PROMOTING WELL-BEING IN SCHOOLS: THE EFFECTS OF A HAPPINESS WORKSHOP ON EDUCATORS AND OTHER SCHOOL PERSONNEL

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DISSERTATION

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Abstract

Educators throughout the United States report high levels of mental distress, anxiety, depression, and stress and difficulties with physical health. Educational systems have limited ability to address the well-being of faculty and staff in primary and secondary schools. Existing interventions are not always adequate and often do not reach the majority of educators who are facing challenges in the aforementioned areas of wellness. Positive psychology interventions and workshops have demonstrated their efficacy in promoting well-being with different populations. In this quantitative, quasi-experimental, pretest-posttest study, I studied the effects of a brief happiness for educators workshop on participants’ well-being. The happiness for educators workshop was offered during a professional development day for Missoula County Public Schools. The workshop included a brief 105-minute presentation introducing participants to positive psychology and interventions associated with this treatment modality. Some participants also received email messages offering further resources once a week for four weeks post-intervention. Participants who completed the workshop reported less depression and less negative affect, although statistical significance, as compared to the control group, was not achieved. The results indicate that positive psychology interventions may be useful in promoting improved well-being among educators, but that larger doses are likely needed to achieve statistical significance. Conclusions, limitations, and recommendations for future research are included.
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CHAPTER ONE: INTRODUCTION TO THE STUDY

Humanity’s search for happiness is a cornerstone of history. Philosophers from cultures that span the globe have long shared their ideas on the nature of happiness and how to achieve it (Usman & Kadir, 2022; Duckworth et al., 2005). Over the course of millennia, researchers have thought of happiness as chronological and conditional, while also being an outward manifestation of peoples’ goodness (Usman & Kadir, 2022; Duckworth et al., 2005).

Positive Psychology is the science and applications related to the study of psychological strengths, positive emotions, and happiness (Duckworth et al., 2005; Lopez et al., 2019). Positive Psychology includes brief interventions that concentrate on people’s pleasure and life satisfaction (hedonia; Waterman, 1993; Lopez et al., 2019; Pancheva et al, 2021). Additionally, the goal of positive psychology is to help individuals thrive by living a good life (eudaimonia); a life of virtue and authenticity that stems from “doing what is worth doing,” and doing it well (Waterman, 1993; Lopez et al., 2019; Pancheva et al, 2021). Research on positive psychology has yielded intervention techniques that facilitate well-being through helping to achieve some measure of hedonia and eudaimonia. Interventions such as developing gratitude interventions, three good things, acts of kindness, writing about the best possible self, savoring, and mindfulness practices empower the individual to achieve wellness and well-being (Clarry & Carson, 2019). Such interventions are commonly referred to as “positive psychology interventions” (PPIs; Clarry & Carson, 2019).

Summary of Teacher Mental Health and Well-Being

Teaching is an occupation that demands intense dedication while requiring the completion of many tasks under complex and challenging conditions (Paudel et al., 2022). Various stakeholders (students, school administrators, colleagues, and parents) place
requirements and stressors on teachers while offering little job support in overcrowded working environments (Pautel et al., 2022). The same stressors are often placed on additional school staff including counselors, secretaries, and other support personnel who contribute to the educational process. These personnel often form mentor-type bonds with students, fulfilling a role that can be incredibly valuable in students’ development (Owuamanam, 2005). Formal teaching, as well as offering support and mentoring to students, often requires excessive mental work with low material rewards and varying degrees of changing curricula (Pautel et al., 2022). Stressors associated with this work can obstruct normal healthy thought processes and hinder corresponding feelings of well-being that may otherwise result from typical daily interactions with peers and activities (Pautel et al., 2022).

Teachers often report high stress (Salinas-Falquez et al., 2022). Effects of this stress include job abandonment, increased absenteeism, and deterioration of instructional effectiveness (Salinas-Falquez et al., 2022; Ferguson et al., 2022). Stress-related physical symptoms often include headaches, myalgia, hypertension, aggressiveness, rigidity, social challenges, isolation, low self-esteem, and emotional distress (Salinas-Falquez et al., 2022; Ferguson et al., 2022).

Developing brief, practical, and efficient methods for improving teacher mental health and well-being could benefit teachers, students, and school communities.

**Strategies for Improving Teacher Mental Health and Well-Being**

Researchers have found that cognitive behavioral therapy delivered by regular post-intervention supportive email or text messages, mental health literacy information, and web-based mental health self-assessments help address stress associated with teaching (Agyapong et al., 2022). Researchers have also found that teachers who are provided with positive psychology interventions that may proactively equip them with skills for managing job-associated stress may
be better able to address the challenges confronting them in schools (Hanson, 2019). Positive psychology interventions promote psychological well-being and include character strengths like gratitude, mindfulness, resiliency, optimism, self-regulation, emotional management, empathy, and compassion (Garcia-Alvarez et al., 2021).

Teacher well-being also may be improved through participation in professional development opportunities (i.e., in-service programming) that deal with well-being and self-efficacy (Tanaka et al., 2020). Teachers who possess higher self-efficacy as a result of professional development opportunities have been found to experience higher achievement and increased motivation, as well as lower emotional exhaustion and lower stress (Tanaka et al., 2020). Classroom management success, improved student engagement, and increased teacher effectiveness are outcomes linked to professional development programs presented to teachers in schools (Tanaka et al., 2020). The efficacy of professional development programs and positive psychology interventions, as well as continued improvement through post-intervention contact with participants is well established in the literature on the topic. Combining these approaches into a program for educators may help them reduce stress and depression and implement practices that reduce somatic symptoms, improve professional goal attainment, and produce higher student achievement.

**Summary of Positive Psychology Interventions**

Positive psychological interventions may be delivered in a variety of ways to help individuals progress towards well-being. Psychological well-being is a wide-ranging concept incorporating components like positive affect, hopefulness, drive, personal development, gratification, and happiness (Feig et al., 2022). Researchers have found that people who have better psychological well-being tend to engage in increased numbers of healthy activities and
achieve greater physical health (Feig et al., 2022). Specific positive psychology interventions found to be beneficial include, but are not limited to: engaging in acts of kindness, expressing gratitude, mindfulness, self-affirmations, conceptualizing a best possible self, goal setting, and increased focus on positive experiences (Feig et al., 2022). Specific positive psychology interventions that have demonstrated the highest degree of efficacy include gratitude, acts of kindness, mindfulness, best possible self exercises, emotional journaling, and multi-component positive psychology interventions (Feig et al., 2022).

Problem Statement

Teachers are experiencing high stress and wide-ranging mental health problems (Ferguson et al., 2022; Salinas-Falquez et al., 2022). Traditional community counseling resources do not meet the needs of all teachers who experience mental health challenges (Paudel et al., 2022). Primary and secondary education systems need wider reaching preventative strategies to meet the needs of teachers who are facing the challenges of the modern education environment. Wellness and positive psychology courses have been shown to improve subjective well-being and mental health among teachers (Ratanasiripong et al., 2021). Positive psychology courses are not required for teacher professional development and are not often offered to teachers at regular intervals, despite evidence suggesting a potential array of emotional, physical, social, and psychological benefits (Vo & Allen, 2022). Community stakeholders interested in advancing teacher well-being and mental health should study the effects of positive psychology courses and their short- and long-term effects on teacher well-being.

Purpose of the Study

The purpose of this study is to evaluate the outcomes of a 105-minute professional development happiness for educators workshop course on teacher happiness, well-being, and
mental health. It is hypothesized that participants who complete the happiness for educators workshop intervention will show significant positive benefits across a range of well-being outcome variables. The current study will contribute to a small but growing scientific literature focusing on positive psychology outcomes with teachers (Vo & Allen, 2022). Based on my review of the literature, most positive psychology courses are primarily content-based and do not provide for continued contact after the intervention (Lindau et al., 2018; Addington et al., 2019). Providing supportive emails and additional resources may augment the effects of a brief happiness for educators workshop. The general research question for this study is: what are the effects of a brief experientially-oriented happiness workshop, with additional encouraging post-intervention emails, on happiness, well-being, and mental health for teachers in the Missoula County Public School System?

**Research Questions and Hypotheses**

**Research Question One and Hypothesis**

Will teachers who participate in the happiness for educators workshop report greater goal-oriented hope compared to the control group?

H1: Teachers who complete the happiness for educators workshop will report greater goal-oriented hope as measured by the Adult Hope Scale (HS; Snyder et al., 1991), compared to the control group.

H10: Teachers who complete the happiness for educators workshop will not report greater goal-oriented hope as measured by the Adult Hope Scale (HS; Snyder et al., 1991), compared to the control group.

**Research Question Two and Hypothesis**
Will teachers who participate in the happiness for educators workshop report less prevalence of depressive symptoms compared to the control group?

H2: Teachers who complete the happiness for educators workshop will report less prevalence of depressive symptoms as measured by the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), compared to the control group.

H2₀: Teachers who complete the happiness for educators workshop will not report less prevalence of depressive symptoms as measured by the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), compared to the control group?

**Research Question Three and Hypothesis**

Will teachers who participate in the happiness for educators workshop report greater positive affect and lower negative affect compared to the control group?

H3: Teachers who complete the happiness for educators workshop will report greater positive affect and lower negative affect as measured by the Negative and Positive Affect Scale (NAPAS; Mroczek & Kolarz, 1998), compared to the control group.

H3₀: Teachers who complete the happiness for educators workshop will not report greater positive affect and will not report lower levels of negative affect as measured by the Negative and Positive Affect Scale (NAPAS; Mroczek & Kolarz, 1998), compared to the control group.

**Research Question Four and Hypothesis**

Will teachers who participate in the happiness for educators workshop report fewer negative somatic symptoms compared to the control group?

H4: Teachers who complete the happiness for educators workshop will report fewer somatic symptoms as measured by the Physical Health Questionnaire (PHQ; Spence et al., 1987), compared to the control group.
H40: Teachers who complete the happiness for educators workshop will not report fewer somatic symptoms as measured by the Physical Health Questionnaire (PHQ; Spence et al., 1987), compared to the control group.

Research Question Five and Hypothesis

Will teachers who participate in the happiness for educators workshop experience improved wellbeing, less negative emotion, and improved health compared to the control group?

H5: Teachers who complete the happiness for educators workshop will report improved wellbeing, less negative emotion, and improved health as measured by the Positive Emotion, Engagement, Relationships, Meaning, Accomplishment Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the control group.

H50: Teachers who complete the happiness for educators workshop will not report improved wellbeing, less negative emotion, and improved health as measured by the Positive Emotion, Engagement, Relationships, Meaning, Accomplishment Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the control group.

Research Question Six and Hypothesis

Will teachers who participate in the happiness for educators workshop experience and receive a series or four encouraging emails, one per week, for four weeks after the initial intervention experience greater improved wellbeing, less negative emotion, and greater improved health compared to those who participate in the experimental group without additional supportive emails?

H6: Teachers who complete the happiness for educators workshop and receive additional supportive emails, one a week for four weeks after the initial intervention, will report greater improved wellbeing, less negative emotion, and greater improved health as measured by the
AHS (HS; Snyder et al., 1991), the CES-D (CES-D; Radloff, 1977), the NAPAS (NAPAS; Mroczek & Kolarz, 1998), the PHQ (PHQ; Spence et al., 1987), and the PERMA-Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the experimental group participants who did not receive additional supportive emails.

H60: Teachers who complete the happiness for educators workshop and receive additional supportive emails, one a week for four weeks after the initial intervention, will not report greater improved wellbeing, less negative emotion, and greater improved health as measured by the AHS (HS; Snyder et al., 1991), the CES-D (CES-D; Radloff, 1977), the NAPAS (NAPAS; Mroczek & Kolarz, 1998), the PHQ (PHQ; Spence et al., 1987), and the PERMA-Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the experimental group participants who did not receive additional supportive emails.

**Definition of Terms**

**Emotional Well-being.** This is a type of well-being consisting of perceptions of affirmed happiness and satisfaction with life, along with a balance of positive and negative affect (Lopez et al., 2019).

**Eudaimonia.** This term refers to the presence of potentials and strengths built through meaning making; personal growth, self-realization, purpose, and value (Kamboj & Garg, 2021; Daneels et al., 2021). Eudaimonia is human flourishing associated with living a life of virtue or happiness based on a lifelong pursuit of meaningful, developmental goals (i.e., “doing what is worth doing”). This is considered the key to a good life (Waterman, 1993; Lopez et al., 2019).

