither agree nor disagree, 4- agree 5- completely agree

I felt mentally ready for today/not tired.					
I was able to easily complete my work today					
Recovery after work was easy today.					
I was able to get out of bed quickly and start my day.					
I was happy to work today.					
I was cynical about my work today					
I was able to focus on work today.					
I felt forgetful at work today					
I had a hard time concentrating today					
I doubted myself or my abilities					

	Yes	No
I felt in control of my emotions today		
I unintentionally overreacted today		
I worried today		
I felt stressed or tense today		
I had a panic attack today		
Chest pain/tightness in chest		
Stomach aches		
Headache		
Muscle pain (neck, shoulder, back)		
Muscle pain other		

Notes:

Appendix D

Session Self-Check In

Complete before and after each session

Date:		Time:	
I am feeling			
Happy	Excited	Grateful	
Relaxed	Content	Tired	
Unsure	Bored	Anxious	
Angry	Stressed	Sad	
Other:			
Any Tags			
Work	School	Family	
Travel	Self Care	Relationship	
Calm	Money	Food	
Spirituality	Health	Friends	
Other:			
Notes:			

Date:		Time:	
I am feeling			
Happy	Excited	Grateful	
Relaxed	Content	Tired	
Unsure	Bored	Anxious	
Angry	Stressed	Sad	
Other:			
Any Tags			
Work	School	Family	
Travel	Self Care	Relationship	
Calm	Money	Food	
Spirituality	Health	Friends	
Other:			
Notes:			

Appendix E

Flow Achievement Checklist

Complete after each session

	Check	Yes	No
I maintained complete concentration on the task			
There was a clear goal in my mind and task provided feedback			
I experienced a loss of time			
The experience was intrinsically rewarding			
The task eventually felt effortless and easy			
There was a balance between challenge and skill			
Actions and awareness merged and lost self-consciousness			
I felt I was in control of the task			
Flow was achieved			