**Flourishing.** This term pertains to individuals who have simultaneously high levels of social, emotional, and psychological well-being (Lopez et al., 2019).
**Hedonia.** This term refers to the predominance of positive over negative emotions while experiencing satisfaction in life; the act of seeking pleasure and comfort in life (Pancheva et al., 2021; Huta & Ryan, 2010).

**Psychological Well-Being.** This is a type of well-being that consists of six elements: self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relations with others (Lopez et al., 2019).

**Subjective Well-Being.** This term refers to subjective evaluation of one’s current status in the world. More specifically, it is a combination of positive affect (in the absence of negative affect) and general life satisfaction (subjective appreciation of life’s rewards). Subjective well-being often is used as a synonym for happiness in the psychology literature (Lopez et al., 2019).

**Well-being.** This term refers to a person’s own assessment of their satisfaction with life, how much positive emotion (enjoyment, enthusiasm, inspiration, or pride) they experience, and how little negative emotion (hostility, irritability, fear, or nervousness) they experience (Lester et al., 2022).

**Wellness.** This term refers to a state of complete physical, mental, and social well-being and not merely the absence of disease. Individuals who are self-aware experience the intentional prevention of distress and promotion of well-being (Kirkland, 2014; Klein & McCarthy, 2022).

**Delimitations**

This study was delimited by focusing exclusively on MCPS employees in Missoula, Montana who choose to attend a 105-minute happiness for educators workshop, during a full-day educational summit. The control group was also a nonrandom self-selected group of teachers who choose to attend different professional development workshops during the full-day educational summit. I did not sample participants outside of these parameters.
Limitations

The study has two principal investigators: the professor teaching the workshop and the doctoral student doing research for the dissertation. This could lead to teaching towards desired outcomes or an emphasis of demand characteristics that could influence outcomes. However, workshop content was laid out in the announcement to teachers and it will be followed. Attempts to minimize the history effect, mortality, and multiple treatment effects are discussed below.

History. Should a significant event occur during the time of the study the history effect may skew the results (Privitera, 2017). To help control for the history effects, a control group will complete pre- and post-test assessments during the same time period as the intervention group. Should a significant historical event occur (e.g., a global pandemic) both groups will have had similar experiences.

Maturation. Internal changes may occur in participating teachers that are not related to external events (Privitera, 2017). Due to the nature and brief length of this intervention, participating teachers may experience hunger or boredom, resulting in maturation. Experiential learning activities will be used during the intervention to keep participants engaged and control for this threat to internal validity.

Mortality. It is possible that not all teachers who agree to participate will complete the study. Completion will be controlled for by providing financial incentives study participation. If teachers leave the workshop early, I will try to identify them and exclude their data during data cleaning. Additionally, to control for mortality a large enough sample size (Privitera, 2017) will be recruited to offset for teachers who leave the workshop early or do not complete the assessments.
Multiple treatment effects. In this study participants may be exposed to external treatments that influence the results (Thorlund & Mills, 2012). Teachers may be working on their wellness by seeking individual/group therapy or other workshops during the full-day summit could promote positive psychology and wellness. Multiple treatment interference can only be partially controlled as teachers involved in other experiences such as a wellness coursework or personal therapy may be experiencing simultaneous benefits. Ideally, on average, control and experimental group participants will experience roughly equivalent external treatments. In this study I will not be able to completely control for multiple treatment effects.

Testing effect. It is possible teachers will experience improved performance on the tests and measurements administered during this intervention the second time they are completed due to the experience of having taken the test previously (Privitera, 2017). Including an appropriate control group that did not experience the intervention will reduce this threat to internal validity.

Significance of the Study

This dissertation study may add to the growing literature base regarding the use of positive psychology courses for promoting well-being in teachers and school personnel (Critchley & Gibbs, 2012; Vo & Allen, 2022; Haslip & Donaldson, 2021). This study is unique in that it combines a brief positive psychology workshop for teachers and school personnel with regular follow-up messages for one-month post-intervention (the workshop and post-intervention follow-up emails). None of the previously published studies on positive psychology workshops for teachers included the option for teachers to participate in a brief happiness for educator intervention and then receive supportive and personalized follow-up messages in their email for one month after the intervention.
Summary

Studying positive psychology by scrutinizing the history and development of happiness dates back to ancient philosophers from a variety of world cultures that span the globe. These philosophers and academics have shared their ideas on the nature of happiness and how to achieve it over the course of multiple millennia. (Usman & Kadir, 2022; Duckworth et al., 2005). The concept of positive psychology has developed from the study of happiness into a science with associated interventions that have broad applications to address a number of challenges that individuals face on a regular basis. Given the nature of modern education systems, all the associated difficulties that exist within the system, and the challenges with stress, anxiety, depression, and somatic symptoms that many teachers and other school personnel experience, it may be beneficial to develop schoolwide programs to aid in the reduction of these symptoms (Clayback & Williford, 2022; Merida-Lopez & Extremera, 2022). The current study seeks to address these stress, well-being, and mental health challenges through an intervention consisting of a brief happiness workshop, plus encouraging resource-oriented follow-up emails. Theoretically, if teachers experience improved happiness, well-being, and mental health, students also may benefit.
Chapter Two: Review of the Literature

In recent years, stress and distress among teachers has been a growing concern (Chesak et al., 2020; Rahm & Heise, 2019). Teachers have reported significant increases in stress, emotional exhaustion, burnout, and health problems (Rahm & Heise, 2019). This literature review includes a review of the problem of teacher distress, strategies that have been used to address teacher distress, and a rationale for using positive psychology interventions (PPIs) as an educational and potentially therapeutic opportunity for teachers. I will also summarize research findings on the effects of teacher distress on student behaviors, academic performance, and social and emotional development. In this study I will examine the effects of a 105-minute “Happiness for Educators” in-service workshop on teacher well-being and mental health.

The History of Positive Psychology

The foundations of positive psychology can be traced to Abraham Maslow’s endeavor to weave humanism into psychology (Upadhyay et al., 2022). For Maslow, humanism, a movement focusing on the care of mankind and humanizing the world, included positive aspects of behavior and the drive every person has to maximize their potential (Upadhyay et al., 2022; Bortun & Matei, 2022). This humanistic focus led to the creation of a new movement that included ideas on modern positivity, respect for oneself, and love in order to emphasize the positive potential of humankind (Upadhyay et al., 2022). Central to this endeavor was Maslow’s (and the humanists’) confidence in humankind’s positive experiences and faith that people can naturally develop internal mental and physical well-being.

Martin Seligman brought renewed attention to Maslow’s movement and the humanistic perspective when he initiated the study of modern positive psychology (Duckworth et al., 2005). Prior to his presidency of the American Psychological Association in 1998, psychology focused
primarily on mental disorders. Seligman instead looked to positive aspects of life and what makes existence meaningful and fulfilling (Upadhyay et al., 2022). Seligman was instrumental in shifting the focus of psychology to what is right with people by examining their attributes, psychological assets, strengths, and virtues (Kobau et al., 2011). Happiness, including positive emotions and peak mental and physical functioning may enhance physical health, which may lead to improved overall well-being (Seligman et al., 2006).

After 1998, Seligman’s research turned toward positive psychology and how happiness can help individuals achieve well-being and optimal performance. Positive psychology is the scientific study of positive experiences, psychological strengths, positive individual qualities, and the behavioral practices that enable their development (Duckworth et al., 2005; Lopez et al., 2019). Seligman further divided happiness into three scientifically manageable domains: positive emotion (the pleasant life), engagement (the engaged life), and meaning (the meaningful life; Seligman et al., 2006). To facilitate the achievement of happiness in life through these domains, Seligman developed positive psychological interventions (PPIs; Seligman, 2004).

Happiness is traditionally—beginning with Aristotle—conceptualized in two different ways (Chen & Zeng, 2021). The first is hedonic happiness; hedonic happiness involves the seeking and attainment of pleasure (Upadhyay et al., 2022). Hedonic motives are what drive individuals to feel good and relax (Gentzler et al., 2021). Hedonia, while often treasured, is not significantly linked to long-term fulfillment, due to its focus on short-term materialism and immediate subjective pleasure (Gentzler et al., 2021).

The second definition of happiness is eudaimonic happiness. Eudaimonic motives include living life to one’s virtuous potential and having greater social or community impact on the world, beyond immediate comfort or pleasure (Gentzler et al., 2021). Eudaimonia, which has its
theoretical foundations in ancient Greece, involves individuals finding fulfillment in virtue, while serving the greater good (Upadhyay et al., 2022). Researchers have found that both varying levels of hedonic and eudaimonic happiness may be necessary for individuals to feel fulfilled and happy (Pancheva et al., 2020). A thorough understanding of both the definition of happiness and the two conceptualizations of happiness may lead to a better comprehension of how individuals can enjoy the benefits of happiness, as achieved by engaging in PPIs.

Happiness has been the subject of intensive research for over two decades. Multiple researchers have identified numerous benefits linked to happiness or subjective well-being (Salvera & Usan, 2020; Graham, 2016; Dayson et al., 2020). Individuals who are happy typically possess positive temperaments, have a tendency to be optimistic, rarely overthink negative events, have friends they trust, and achieve greater physical, emotional, and social well-being (Salvera & Usan, 2020; Sahin & Altun, 2022).

Researchers have also found happy individuals have more focus, are less reactive, regulate emotions more successfully, and are prone to positive affects (Salvera & Usan, 2020; Sahin & Altun, 2022; Upadhyay et al., 2022; Caprara et al., 2022). All of these benefits are enhanced by engaging in PPIs, and utilizing them may result in increased positive emotion, improved mood, and self-reliance (Upadhyay et al., 2022). Subjective well-being is a form of happiness involving the subjective evaluation of one’s current status in the world. More specifically, it is a combination of positive affect (in the absence of negative affect) and general life satisfaction (subjective appreciation of life’s rewards; Lopez et al., 2019). When considered as subjective well-being, happiness may also help individuals when they encounter the negative experiences that commonly occur in professional settings (Wang et al., 2022). Increased socialization with colleagues is one of the positive psychological interventions applied in the
workplace. It may benefit those who experience negative behaviors at work due to increased trust and less isolation (Wang et al., 2022).

In conclusion, positive psychology practices generally improve subjective happiness. There are well-documented small and positive outcomes across many different populations and settings (Pan et al., 2022). It also benefits those who already report well-being and are engaging in PPIs with the goal of attaining even greater well-being. Experience with happiness and well-being over the decades since Maslow began his exploration of humanism has demonstrated the relationship between psychological health, physical health, and the valuable role mindsets play in helping individuals reach greater well-being. Hedonic happiness is more immediate in nature and is important for short-term well-being. But eudaimonic happiness is essential to facilitating movement towards complete (sweeping) change that leads to transformational happiness. The history of positive psychology has been described as a history of the process of intense self-actualization, which has been demonstrated to have health benefits (Bernard et al., 2010).

**Delivery Models**

Within the counseling and psychology disciplines there exists a variety of delivery models used to offer educational and therapeutic treatment to clients and students. Some of the delivery models include the use of differentiated approaches and technologies that may be beneficial to the overall client experience. Face-to-face interventions, where clients and practitioners are present in the same location for synchronous delivery of service, remains the default treatment for mental health challenges (Aemissegger et al., 2022). However, internet-based counseling interventions are becoming increasingly accepted and have proven effective in several ways (Aemissegger et al., 2022; Philippe et al., 2022). Internet-based interventions allow for greater access to mental health services. They also result in reduced waitlists and they may
prove effective for treating subthreshold depression, anxiety, substance use-, mood-, and trauma-related disorders (Aemissegger et al., 2022; Philippe et al., 2022; Blair et al., 2022).

Synchronous and asynchronous internet-based health service allows for delivery of care using messaging, telephone, videoconferencing, virtual reality-based programs, and web-based peer and social support groups (Philippe et al., 2022; Geerling et al., 2022). Researchers studying digital contact between clients and providers have even found that synchronous digital contact is an effective substitution for in-person treatment and for assessment of a variety of mental health disorders (Philippe et al., 2022).

While there has been diversification in mental health therapy delivery models, there have also been criticisms of these models’ effectiveness. Some of the limits identified by researchers to internet-based eHealth treatment are the lack of true integration of internet-based tools into a useful comprehensive treatment strategy for each individual client and lack of resources for all those needing care. In order for internet-based eHealth treatments to reach their full potential, synchronous treatment and asynchronous online interventions should be blended with a clear rationale developed through collaboration between the mental health professional and the client (Wentzel et al., 2016). In addition, service delivery can only occur when clients have access to the internet, computers or other mobile devices, and secure places within which they can truly engage with their mental health professional (Wentzel et al., 2016). Online or electronic approaches to positive psychology may be especially useful for educators due to their required workday hours. However, obstacles include scarce access to technology, insufficient internet speeds in rural areas, and lack of access due to the expense involved in purchasing necessary hardware.
The delivery of PPIs through group counseling or psychotherapy is another viable option. The delivery of positive psychological interventions through group counseling enables practitioners to share positive psychological skills with participants who can then share insights with group members and practice interventions between sessions (Carr et al., 2017). Group interventions have practical implications for treatment; they enable access for individuals seeking help for reduced cost, while providing treatments for a variety of challenges (Carr et al., 2017; Blair et al., 2022; Sergeant & Mongrain, 2015).

Positive psychology group interventions are also available to different target populations. Suldo et al. (2014) implemented a positive psychology group intervention to students as they transitioned to middle school. Their research demonstrated that the variety of positive psychology interventions available enabled students to experience significant improvement in global life satisfaction (Suldo et al., 2014). While the effects of the intervention failed to produce lasting effects, the temporary improvement was sufficient to ease participants’ transition to middle school.

Positive psychology group interventions are effective at other stages of life as well. Zhang et al. (2022) found that group counseling was linked to decreased symptom scores, increased scores on general well-being scales, and increased scores on resiliency scales among university students who were making the transition to adulthood while also struggling to adjust to life in college. Adults participating in the Inspired Life Programme group counseling experience in Ghana also experienced improved positive mental health and decreased symptoms of depression through introspection, mutually beneficial partnerships, stronger social support networks, and improved positive cognitions (Appiah et al., 2021). Overall, group-based approaches to delivering positive psychological interventions have potential for educators.
As the practice of counseling continues to evolve, counselors should be prepared to use positive psychology while employing a number of different delivery models to offer these valuable mental health services to a larger percentage of the population. Electronic delivery of psychological interventions has matured to the point of research being conducted in order to measure its efficacy. Text messaging electronic interventions have become increasingly useful as a way to increase the use of positive psychological interventions, along with the accompanying benefits, without the need for direct care requirements (Sayde et al., 2022). An example of this technology is Cope Notes, which automatically sends electronic messages to participants at predetermined intervals each day on such topics as positive psychology, cognitive restructuring, peer support, and stigma reduction with the goal of fostering positive thought patterns in order to increase mental well-being (Sayde et al., 2022). Sayde et al. (2022) utilized the Brief Coping Orientation to Problems Experienced (COPE) inventory in order to measure coping skills. The results supported the efficacy of electronic interventions such as Cope Notes. Electronic interventions like Cope Notes will become increasingly important to counseling as clients and students continue to increasingly rely on electronic devices for a larger variety of their basic needs.

Digital delivery models that employ a mixed approach to mental health care are also becoming more common. Delivery methods that use technology like mobile devices as part of a peer support experience focusing on positive psychology approaches to self-managing challenges have become widespread (Wright et al., 2022; Feig et al., 2022). One such intervention, called the Hope Programme for Long COVID, utilizes peer support delivered electronically each week in the Hope Café via Zoom coupled with asynchronous and interactive videos, diagrams, and discussion forums (Wright et al., 2022). This program utilizes positive psychological
interventions such as discussions on the benefits of positive emotions and the power of gratitude to help participants reach their objectives. Wright et al. (2022) found participants (n = 47) experienced improved positive mental well-being and self-efficacy and less fatigue and loneliness as a result of engaging in positive psychology interventions.

Positive psychological intervention delivery models are dynamic and evolving. The value of the social aspects of these delivery models is also evident due to the demonstrated importance of connections with others (Wright et al., 2022). These interventions, and their accompanying research outcomes, reveal the multifaceted ways in which positive psychological interventions can be effectively delivered to students and clients of all ages.

Interventions

There are a variety of positive psychology interventions that have empirical support. Some of the specific interventions found to be helpful in positive psychology include engaging in acts of kindness, expressing gratitude, mindfulness, self-affirmations, conceptualizing a best possible self, goal setting, and increased focus on positive experiences (Feig et al., 2022). Outcomes linked to PPIs include positive affect, hopefulness, drive, personal development, gratification, and happiness (Feig et al., 2022). Researchers have found that people who have increased psychological well-being tend to participate in healthy activities and achieve greater physical health as a result (Feig et al., 2022). Specific positive psychology interventions that have demonstrated the highest degree of efficacy include gratitude, acts of kindness, mindfulness, best possible self exercises, emotional journaling, and multi-component positive psychology interventions.
Gratitude

Demonstrating and receiving gratitude has been shown to have significant and lasting positive effects on peoples’ lives (Handa & Rikhi, 2022). Gratitude is defined as the positive appreciation of benefits received and is characterized as an evaluation of a gain along with the deduction that someone else has contributed to that benefit (Solomon, 1977, p. 316; Emmons & McCullough, 2004; Handa & Rikhi, 2022). In some studies, researchers have even identified gratitude as the most predictive factor contributing to a sense of well-being. (Karmakar & Bhattacharyya, 2022). Karmakar & Bhattacharyya (2022) found that gratitude may be the most crucial factor leading to improved well-being because it instills the sense of meaningfulness and autonomy in individuals that is vital to psychological well-being. Furthermore, gratitude has been found to be incompatible with negative emotions such as greed and anger and it has been linked to improved physical health by decreasing blood pressure and enhancing immune responses (Handa & Rikhi, 2022). Particular interventions that contain gratitude include keeping a daily gratitude journal, where individuals write down three things they are grateful to have experienced each day, and writing gratitude letters, where individuals write and deliver a gratitude letter to someone they have neglected to thank in the past (Angood, 2022; Ruini & Mortara, 2022; Dickens, 2017).

Gratitude has been subdivided by researchers into two types: trait gratitude and state gratitude (Komase et al., 2021; vanOyen-Witvliet et al., 2018). Trait gratitude refers to the extent to which there is an individual tendency towards recognizing and appreciating benefits afforded in life (Komase et al., 2021; Harrison et al., 2021). State-level gratitude is a more discrete experience and occurs when individuals perceive themselves as receiving a positive outcome that triggers the need to reciprocate in similar prosocial behaviors (Komase et al.,
Trait gratitude may lead to state gratitude that inspires others to engage in more widespread societal gains. Komase et al. (2021) report that the creation of gratitude lists and journals, described above, are essential to achieving the kind of gratitude that benefits others and leads to greater well-being. Researchers have found that interventions where gratitude lists were produced four times or less were not as effective as interventions where gratitude lists were produced more regularly (Komase et al., 2021). Gratitude lists generated multiple times during an intervention help participants achieve the most benefit from the activity (Komase et al., 2021). Three possible mechanisms responsible for the efficacy of gratitude include the association between gratitude and positive interpretations of stimuli, the tendency for more compassionate views of oneself when engaging in gratitude, and higher associations between increased gratitude and relationship connection and satisfaction (Komase et al., 2021).

**Acts of Kindness**

Acts of kindness, another positive psychology intervention with empirical support, are prosocial behaviors that often increase well-being (Gherghel et al., 2019). Gherghel et al. (2019) noted individuals often have essential needs for relatedness, competence, and autonomy. Engaging in acts of kindness (prosocial behaviors) may lead to experiencing connections to others (relatedness), the ability to carry out difficult tasks (competence), and autonomy (control of one’s actions; Gherghel et al., 2019). The frequency with which individuals perform acts of kindness correlates positively to well-being indicators like life satisfaction and experiencing positive affect (Gherghel et al., 2019).

Acts of kindness also may decrease social isolation. Individuals who lack strong social connections have been found to have a 50% increased risk of earlier death (Lim et al., 2021). Lonely people have been found to suffer high blood pressure and weakened cardiac function
Lim et al. (2021) wrote that community connections are vital and that the connections must be meaningful to satisfy our need for social connectedness. Researchers have found acts of kindness may be challenging for some people, but the challenge is what increases the efficacy of this intervention. In one study, individuals who put more effort into completing their acts of kindness experienced greater increases in well-being (Binfet, 2015). Binfet (2015) writes that an initial activity for generating lists of those individuals or organizations who may appreciate acts of kindness is to have participants generate banks of recipients. These banks of recipients (lists) can then be used by participants as they engage with the intervention.

Acts of kindness are relevant for teacher role-modeling and teacher-student interactions. Teachers can informally model acts of kindness for their students. Teachers may purposefully engage in acts of kindness towards their students at regular intervals. Teachers may also take the time to recognize acts of kindness when they occur organically in daily interactions among students in their classes as further examples of application. Students who learn from teachers engaging in acts of kindness may experience greater prosocial classrooms and gain lifelong insight into the value of kindness in human interactions (Binfet & Passmore, 2017). But in order for this to occur, teachers should themselves possess social and emotional competencies that develop from practicing acts of kindness (Binfet & Passmore, 2017).

**Mindfulness-Based Interventions**

Within the context of PPIs, mindfulness-based interventions have shown efficacy for a number of positive outcomes (Allen et al., 2021). Allen et al. (2021) reported that mindfulness interventions may broaden our awareness, resulting in cognitive reassessments of past events to incorporate the perceived positive aspects of specific occasions that may help bring about eudaimonic well-being through the reexamination of previous experiences. Mindfulness may
also strengthen peoples’ ability to self-regulate; it allows facilitates attitudes of curiosity, openness, and acceptance (Sonthalia, 2020). Mindfulness-based interventions may contribute to positive outcomes such as hope, optimism, prosocial behaviors, academic performance (Allen et al., 2021; Priyanka & Singh, 2022). Mindfulness may also help to reduce depression, worry, stress, and fatigue in school personnel, especially teachers (Priyanka & Singh, 2022).

Mindfulness has shown effectiveness for reducing occupational stress in a variety of industries while increasing job satisfaction (Bolm et al., 2022; Sado et al., 2022). Focus, self-regulation, and adaptation are crucial to reducing stress in the workplace. Researchers have found that 15-day mindfulness interventions significantly reduced job-related stress, while improving sleep quality and overall stress management (Bolm et al., 2022).

Mindfulness-based programs may also enhance emotional regulation and reduce psychological distress (Jennings et al., 2019). The Cultivating Awareness and Resilience in Education (CARE) program is one example of an intervention designed to address emotional regulation and psychological distress among teachers. The CARE program was intended to support teachers by enhancing their social and emotional competence while managing stress, promoting positive classroom interactions, and sustaining improvements in student success rates (Jennings et al., 2019). Emotion skills instruction and mindfulness awareness training were taught for five 6-hour days over the course of the school year. Didactic training and experiential practices supported emotional awareness and regulation while mindful awareness of breathing, body scans, walking, stretching and listening practices were included (Jennings et al., 2019). Two hundred and twenty-four teachers from 36 schools with a median age of 40 and varying ethnicities and races participated in this study. Ninety percent of the participants attended at least four days and each participant was scheduled for three individual support calls during the
course if the intervention. Teachers received a workbook, audio recordings, and mindful awareness practices to use during the intervention. Six scales were used to measure teacher psychological distress. They were: the Patient Health Questionnaire Depression Scale (PHQ-8), the Generalized Anxiety Disorder Scale (GAD-7), the Positive and Negative Affect Rating Short Form (PANAS), the Patient Reported Outcomes Measurement Information System Sleep Disturbance Questionnaire (PROMIS Questionnaire), the Maslach Burnout Inventory-Educators Scale (MBI-ES), and the Perceived Stress Scale (PSS; Jennings et al., 2019).

The CARES post-intervention data indicated significant changes for teacher outcomes as a result of participating in this study (Jennings et al., 2019). Psychological distress declined significantly in the intervention group compared to the control group ($p < 0.01$). Emotional regulation skills increased as well for those participants in the intervention group ($p < 0.01$). Overall, the CARES mindfulness and emotional skills intervention showed the potential and promise for a 30-hour educational program on teacher well-being.

**Best Possible Self**

The best possible self-intervention is a future-oriented positive psychology intervention that has repeatedly demonstrated its usefulness at helping participants to increase well-being, positive affect, and optimism, while decreasing pessimism (Heekerens et al., 2021; Carrillo et al., 2021). The BPS intervention also helps promote the development of adaptive cognitions positive future expectations (Heekerens et al., 2021). BPS is a writing and visualization exercise requiring participants to mentally picture an imagined representation of themselves as their best possible self in the future where they have achieved everything desired after working hard towards the attainment of their goals (Carrillo et al., 2021). Heekerens et al. (2021) found that the best possible self-intervention may be especially helpful for those who experience low
emotional self-awareness as those individuals may prefer not to approach strong emotions. Writing about future-oriented goals may provide self-regulatory benefits without exploring unpleasant emotions (King, 2001; Heekerens et al., 2021). Interventions like BPS may increase overall well-being. As a writing task, BPS may be especially useful for teachers, and they may be able to integrate it into lesson plans for students. In addition to the interventions mentioned above, there exists a multi-component strategy for psychological well-being that blends together aspects of the interventions mentioned so far.

**Multi-Component and Multimodal Positive Psychology Interventions**

Multi-component positive psychology interventions (MPPIs) include two or more PPIs delivered in combination through an established curriculum. MPPIs are interventions that contain an assortment of evidence-based exercises targeting two or more hedonic and eudaimonic well-being components (Hendriks et al., 2020). For example, the CARES intervention described previously is a two component PPI intervention. MPPIs have received increased attention in the literature (Hendriks et al., 2020). The proliferation of MPPIs is driven, in part, by the challenges workplace stress causes individuals and businesses.

The Flourish Program is an MPPI based on meditation practices and positive psychology principles designed to promote greater well-being in workplace settings (dos Santos et al., 2021). The Flourish program consists of 1.5-hour meetings, once a week for eight weeks, and provides in-person training as well as audio recordings for use when the group is not meeting. Gratitude diaries, counting blessings, body scanning, mindfulness meditation and breathing, loving-kindness meditations, character strengths, and hope are covered during the course of the program. Stress, anxiety, depression, sleep quality, mindful awareness, and self-compassion were all measured after the implementation of the program by analyzing the results of the
Perceived Stress Scale, the Self-Report Questionnaire-20, the Beck Depression Inventory, the Beck Anxiety Inventory, and the Pittsburgh Sleep Quality Index, with posttest results compared to pretest scores. Perceived stress over time and anxiety decreased while sleep quality improved (dos Santos et al., 2021). Researchers have confirmed the efficacy of this program and MPPIs in general by conducting studies into the efficacy of such interventions (dos Santos et al., 2021).

MPPIs have shown effectiveness in a variety of workplace settings and have been recently implemented for schools in order to test their usefulness with teachers. Researchers have found that working with teachers is vital due to their central role in implementing educational change (Garcia-Alvarez et al., 2022). Teachers with better well-being and satisfactory emotional competencies may be able to more effectively apply their skills when working with students (Garcia-Alvarez et al., 2022). A recently implemented MPPI for teachers in Uruguay included 12 modules and focused on character strengths, gratitude, open-mindedness, kindness, and optimism with in-person training sessions totaling 90-hours of direct instruction (Garcia-Alvarez et al., 2022). The results indicated significant positive changes in psychological well-being, self-efficacy, and decreases in psychological distress. MPPIs are effective at reducing workplace stress and improving the well-being of professionals like teachers. Implementation of such programs may improve the well-being of a wide dimension of professional populations and help reduce one component of psychological distress in people’s lives.

**Length of Interventions**

The length of time (aka dosage) devoted to intervention implementation is one of the most crucial decisions to make when designing and applying interventional strategies. While researchers have found that many intervention studies, especially those delivered digitally, have
immediate or short-term benefits, there is little evidence of long-term skill use beyond the intervention period (Davis et al., 2022). Despite this, there are valuable lessons on length of interventions from several recent studies. Participant attendance and active engagement, more than overall length of the intervention, are two of the most salient factors to consider when evaluating the effectiveness of positive psychology interventions (Davis et al., 2022). Davis et al. (2022) found that interventions that were too long (while not defining what is too long) were not as effective as shorter, focused interventions with sustained attendance and engagement. Also, exit interviews and follow-up with participants appears to strengthen lasting commitment to implementation and is considered vital to the longer-term effectiveness of interventions (Davis et al., 2022).

Brief interventions have other advantages as well. Interventions implemented over shorter time periods may cost less and have the potential to reach many different demographic groups (Zhou et al., 2015). Researchers have found that brief interventions attract professional participants due to lower time commitments and the ease with which they can be applied to individual or group settings (Schick et al., 2021). Results from studies on the efficacy of brief positive psychology interventions have indicated increased hope, optimism, efficacy, resilience, and job performance while revealing large effects on affective well-being (Ivandic et al., 2017). Brief positive psychology interventions have the potential to reach larger groups of people thus creating the possibility of greater impacts on participant well-being.

Researchers have also demonstrated the effectiveness of shorter interventions that include high participant engagement and task completion (Sandstrom et al., 2022). Sandstrom et al. (2022) implemented an intervention that lasted five days, but included intense practical application. Their results support the assertion that practical experience with interventions is
more valuable to participants than length of time receiving instruction (Sandstrom et al., 2022). What may be clear from these recent research studies is that the length of the intervention may not be as useful as regular attendance, sustained engagement, regular follow-up with participants, and continued demonstration during the intervention of the practical applications of the tasks to life situations.

**Common Outcomes**

As these positive psychology interventions have been implemented, common outcomes have emerged. Researchers have found positive psychology interventions reliably increase positive emotion and life satisfaction; they also decrease negative emotions, protect against stress, and attenuate symptoms of mental disorders and emotional distress (Lambert et al., 2021). Broader outcomes of greater well-being, prosocial action, better relationships, stronger academic performance, and greater workplace productivity have been identified as well (Lambert et al., 2021). Lambert et al. (2021), in their study, found the accumulation of positive emotions leads to increased cognitive flexibility and wider-ranging perceptions of possibility, while augmenting existing physical, social, cognitive, and psychological resources.

When conducting meta-analyses of the effectiveness of PPIs, researchers have found consensus around their general effectiveness (Stemmler et al., 2021). Stemmler et al. (2021) indicate PPIs enhance strengths, increase well-being, improve quality of life, and alleviate depression, anxiety, and stress. PPIs are efficient means of addressing the challenges encountered in daily life and contribute to increased well-being amongst those who engage with them (Stemmler et al., 2021). Because their efficacy has been established, it is reasonable to propose a PPI-based intervention program for teachers, who face many of the challenges mentioned above on a regular basis.
Positive Psychology and Teachers

Teacher health has been a persistent concern for decades in our national education system. Researchers have monitored teacher stress, emotional exhaustion, and health impairments with the goal of designing interventions designed to address these symptoms and alleviate some of the challenges teachers face (Rahm & Heise, 2019; Benevene et al., 2019). In addition, stressors such as student discipline problems, conflict with co-workers, scant administrative support, and time pressure were found to contribute to teacher exhaustion (Rahm & Heise, 2019; Benevene et al., 2019). Teachers facing health challenges lack the ability to fully utilize their potential (Rahm & Heise, 2019). Improved subjective well-being (SWB), the scientific concept most related to happiness, has been identified as a possible remedy to improve some of the challenges mentioned above (Rahm & Heise, 2019). Subjective well-being is comprised of life satisfaction, increased positive affect and reduced negative affect (Rahm & Heise, 2019). Satisfaction with life, the cognitive element of SWB, includes individuals’ uninhibited and conscious evaluations of their lives while the frequency of positive affect (PA) and negative affect (NA) is the affective component of SWB (Rahm & Heise, 2019). PA often feeds our motivations and reinforces learning process while NA happens when our needs and values are threatened (Rahm & Heise, 2019). NA is not universally negative, as it serves a protective purpose by helping people know their values and focus on their goals.

Teachers are the most important component in helping schools reach their goals (Rahm & Heise, 2019). Researchers have identified “emotional contagion” as the process by which teachers use their positive and negative feelings to motivate student achievement (Rahm & Heise, 2019). Because this influence is vital to successful educational outcomes, researchers have concentrated on identifying positive psychological interventions that may improve SWB in
teachers, increase positive emotional contagion, and enhance student performance in schools. Positive psychological interventions identified as most effective to reach this goal include the *Three Good Things* exercise and the *Gratitude Letter* (Rahm & Heise, 2019). Rahm and Heise’s (2019) study found significant increases in the incidence of positive emotions and life satisfaction while observing decreases in exhaustion, perceived stress, and negative emotions after implementing their MPPI in their experimental group of teacher participants.

School-based positive psychology interventions are designed to change the focus from managing entrenched stress to a model that enables teachers to proactively act and thrive in the profession (Vo & Allen, 2022). Vo and Allen (2022) reviewed 10 studies conducted on school-based PPIs to assess their effectiveness. Six of the studies reviewed were based on mindfulness interventions, three were multimodal in nature, and one focused on gratitude. The authors stated that multimodal programs incorporating psychoeducational elements stressing the importance of exercise, conflict resolution, positive psychology, and the importance of sleep were effective at reducing psychological strain (Vo & Allen, 2022). Psychological strain is the term used by the authors to describe depression, anxiety, and irritability. Vo and Allen (2022) noted that multimodal positive psychology interventions increased resilience, motivation, and self-efficacy.

When schools are considering implementing PPIs of this nature, it is important for them to consider six common core elements present in the ten studies reviewed by Vo and Allen (2022). The six common core elements are: voluntary participation, professional instructors, the use of multiple methods, context specific designs, weekly sessions, and group formats (Vo & Allen, 2022). The presence of these elements is important because it gives teachers choice regarding which interventions to use and the group dynamic enhances social interaction, aiding in learning through relatedness with others (Vo & Allen, 2022).
Multimodal positive psychology interventions similar to those described above have proven effective in other contexts as well. The CALMERSS program, a multimodal intervention developed to improve well-being for educators, was implemented as a pilot study with five participant teachers with a mean age of 41 years (Taylor, 2018). This program lasted four weeks with eight hours of face-to-face training and included positive psychology interventions, physical exercise, sleep hygiene work, daily journaling, and work on resolving conflicts (Taylor, 2018). Outcomes measures included the Center for Epidemiological Studies Depression Scale (CES-D), the Occupational Stress Inventory Revised Edition (OSI-R with three parts: the Personal Strain Questionnaire [PSQ], the Occupational Roles Questionnaire [OSQ], and the Personal Resources Questionnaire [PRQ]), and the Flourishing Scale were implemented at the pre-intervention and post-intervention stages in order to test for significance (Taylor, 2018). Classes took place after the school day and consistently began with an ice breaker activity, followed by didactic instruction, group and paired discussion, and workbook exercises outside of class.

Once the post-intervention questionnaires were completed, statistical analyses showed positive outcomes on the CES-D, the PSQ, and the Psychological Strain subsection of the PSQ (Taylor, 2018). The CES-D yielded an overall significance effect from T1 to T2 ($M = 21.4, SD = 7.92; M = 12.6, SD = 11.10; p = .042$). The PSQ yielded significant improvements over time as well from T1 to T2 ($M = 95.4, SD = 33.31; M = 82.4, SD = 25.03; p = .043$). The Psychological Strain subsection also demonstrated significant improvements ($M = 25.6, SD = 8.30; M = 20.2, SD = 5.59; p = .043$). Taylor (2018) found that prior to the intervention, four of five participants were experiencing considerable depressive symptoms. Post-intervention, only one participant was experiencing depression (Taylor, 2018). Multimodal approaches like this are beneficial and meaningful because the variety of approaches offered in the intervention makes it
more probable that participants might employ at least one PPI and achieve some benefit (Taylor, 2018). Positive psychology interventions appear to lead to improved health and well-being, regardless of whether the work environment changes. Educators who are proactive in seeking interventions as described and implement them over the long-term are more likely to alter their physical and mental states (Taylor, 2018).

Scholars and the media have noted that the U.S. faces challenges with teacher recruitment and retention. Teacher well-being is in crisis. Positive psychology interventions may help address some of the challenges noted in this review of the literature. A further subtopic that needs to be addressed (in this section) is why does teacher well-being matter to our society. Researchers have found that teachers who experience stress, depression, and a general lack of well-being can have an impact on classroom climate and instructional success (Sandilos et al., 2022). Higher stress may also influence individual interpretations of classroom events, with more negative and menacing interpretations assigned by those experiencing excessive stress, depression, and a lack of well-being (Sandilos et al., 2022; Quinlan et al., 2019).

Teachers who are resilient may have a greater capacity to thrive in their work environments and overcome environmental stressors (Gray et al., 2017). The researchers cited above have found that risk factors in workplace environments can be mitigated by protective factors that PPIs can strengthen (Gray et al., 2017). Researchers have found that teacher well-being accounts for approximately 8% of the variance in student achievement in primary and secondary schools (Gray et al., 2017). Gray et al. (2017) indicated that while this is not an enormous amount, it can still help to raise the achievement levels of students who work with teachers who have greater well-being and lower stress and less depression.
PPIs can have significant positive effects on teacher well-being. PPIs may also have benefits for other school personnel (i.e., non-teachers). Other school personnel may also have contagion effects on students and school climate. This knowledge should aid our development and implementation of PPI programs in schools throughout the U.S. PPIs may not be the only solution to these challenges, but they may certainly be one of the solutions to help teachers and other school personnel reduce negative physical and emotional symptoms and consistently increase positive experiences.

**Educator Diversity**

Educator diversity is a relevant issue facing many American schools. The majority of teachers in the United States are white, middle-class, and female (Simon & Azzarito, 2019; Banjeree, 2018). Researchers have also found that ethnic minority populations are expanding faster than minority teacher populations, which are absent from approximately 40% of U.S. schools (Simon & Azzarito, 2019; Banjeree, 2018). The participant population in the current study reflects and verifies this reality. A lack of diversity among educators in school communities presents certain challenges that should be acknowledged. The absence of diversity results in knowledge gaps in the lived experiences of minority educators that may adversely affect minority student populations (Burkhard et al., 2021). Persistent racism in the United States is another challenge that can be stressful for educators thus requiring specialized coping mechanisms that may be difficult to identify and implement in schools that lack ethnic cultural knowledge due to a lack of educator diversity (Simon & Azzarito, 2019). Researchers have also found that ethnoracial matching between students and teachers provides common opportunities for connections and a sense of belongingness to develop between teacher and student (Banjeree, 2018). A diverse teaching faculty may also influence daily experiences for educators from
multiple ethnic and racial backgrounds and may provide greater opportunity for broader understanding and support of culture and race (Banjee, 2018). Finally, homogenous participant samples in research studies may result in research findings being less generalizable to the broader population (Shea et al., 2022). There are clear advantages to diversity amongst both teaching faculty and research participant samples. The unavailability of a more diverse population, while regrettable, is a reality in many parts of the United States. While significant research findings still advance our understanding of challenges (and how to address them), the shortage of a diverse population is nonetheless a subject requiring continued attention to correct this disparity.

**All School Personnel Inclusion in the Intervention**

While most research reviewed for this study has focused on the importance of addressing and improving teacher well-being in schools, there is value in including all school personnel in a positive psychology intervention. Researchers have found schoolwide plans to be effective at reinforcing strategies and reaching goals for improved educational environment well-being (Bradshaw et al., 2010). Bradshaw et al. (2010) examined the implementation of Schoolwide Positive Behavioral Interventions and Supports to address challenging behavioral environments that lead to stress and mental health challenges for all stakeholders. All school personnel are affected by the demanding daily situations present in many schools and all school staff can experience negative mental health impacts as a result. When all school staff members implement and utilize consistent tangible positive reinforcers included in programs such as the SWPBIS referenced above, positive change that leads to improved well-being was found to occur throughout school environments (Bradshaw et al., 2010).
Lopez et al. (2021) also found that increased school engagement by noninstructional staff has led to positive improvement and better adult and student interactions in schools. These findings are supported by Riciputi et al. (2020), who established that support by all staff involved in positive youth development programs led to improved behavioral and emotional engagement for participating children. Studies like these have consistently shown that whole group approaches in educational settings lead to improved interactions between children and adults and perceivable improvements in environmental quality have resulted. All school community members may benefit from positive psychology interventions and all interested stakeholders may find it valuable to participate whenever possible.

Many school personnel in addition to teachers have contact with students on a daily basis. This contact is often supportive in nature (Beasy et al, 2023). Students regularly seek connections in safe spaces with those they deem friendly and helpful as they navigate the daily challenges before them (Langhout & Annear, 2011). The staff who are able to form these connections with students regularly provide insight on a variety of life topics. This insight serves an educational purpose and is an often overlooked and important aspect of student development (Anaby et al, 2020). These relationships may also lead to professional ties developing between teachers and support personnel. Those ties may also improve the sense of comradery and teamwork at schools. Connections such as these may also lead to improved overall performance as staff work together for the good of those they serve (Anaby et al., 2020). Many school staff in addition to teachers have contact with students and provide guidance in an educational setting. It is for these reasons that all school staff should receive support to manage anxiety and depression associated with their professional roles.

**Follow-Up Contact Post-Intervention**
Researchers have experimented with the role follow-up contact in maintaining or strengthening PPI-related wellness outcomes (Torniainen-Holm et al., 2016). Torniainen-Holm et al. (2016) stated that email-based happiness activities led to improvement in psychological well-being and decreased depressive symptoms. Emails that contained short paragraphs on additional background information to themes presented, and reminders on how to approach interventions were particularly helpful (Torniainen-Holm et al., 2016).

In addition to the research presented above, Wurdak et al. (2017) showed the efficacy of email-based interventions in substance abuse treatment. They reported that email-based interventions led to more informed participants who were better able to reach their goals (Wurdak et al., 2017). Emails that keep key themes and interventions at the forefront of participants minds may help increase the effects of participating in positive psychology workshops, such as the one being proposed. Emails tailored to the needs of participants and adjusted for age-level may be especially helpful (Wurdak et al., 2017).

Motivational feedback provided post intervention may also be important to increasing the efficacy of the proposed positive psychology program. Lancee et al. (2013) found increased post-intervention support is necessary for optimal treatment. Guided self-help with minimal contact is less intensive and results in fewer costs to participants (Lancee et al., 2013). Because of this, Lancee et al. (2013) concluded that minimal contact feedback may be helpful to allowing participants to successfully realize the benefits of interventions. Emails serve as reminders and motivators for participants in research studies (Lancee et al., 2013). The fact that research indicates that contact through email post-intervention may augment the efficacy of the initial PPI intervention is the rationale for including an “encouraging email” condition in this proposed research study.
Research Questions and Hypotheses

Research Question One and Hypothesis

Will teachers who participate in the happiness for educators workshop report greater goal-oriented hope compared to the control group?

H1: Teachers who complete the happiness for educators workshop will report greater goal-oriented hope as measured by the Adult Hope Scale (HS; Snyder et al., 1991), compared to the control group.

H10: Teachers who complete the happiness for educators workshop will not report greater goal-oriented hope as measured by the Adult Hope Scale (HS; Snyder et al., 1991), compared to the control group.

Research Question Two and Hypothesis

Will teachers who participate in the happiness for educators workshop report less prevalence of depressive symptoms compared to the control group?

H2: Teachers who complete the happiness for educators workshop will report less prevalence of depressive symptoms as measured by the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), compared to the control group.

H20: Teachers who complete the happiness for educators workshop will not report less prevalence of depressive symptoms as measured by the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), compared to the control group?

Research Question Three and Hypothesis

Will teachers who participate in the happiness for educators workshop report greater positive affect and lower negative affect compared to the control group?
H3: Teachers who complete the happiness for educators workshop will report greater positive affect and lower negative affect as measured by the Negative and Positive Affect Scale (NAPAS; Mroczek & Kolarz, 1998), compared to the control group.

H30: Teachers who complete the happiness for educators workshop will not report greater positive affect and will not report lower levels of negative affect as measured by the Negative and Positive Affect Scale (NAPAS; Mroczek & Kolarz, 1998), compared to the control group.

**Research Question Four and Hypothesis**

Will teachers who participate in the happiness for educators workshop report less negative somatic symptoms compared to the control group?

H4: Teachers who complete the happiness for educators workshop will report less somatic symptoms as measured by the Physical Health Questionnaire (PHQ; Spence et al., 1987), compared to the control group.

H40: Teachers who complete the happiness for educators workshop will not report less somatic symptoms as measured by the Physical Health Questionnaire (PHQ; Spence et al., 1987), compared to the control group.

**Research Question Five and Hypothesis**

Will teachers who participate in the happiness for educators workshop experience improved wellbeing, less negative emotion, and improved health compared to the control group?

H5: Teachers who complete the happiness for educators workshop will report improved wellbeing, less negative emotion, and improved health as measured by the Positive Emotion, Engagement, Relationships, Meaning, Accomplishment Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the control group.
H50: Teachers who complete the happiness for educators workshop will not report improved wellbeing, less negative emotion, and improved health as measured by the Positive Emotion, Engagement, Relationships, Meaning, Accomplishment Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the control group.

**Research Question Six and Hypothesis**

Will teachers who participate in the happiness for educators workshop experience and receive a series or four encouraging emails, one per week, for four weeks after the initial intervention experience greater improved wellbeing, less negative emotion, and greater improved health compared to those who participate in the experimental group without additional supportive emails?

H6: Teachers who complete the happiness for educators workshop and receive additional supportive emails, one a week for four weeks after the initial intervention, will report greater improved wellbeing, less negative emotion, and greater improved health as measured by the AHS (HS; Snyder et al., 1991), the CES-D (CES-D; Radloff, 1977), the NAPAS (NAPAS; Mroczek & Kolarz, 1998), the PHQ (PHQ; Spence et al., 1987), and the PERMA-Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the experimental group participants who did not receive additional supportive emails.

H60: Teachers who complete the happiness for educators workshop and receive additional supportive emails, one a week for four weeks after the initial intervention, will not report greater improved wellbeing, less negative emotion, and greater improved health as measured by the AHS (HS; Snyder et al., 1991), the CES-D (CES-D; Radloff, 1977), the NAPAS (NAPAS; Mroczek & Kolarz, 1998), the PHQ (PHQ; Spence et al., 1987), and the
PERMA-Profiler (PERMA-Profiler; Ryan et al., 2019), compared to the experimental group participants who did not receive additional supportive emails.

**Summary**

In recent years, mental health challenges among teachers, counselors, and other school personnel have become a major point of concern for education stakeholders (Renshaw et al., 2015). Of particular concern are teachers’ reports of feeling depressed, stressed, and unsupported (Renshaw et al., 2015). One universal approach to address and help prevent further aggravation of these mental health concerns is to create courses or workshops that promote coping skills and lead to greater well-being among teachers and other school personnel. Positive psychology interventions tend to focus on human strength and hold promise as an effective intervention that could aid teachers and other school personnel in managing their immediate stress and in developing lifelong positive coping skills. In this completed study the researchers implemented a brief happiness for educators workshop in Missoula, Montana in order to provide county public school educators with background information on positive psychology and information on the benefits of implementing positive psychology interventions. It is our contention that exposure to and practice with positive psychology interventions may lead to improved psychological well-being, better physical health, greater positive affect, lower negative affect, decreased depression, and decreased anxiety for those participants who practice these interventions.
CHAPTER THREE: METHODOLOGY

Design

This study used a quantitative, quasi-experimental, pretest-posttest design (Privitera, 2015). Data was obtained from a nonrandom convenience sample of teachers and counselors (aka educators) who participated in a full-day in-service offered by Missoula County Public Schools (MCPS). Specifically, outcomes associated with educators who enrolled in a workshop session titled “Happiness for Educators” (intervention group) were compared with outcomes of educators who attended the in-service, but participated in alternative workshops (control group).

The Happiness for Educators workshop was offered through a cooperative positive psychology initiative of the University of Montana and MCPS in Missoula, Montana.

Quantitative, quasi-experimental, pretest-posttest designs are often used in educational settings where researchers use existing groups, or classrooms, as naturally occurring intervention and control groups (Privitera, 2015). The workshop consisted of 105 minutes of instruction during the professional development day in-service program. Data was collected during the week preceding the in-service training day and approximately one month after the workshop. All questionnaires were administered online through Qualtrics, using an anonymous coding procedure to ensure confidentiality. All electronic data was password protected on a computer.

Participants

Participants were educators employed at MCPS. As MCPS employees they attended an all-day in-service on February 13, 2023, and were empowered to self-select which workshops they attended on that day, including the evidence-based happiness workshop as one option. The demographics of study participants as expected were a representative sample of MCPS educators (including school counselors, school psychologists, administrators, and other school personnel).
Participant recruitment efforts were conducted in collaboration with Missoula County Public Schools. Electronic flyers and/or emails were sent to school district employees through outreach efforts conducted by the researcher(s) in conjunction with school district personnel. Participants were informed that they were able to participate in either the experimental condition or control condition, but not both (see Appendix A for the recruitment email/flyer). For both conditions, participants were given a $25.00 gift card for completing the pre- and post-test questionnaires. An IRB application was completed and submitted to the University of Montana IRB along with all supporting documentation. Participants signed IRB consent forms to participate in the study.

Participants included teachers employed by Missoula County Public Schools. Additional school staff including counselors, administrators, paraprofessionals, and support staff were also included due to the nature of their roles in the schools, and because they enrolled in and participated in the 105 minute happiness workshops. Additional school staff often have contact with students outside of class and act as educational mentors of varying capacities on a daily basis (Beasy et al., 2023; Langhout & Annear, 2011). These relationships are educational and emotional in nature and may cause school personnel to experience some of the same anxiety, depression, and other negative health effects associated with work in modern schools (Bohanon et al, 2018). For these reasons, all school staff were included as participants.

**Procedure**

During the month prior to February 13, 2023, all MCPS employees signed up for various workshops occurring during that in-service day. There were over 100 workshops to choose from, including the happiness for educators workshop. Following the initial sign-up period, participants who signed up for the happiness workshop were sent an email inviting them to
participate in this research project. A random sampling of MCPS employees who attended the in-service day, but had not signed up for the happiness workshop, were also sent an email inviting them to participate in the control condition (see Appendix B for copies of these invitation emails).

In the week prior to the in-service day, experimental participants enrolled in the happiness for educators professional development workshop, and control participants attending alternative workshops, completed the pre-test assessment, including: an informed consent form, demographics questionnaire, the Adult Hope Scale (AHS; Snyder et al., 1991), Negative and Positive Affect Scale (NAPAS; Mroczek & Kolarz, 1998), the PERMA-Profiler (Butler & Kern, 2016), the Physical Health Questionnaire (PHQ; Spence et al., 1987), and the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). One month after the session, participants received an email with a Qualtrics link to complete the same assessments, plus several open-ended questions. As per the IRB informed consent form, all participants were able to opt out of the study at any time should they have decided to do so.

At the February 13, 2023 event, the happiness workshop was offered twice, from 9am to 10:45am and 12:15pm to 2pm. Each session was 105 minutes in duration. A total of 201 participants completed the one of the two workshops.

After the workshop, 50% of the happiness participants who signed informed consent forms and completed the pre-test questionnaires were randomly selected to receive “encouraging” follow-up emails. Encouraging emails were sent once a week for four consecutive weeks after the happiness workshop intervention. The emails included: (a) encouraging comments, (b) one outside resource associated with positive psychology/happiness and (c) functioned as a check-in with participants regarding their practice or progress. Reminders
of effective strategies to implement positive psychological interventions were included. Consent to receive these emails was integrated into the study informed consent form.

Variables

The independent variable is the variable manipulated in an experiment. The independent variable is the hypothesized cause for change in outcomes at posttest (Privitera, 2015). The primary independent variable in this study was the Happiness for Educators professional development session, including all accompanying course information and interventions. Participants in the experimental condition were exposed to the class intervention; participants in the control condition enrolled in alternative professional development sessions of identical length during the same day. Participants in the control condition completed the pre- and post-class questionnaires, but were not be exposed to the course intervention.

The secondary independent variable was “encouragement emails” sent to educators who have completed the happiness workshop. Approximately 50% of the educators who completed the happiness workshop were randomly selected to receive these emails. Encouragement emails (n = 4) are included in Appendix C.

The dependent variable is the variable used to determine the effects of the IV (Privitera, 2015). Generally, the dependent variable for this study is eudaimonic happiness and psychosocial wellness. Several different questionnaires were used to measure whether or not the IV (105-minute happiness workshop) caused changes in the DV (participant happiness and well-being).

Description of Intervention

The intervention was multidimensional and practical, with lecture and demonstration content linked to positive psychology research and positive psychology interventions (PPIs).
The intention was for happiness skills to be discussed and practiced during the session, but also applied and incorporated into participants’ daily lives and possibly into their educator (e.g., teaching and counseling) responsibilities. Participants reviewed and experienced the following interventions during the workshop: (a) the three-step emotional change trick (Sommers-Flanagan & Sommers-Flanagan, 2007), (b) three good things (Duckworth et al., 2005), (c) mindfulness meditation (Davis & Bjornberg, 2015), sleep hygiene (Sato et al., 2022), (d) savoring, (e) gratitude, (f) therapeutic writing, and (g) positive distractions.

Workshop learning objectives included the following:

- Identify and describe evidence-based happiness strategies for pursuing wellbeing
- Apply evidence-based happiness strategies
- Experience evidence-based happiness strategies
- Process and reflect on personal reactions/responses to evidence-based happiness strategies.
- Discuss how to integrate and apply evidence-based happiness strategies into your life and into your students’ lives in the future

**Instrumentation**

Questionnaires were selected to capture the potential wide-ranging effects of the 105-minute happiness workshop.

**Demographic Questionnaire**

The demographic questionnaire included items on age, education, gender identity, race, and self-reported optimism.

**The Adult Hope Scale**
The Adult Hope Scale (AHS; Snyder et al., 1991) is a 12-item measure of hope; Snyder et al. (1991) defined hope as a cognitive variable that included two factors—agency and pathways. Agency is the individual’s sense of goal directed determination and pathways are plans to accomplish goals (Snyder et al., 1991). Each item is answered using an 8-point Likert-type scale ranging from “definitely false” to “definitely true.” AHS Cronbach alphas have ranged from .74 to .84 among six samples of undergraduate college students and test-retest correlations have been .80 or higher over time periods exceeding 10 weeks in the same population (Snyder et al., 1991). The Adult Hope Scale is negatively correlated with hopelessness (r = -.51, p < .005) and depression (r = -.42, p < .005; Snyder et al., 1991).

**Negative and Positive Affect Scale**

The Negative and Positive Affect Scale (NAPAS; Mrozek & Kolarz, 1998) is a 12-item scale that captures a combination of high-arousal (e.g., “everything was an effort”) and low arousal (e.g., “satisfied”) affective states. The NAPAS includes two subscales, positive affect scores and negative affect scores. Negative affect and positive affect yielded alphas of 0.87 and 0.91, respectively, in a sample of 2,727 American adults (Mroczek & Kolarz, 1998). The NAPAS appears to measure the same constructs across young (20-40), middle-aged (41-60), and older adults (61+; n = 3,480), suggesting it is a consistent measure of negative and positive affect regardless of age (Chan et al., 2020).

**Center for Epidemiological Studies Depression Scale**

The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) is a 20-item instrument designed to measure self-reported depressive symptoms within the last week. Each of the 20 items in the scale is associated with depression. Examples include “I felt that people dislike me” and “I felt hopeful about the future.” Several items are reverse scored
Participants respond to a four-point Likert-type scale, indicating whether they have experienced the items “rarely” to “most or all of the time.” The six item subscales are meant to assess general mood, feelings of guilt, hopelessness, psychomotor reactions, appetite, and sleep disturbances (Radloff, 1977). The CES-D showed internal consistency (α = .91) among a sample of 984 undergraduates, and (α = .94) among a sample of 254 non-clinical community members (Carleton et al., 2013).

**Physical Health Questionnaire**

The Physical Health Questionnaire (PHQ; Spence et al., 1987) is a measure of self-reported somatic symptoms, including gastrointestinal distress, sleep, headaches, and respiratory ailments. Lower scores are linked to greater physical health (Spence et al., 1987). The PHQ is a 14-item questionnaire (abbreviated from 32) and has shown strong reliability (α = .80; Schat et al., 2005). Subscales including sleep, headaches, and respiratory infections exhibited internal consistency of α = .79 or greater in a sample of 197 healthcare workers (Schat et al., 2005). The gastrointestinal subscale was revised for clearer wording and yielded an internal consistency of α = .77 (Schat et al., 2005). The correlations between the PHQ and psychological health ranged from .23 to .62, demonstrating a significant relationship between the constructs (Schat et al., 2005).

**PERMA-Profiler**

The PERMA-Profiler, which captures Seligman’s five pillars of wellbeing: Positive emotion (experience of positive emotions), Engagement (being immersed in life pursuits), Relationships (having satisfying relationships with others), Meaning (working towards a bigger goal), and Accomplishment (regularly achieving successes), were used to measure participant wellbeing (Ryan et al., 2019). The PERMA-Profiler consists of 23 items (15 PERMA items and
8 filler items), however, in the current study, 15 items will be used to measure the five pillars of well-being. Each item is rated on an 11-point scale ranging from 0 (never) to 10 (always), or 0 (not at all) to 10 (completely). The reported Cronbach’s alpha for the subscale scores ranged from .71 to .89 for positive emotion, .60 to .81 for engagement, .75 to .85 for relationships, .85 to .92 for meaning, and .70 to .86 for accomplishment subscale scores (Umucu et al., 2020). The PERMA-Profiler is a highly regarded wellbeing model and therefore has experienced fast uptake since it was published in 2016 (Ryan et al., 2019).

**Data Analysis Plan**

Data was entered into the Statistical Package for the Social Sciences (SPSS) for statistical analysis, version 27. Data was cleaned using three procedures. First, entries were cross checked and corrected for entry accuracy on 10% of items. Second, descriptive statistics were run on all variables to confirm that the expected range, means, and standard deviations were within instrument parameters. Third, prior to inferential analysis, data was screened for statistical assumptions including independence, multivariate normality, linearity, homogeneity of variance, and outliers (Hahs-Vaughn, 2016).

Descriptive statistics were used to summarize demographic data. Between groups ANOVAs were conducted to evaluate the equivalence between the experimental and control groups on pretest measures.

To control for the effect of potential pretest differences between groups, an analysis of covariance (ANCOVA) was used to evaluate whether or not to reject the null hypotheses, using significance levels of p < .05. Eta squared will be used to measure effect sizes (Privitera, 2015).
Summary

The purpose of this quantitative quasi-experimental research study was to determine if a 105-minute professional development workshop for teachers called “Happiness for Educators” had positive effects on happiness, well-being, and mental health on educators. Additionally, I evaluated whether weekly encouraging emails had a positive effect on outcomes. To accomplish this, Missoula County Public School educators were recruited to participate in a 105-minute happiness for educators workshop offered as part of a full-day, Missoula Community Education Summit. The workshop was delivered by a faculty member from the University of Montana, Department of Counseling and was partially funded by the Montana Safe Schools Center and Montana Happiness Project. Additional MCPS educators were recruited to participate in the control condition. To evaluate whether encouraging emails enhance positive outcomes, 50% of the experimental group was randomly assigned to receive four weekly follow-up emails. All experimental and control participants completed a demographics questionnaire, along with five standardized questionnaires one week preceding the happiness workshop and one month after the happiness workshop. Data was summarized via descriptive statistics. ANOVAs were used to evaluate for pre-test differences between experimental and control groups. To test the hypotheses, ANCOVAs were conducted to evaluate for mean differences in scores between educators’ who attend the happiness workshop training (with or without encouraging emails) and educators who did not attend the happiness workshop. The ANCOVA was used to test the effects of an independent variable (control vs intervention group) on a continuous dependent variable measured over time. Chapter 4 includes the results of these analyses.
CHAPTER FOUR: RESULTS

In this chapter, I describe and summarize the statistical analyses and outcomes relating to research questions and hypotheses included in the previous chapters. My data analyses included the following steps: (a) pre-analysis and data cleaning, (b) experimental and control sample group comparisons, (c) hypothesis testing with inferential statistics, and (d) post-hoc analyses.

Pre-Analysis Data Cleaning and Integrity

All data were entered in the Statistical Package for the Social Sciences (SPSS) software for statistical analysis. Data cleaning was conducted using the following procedures. First, I cross-checked and corrected entry accuracy on 10% of items. Second, I ran descriptive statistics on all variables in order to verify that the expected range, means, and standard deviations were within instrument parameters. After completing those steps to confirm the integrity of the data, I proceeded to data analysis. Forty-eight participants in the experimental group were lost due to attrition. 16 participants were lost in the control group due to attrition. Attrition was caused by: (a) participants not completing both the pretest and posttest questionnaires, or (b) participants completing the experimental pretest and the control posttest or the control pretest and the experimental posttest, or (c) participants who could not be linked from pretest to posttest. No demographic patterns were apparent when analyzing participant attrition.

Experimental and Control Sample Group Comparisons

The experimental (n = 139) and control (n = 62) samples were compared by age, gender identity, sexual identity, ethnicity, and role within schools. Demographics within each group were relatively similar. Participants ranged in age from 22-72 years old (see Table 1). Each sample had representation from each decadal age grouping (ex: 21-30). Both samples included primarily White participants (96% experimental, 95% control). Most participants in each sample
identified as female (87% experimental, 83% control). The majority of participants in both
groups decided to disclose their sexual orientation. The majority in both groups identified as
heterosexual (82% experimental, 89% control). The majority of participants identified their
employment positions as teachers in each group (60% experimental, 70% control). The next
largest employment group in the experimental sample identified as counselors (18%
experimental). The next largest employment group in the control sample identified as other
(13%).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographics</th>
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<table>
<thead>
<tr>
<th>Age</th>
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<th>Control Group</th>
<th>Percent</th>
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<td>31-40</td>
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<td>41-50</td>
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<td>Control</td>
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<td>---------</td>
<td></td>
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**Gender Identity**

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<tr>
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**Sexual Identity**

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<tr>
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</tr>
<tr>
<td>Homosexual</td>
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<tr>
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<tr>
<td>Queer</td>
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<tr>
<td></td>
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<td>Control Group</td>
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<td>----------------</td>
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</tr>
<tr>
<td>Teacher</td>
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<td>Student Services</td>
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<tr>
<td>Total</td>
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**Hypothesis Testing**

To evaluate the hypotheses that workshop participants would show improved scores on the five dependent measures, I conducted one-way between groups analyses of covariance (ANCOVAs). For each ANCOVA, I entered pretest scores as the covariates to account for small pretest differences between experimental and control groups. Also, for each ANCOVA, I screened the data to evaluate whether essential statistical assumptions were met. These assumptions included (a) independence, (b) multivariate normality, (c) linearity, (d) homogeneity of variance, and (e) outliers (Hahs-Vaughn, 2016). As is common in the scientific literature on
positive psychology and happiness course research, hypothesis testing was conducted using significance levels of $p < .05$. SPSS-generated eta squared was used to measure effect sizes (Privitera, 2015).

**Outcome Measures**

As described in chapter three, the dependent variables consisted of posttest scores on the following instruments: the Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1997); the Negative and Positive Affect Scale (NAPAS; Mrocek & Kolarz, 1998); the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977); the Physical Health Questionnaire (PHQ; Spence et al., 1987); the Adult Hope Scale (AHS; Snyder et al., 1991) and the PERMA-Profiler (Ryan et al., 2019; Umucu et al., 2020). The NAPAS (negative affect and positive affect; two subscales and a total score), PHQ (sleep, headaches, gastrointestinal, and colds; four subscales and a total score), the AHS (pathways and agency; two subscales and a total score), and the PERMA-Profiler (positive emotion, negative emotion, engagement, relationships, meaning, accomplishment, overall well-being, health, and loneliness; nine subscales and a total score) were split into their respective subscales and total scores. Overall, including total scores and subscales, there were 22 outcome measures. Outliers were scanned for patterns of varying responses, but no outliers were deleted because they did not appear to fall outside the range of usual extreme scores in a research study.

**ANCOVA Results (Exp. [Group 1] vs. Exp. With Email Support [Group 3])**

One-way ANCOVAs were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for participants in the workshop only condition (Group 1) vs. the workshop plus emails condition (Group 3). Preliminary assumption checks revealed the following: Levene’s test
indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there were no significant differences between the two experimental conditions on total scores for any of the outcome measures (see Table 2).

**Table 2**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental w/ Email Support estimated means and SE $n = 69$</th>
<th>Experimental w/ Email Support estimated means and SE $n = 70$</th>
<th>$F$ (df)</th>
<th>$p$ – value</th>
<th>Eta squared</th>
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</thead>
<tbody>
<tr>
<td>SHS</td>
<td>17.47 (2.25)</td>
<td>18.01 (2.04)</td>
<td>.772 (1,137)</td>
<td>.110</td>
<td>.019</td>
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<tr>
<td>CES-D</td>
<td>9.91 (6.86)</td>
<td>11.17 (8.67)</td>
<td>.400 (1, 134)</td>
<td>.645</td>
<td>.002</td>
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<tr>
<td>AHS-Agency</td>
<td>26.38 (3.89)</td>
<td>26.29 (3.05)</td>
<td>1.934 (1, 137)</td>
<td>.967</td>
<td>.000</td>
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<tr>
<td>AHS-Pathway</td>
<td>26.19 (4.10)</td>
<td>26.73 (2.99)</td>
<td>5.892 (1, 136)</td>
<td>.351</td>
<td>.006</td>
</tr>
<tr>
<td>AHS-Total</td>
<td>52.53 (7.54)</td>
<td>53.01 (5.42)</td>
<td>6.085 (1, 136)</td>
<td>.608</td>
<td>.002</td>
</tr>
<tr>
<td>NAPAS-Neg</td>
<td>10.91 (2.96)</td>
<td>11.46 (3.17)</td>
<td>.711 (1, 136)</td>
<td>.365</td>
<td>.006</td>
</tr>
<tr>
<td>NAPAS-Pos</td>
<td>16.53 (3.36)</td>
<td>16.09 (3.44)</td>
<td>.144 (1, 134)</td>
<td>.346</td>
<td>.007</td>
</tr>
<tr>
<td>PHQ-Total</td>
<td>32.43 (9.13)</td>
<td>34.88 (10.49)</td>
<td>1.577 (1, 135)</td>
<td>.181</td>
<td>.013</td>
</tr>
<tr>
<td>PHQ-Sleep</td>
<td>12.71 (4.11)</td>
<td>13.79 (4.40)</td>
<td>.002 (1, 135)</td>
<td>.184</td>
<td>.013</td>
</tr>
<tr>
<td>PHQ-HAche</td>
<td>7.22 (3.79)</td>
<td>7.59 (4.28)</td>
<td>.351 (1, 137)</td>
<td>.700</td>
<td>.001</td>
</tr>
<tr>
<td>PHQ-GI</td>
<td>8.80 (4.44)</td>
<td>9.84 (5.40)</td>
<td>1.223 (1, 137)</td>
<td>.266</td>
<td>.009</td>
</tr>
<tr>
<td>PHQ-Resp.</td>
<td>3.55 (1.67)</td>
<td>3.91 (1.79)</td>
<td>.033 (1, 137)</td>
<td>.299</td>
<td>.008</td>
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<td>Both Experimental</td>
<td>F</td>
<td>p</td>
<td>Levene's Test</td>
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</tr>
<tr>
<td>PP-WB</td>
<td>136.05 (20.47)</td>
<td>136.60 (17.33)</td>
<td>1.554 (1, 132)</td>
<td>.774</td>
<td>.001</td>
</tr>
<tr>
<td>PP-PE</td>
<td>24.55 (5.03)</td>
<td>24.40 (4.40)</td>
<td>.350 (1, 135)</td>
<td>.966</td>
<td>.000</td>
</tr>
<tr>
<td>PP-NE</td>
<td>13.75 (5.28)</td>
<td>14.13 (5.03)</td>
<td>.004 (1, 135)</td>
<td>.796</td>
<td>.000</td>
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<td>PP-Engagement</td>
<td>24.22 (4.37)</td>
<td>24.03 (4.34)</td>
<td>.004 (1, 134)</td>
<td>.830</td>
<td>.000</td>
</tr>
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<td>PP-Relationships</td>
<td>26.50 (4.70)</td>
<td>26.76 (3.70)</td>
<td>2.397 (1, 136)</td>
<td>.792</td>
<td>.001</td>
</tr>
<tr>
<td>PP-Meaning</td>
<td>26.54 (4.14)</td>
<td>26.93 (3.50)</td>
<td>1.433 (1, 135)</td>
<td>.560</td>
<td>.003</td>
</tr>
<tr>
<td>PP-Accomp.</td>
<td>25.93 (3.96)</td>
<td>25.49 (3.50)</td>
<td>.480 (1, 135)</td>
<td>.722</td>
<td>.001</td>
</tr>
<tr>
<td>PP-Health</td>
<td>23.85 (5.10)</td>
<td>23.30 (5.27)</td>
<td>.004 (1, 133)</td>
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<td>.002</td>
</tr>
<tr>
<td>PP-Loneliness</td>
<td>4.28 (2.68)</td>
<td>3.51 (2.24)</td>
<td>3.801 (1, 136)</td>
<td>.152</td>
<td>.015</td>
</tr>
</tbody>
</table>

Notes: SE = Standard error; SHS = Subjective Happiness Scale; CES-D = Center for Epidemiologic Studies Depression Scale; AHS = Adult Hope Scale; NAPAS = Negative and Positive Affect Scale; PHQ = Physical Health Questionnaire; HAche = Headache; GI = Gastrointestinal; Resp. = Respiratory; PP = PERMA-Profiler; Accomp. = Accomplishment; PE = Positive Emotion; NE = Negative Emotion

*p < .05, **p < .01, # indicates a significant result on Levene’s test of Homogeneity of Variance

**ANCOVA Results (Control [Group 2] vs. Both Experimental [Groups 1 and 3])**

Given that no significant differences were found between experimental group 1 and experimental group 3, one-way ANCOVAs were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical...
health, and well-being for all (combined groups 1 and 3) experimental participants vs. control participants (group 2). Preliminary assumption checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there were no significant effects of the happiness for educators workshop (both groups 1 and 3) on total scores for any of the outcome measures, as compared to the control group (see Table 3).

Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control estimated means and SE n = 62</th>
<th>Experimental estimated means and SE n = 139</th>
<th>$F$ (df)</th>
<th>$p$ - value</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHS</td>
<td>17.88 (2.53)</td>
<td>17.74 (2.16)</td>
<td>0.892(1, 199)</td>
<td>.847</td>
<td>.000</td>
</tr>
<tr>
<td>CES-D</td>
<td>10.71 (8.80)</td>
<td>10.55 (7.83)</td>
<td>1.542(1, 195)</td>
<td>.612</td>
<td>.001</td>
</tr>
<tr>
<td>AHS-Agency</td>
<td>26.39 (3.99)</td>
<td>26.33 (3.48)</td>
<td>1.543(1, 199)</td>
<td>.989</td>
<td>.000</td>
</tr>
<tr>
<td>AHS-Pathway</td>
<td>26.38 (3.81)</td>
<td>26.46 (3.58)</td>
<td>0.008(1, 197)</td>
<td>.840</td>
<td>.000</td>
</tr>
<tr>
<td>AHS-Total</td>
<td>52.74 (7.26)</td>
<td>52.78 (6.53)</td>
<td>.555(1, 197)</td>
<td>.915</td>
<td>.000</td>
</tr>
<tr>
<td>NAPAS-Neg</td>
<td>11.17 (3.24)</td>
<td>11.19 (3.07)</td>
<td>.001(1, 198)</td>
<td>.881</td>
<td>.000</td>
</tr>
<tr>
<td>NAPAS-Pos</td>
<td>16.29 (3.61)</td>
<td>16.31 (3.39)</td>
<td>.002(1, 196)</td>
<td>.883</td>
<td>.000</td>
</tr>
<tr>
<td>PHQ-Total</td>
<td>32.27 (9.69)</td>
<td>33.66 (9.88)</td>
<td>.000(1, 197)</td>
<td>.434</td>
<td>.003</td>
</tr>
<tr>
<td>PHQ-Sleep</td>
<td>12.47 (4.32)</td>
<td>13.25 (4.28)</td>
<td>.046(1, 197)</td>
<td>.334</td>
<td>.005</td>
</tr>
<tr>
<td>PHQ-HAche</td>
<td>7.47 (3.77)</td>
<td>7.40 (4.03)</td>
<td>.581(1, 199)</td>
<td>.870</td>
<td>.000</td>
</tr>
<tr>
<td>Measure</td>
<td>Mean (SD)1</td>
<td>Mean (SD)2</td>
<td>t-value</td>
<td>df</td>
<td>p-value1</td>
</tr>
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<td>------------</td>
<td>------------</td>
<td>----------</td>
<td>----</td>
<td>----------</td>
</tr>
<tr>
<td>PHQ-GI</td>
<td>8.37 (3.60)</td>
<td>9.32 (4.96)</td>
<td>8.234 (1, 199)</td>
<td>.255</td>
<td>.007</td>
</tr>
<tr>
<td>PHQ-Resp.</td>
<td>3.97 (2.54)</td>
<td>3.73 (1.73)</td>
<td>9.301 (1, 199)</td>
<td>.526</td>
<td>.002</td>
</tr>
<tr>
<td>PP-WB</td>
<td>139.82 (19.80)</td>
<td>136.32 (18.90)</td>
<td>.266 (1, 194)</td>
<td>.400</td>
<td>.004</td>
</tr>
<tr>
<td>PP-PE</td>
<td>25.39 (4.55)</td>
<td>24.47 (4.70)</td>
<td>.031 (1, 197)</td>
<td>.298</td>
<td>.006</td>
</tr>
<tr>
<td>PP-NE</td>
<td>14.16 (5.35)</td>
<td>13.94 (5.14)</td>
<td>.384 (1, 197)</td>
<td>.867</td>
<td>.000</td>
</tr>
<tr>
<td>PP-Engagement</td>
<td>25.45 (4.34)</td>
<td>24.13 (4.34)</td>
<td>.002 (1, 196)</td>
<td>.106</td>
<td>.013</td>
</tr>
<tr>
<td>PP-Relationships</td>
<td>26.71 (4.43)</td>
<td>26.63 (4.21)</td>
<td>.024 (1, 198)</td>
<td>.999</td>
<td>.000</td>
</tr>
<tr>
<td>PP-Meaning</td>
<td>27.61 (3.63)</td>
<td>26.73 (3.82)</td>
<td>.348 (1, 197)</td>
<td>.241</td>
<td>.007</td>
</tr>
<tr>
<td>PP-Accomp.</td>
<td>26.00 (4.29)</td>
<td>25.70 (3.73)</td>
<td>2.425 (1, 197)</td>
<td>.859</td>
<td>.000</td>
</tr>
<tr>
<td>PP-Health</td>
<td>23.31 (6.09)</td>
<td>23.57 (5.17)</td>
<td>1.00 (1, 194)</td>
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<td>.000</td>
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<tr>
<td>PP-Loneliness</td>
<td>3.60 (2.68)</td>
<td>3.89 (2.49)</td>
<td>.016 (1, 198)</td>
<td>.288</td>
<td>.006</td>
</tr>
</tbody>
</table>

Notes: SE = Standard error; SHS = Subjective Happiness Scale; CES-D = Center for Epidemiologic Studies Depression Scale; AHS = Adult Hope Scale; NAPAS = Negative and Positive Affect Scale; PHQ = Physical Health Questionnaire; Hache = Headache; GI = Gastrointestinal; Resp. = Respiratory; PP = PERMA-Profiler; Accomp. = Accomplishment; PE =Positive Emotion; NE = Negative Emotion

*p < .05, **p < .01, # indicates a significant result on Levene’s Test of Homogeneity of Variance

**ANCOVA Results (All Participants Control [Group 2] and Experimental [Group 1])**
One-way ANCOVAs were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for participants in the workshop only condition (Group 1) vs. the control condition (Group 2). Preliminary assumption checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there were no significant differences between the two experimental conditions on total scores for any of the outcome measures.

ANCOVA Results (All Participants Control [Group 2] and Experimental with Emails [Group 3])

One-way ANCOVAS were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for participants in the workshop plus emails condition (Group 3) vs. the control condition (Group 2). Preliminary assumption checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there were no significant differences between the two experimental conditions on total scores for any of the outcome measures.

ANCOVA Results (Teachers Only EXP [Group 1] vs. EXP w/ Emails [Group 3])

One-way ANCOVAS were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for teachers only in the experimental group and the experimental group receiving emails. Preliminary assumption checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results
indicated that there was no significant effect of the happiness for educators workshop on total scores for any the outcome measures (see table 4).

Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teachers Experimental estimated means and SE</th>
<th>Teachers Experimental w/ Email Support estimated means and SE</th>
<th>$F$ (df)</th>
<th>$p$ – value</th>
<th>Eta squared</th>
</tr>
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<tbody>
<tr>
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<td>$n = 48$</td>
<td>$n = 37$</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SHS</td>
<td>17.48 (2.36)</td>
<td>17.87 (2.20)</td>
<td>.394 (1, 83)</td>
<td>.453</td>
<td>.007</td>
</tr>
<tr>
<td>CES-D</td>
<td>11.07 (7.36)</td>
<td>11.94 (9.64)</td>
<td>.783 (1, 77)</td>
<td>.646</td>
<td>.003</td>
</tr>
<tr>
<td>AHS-Agency</td>
<td>25.96 (4.27)</td>
<td>26.43 (2.92)</td>
<td>2.529 (1, 83)</td>
<td>.588</td>
<td>.004</td>
</tr>
<tr>
<td>AHS-Pathway</td>
<td>25.64 (4.40)</td>
<td>26.60 (3.06)</td>
<td>3.603 (1, 82)</td>
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</tr>
<tr>
<td>AHS-Total</td>
<td>51.53 (8.30)</td>
<td>53.03 (5.11)</td>
<td>5.351 (1, 82)</td>
<td>.357</td>
<td>.010</td>
</tr>
<tr>
<td>NAPAS-Neg</td>
<td>11.46 (3.12)</td>
<td>11.97 (3.67)</td>
<td>2.602 (1, 82)</td>
<td>.479</td>
<td>.006</td>
</tr>
<tr>
<td>NAPAS-Pos</td>
<td>17.08 (3.55)</td>
<td>16.63 (3.75)</td>
<td>.342 (1, 81)</td>
<td>.561</td>
<td>.004</td>
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<tr>
<td>PHQ-Total</td>
<td>33.62 (9.88)</td>
<td>36.72 (10.86)</td>
<td>.281 (1, 81)</td>
<td>.185</td>
<td>.022</td>
</tr>
<tr>
<td>PHQ-Sleep</td>
<td>12.73 (4.18)</td>
<td>14.56 (4.49)</td>
<td>.057 (1, 82)</td>
<td>.057</td>
<td>.044</td>
</tr>
<tr>
<td>PHQ-HAche</td>
<td>7.77 (3.86)</td>
<td>8.11 (4.41)</td>
<td>.754 (1, 83)</td>
<td>.727</td>
<td>.001</td>
</tr>
<tr>
<td>PHQ-GI</td>
<td>9.28 (4.78)</td>
<td>10.68 (5.75)</td>
<td>.799 (1, 82)</td>
<td>.281</td>
<td>.014</td>
</tr>
<tr>
<td>PHQ-Resp.</td>
<td>3.88 (1.76)</td>
<td>3.84 (1.85)</td>
<td>.106 (1, 83)</td>
<td>.957</td>
<td>.000</td>
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<tr>
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<td>CON</td>
<td>df</td>
<td>F</td>
<td>p</td>
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<td>-------</td>
</tr>
<tr>
<td>PP-WB</td>
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<td>134.56</td>
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<td>.775</td>
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</tr>
<tr>
<td>PP-PE</td>
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<td>24.16</td>
<td>2.772</td>
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<tr>
<td>PP-NE</td>
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<tr>
<td>PP-Engagement</td>
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<td>23.62</td>
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<td>.743</td>
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</tr>
<tr>
<td>PP-Relationships</td>
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<td>.654</td>
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<tr>
<td>PP-Meaning</td>
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<td>26.64</td>
<td>1.668</td>
<td>.398</td>
<td>.009</td>
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<tr>
<td>PP-Accomp.</td>
<td>25.46</td>
<td>25.41</td>
<td>.049</td>
<td>.921</td>
<td>.000</td>
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<tr>
<td>PP-Health</td>
<td>23.16</td>
<td>23.12</td>
<td>.081</td>
<td>.980</td>
<td>.000</td>
</tr>
<tr>
<td>PP-Loneliness</td>
<td>4.92</td>
<td>3.97</td>
<td>2.926</td>
<td>.223</td>
<td>.018</td>
</tr>
</tbody>
</table>

Notes: SE = Standard error; SHS = Subjective Happiness Scale; CES-D = Center for Epidemiologic Studies Depression Scale; AHS = Adult Hope Scale; NAPAS = Negative and Positive Affect Scale; PHQ = Physical Health Questionnaire; HAche = Headache; GI = Gastrointestinal; Resp. = Respiratory; PP = PERMA-Profiler; Accomp. = Accomplishment; PE = Positive Emotion; NE = Negative Emotion

*p < .05, **p < .01, # indicates a significant result on Levene’s test of Homogeneity of Variance

**ANCOVA Results (Teachers Only EXP [Group 1] vs. CON [Group 2])**

One-way ANCOVAs were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for teachers only in the experimental group and the control group. Preliminary assumption
checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there was no significant effect of the happiness for educators workshop on total scores for any of the outcome measures (see Table 5).

Table 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teachers Control estimated means and SE</th>
<th>Teachers Experimental estimated means and SE</th>
<th>$F$ (df)</th>
<th>$p$ – value</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHS</td>
<td>18.00 (2.44)</td>
<td>17.48 (2.36)</td>
<td>.038 (1, 87)</td>
<td>.391</td>
<td>.009</td>
</tr>
<tr>
<td>CES-D</td>
<td>10.24 (7.71)</td>
<td>11.07 (7.36)</td>
<td>.049 (1, 82)</td>
<td>.674</td>
<td>.002</td>
</tr>
<tr>
<td>AHS-Agency</td>
<td>27.15 (3.60)</td>
<td>25.96 (4.27)</td>
<td>.214 (1, 87)</td>
<td>.230</td>
<td>.017</td>
</tr>
<tr>
<td>AHS-Pathway</td>
<td>26.72 (3.36)</td>
<td>25.64 (4.40)</td>
<td>2.268 (1, 84)</td>
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<td>.013</td>
</tr>
<tr>
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<td>53.80 (6.34)</td>
<td>51.53 (8.30)</td>
<td>1.318 (1, 84)</td>
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<tr>
<td>NAPAS-Neg</td>
<td>10.85 (2.98)</td>
<td>11.46 (3.12)</td>
<td>.007 (1, 86)</td>
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<td>.010</td>
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</tr>
<tr>
<td>PHQ-Total</td>
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<td>33.62 (9.88)</td>
<td>.000 (1, 84)</td>
<td>.985</td>
<td>.000</td>
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<tr>
<td>PHQ-Sleep</td>
<td>12.88 (4.37)</td>
<td>12.73 (4.18)</td>
<td>.008 (1, 87)</td>
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<td>.001</td>
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<tr>
<td>PHQ-HAche</td>
<td>7.70 (3.70)</td>
<td>7.77 (3.86)</td>
<td>.251 (1, 86)</td>
<td>.912</td>
<td>.000</td>
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<td>PHQ-GI</td>
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<td>9.28 (4.78)</td>
<td>2.857 (1, 84)</td>
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<td>3.86 (1.76)</td>
<td>4.422 (1, 86)</td>
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<tr>
<td>PP-WB</td>
<td>141.15 (18.77)</td>
<td>132.70 (22.16)</td>
<td>.363 (1, 83)</td>
<td>.114</td>
<td>.030</td>
</tr>
<tr>
<td>PP-PE</td>
<td>25.53 (4.42)</td>
<td>23.96 (5.44)</td>
<td>.740 (1, 85)</td>
<td>.214</td>
<td>.018</td>
</tr>
<tr>
<td>PP-NE</td>
<td>13.85 (5.56)</td>
<td>14.72 (5.48)</td>
<td>.278 (1, 85)</td>
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<td>.008</td>
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<td>PP-Engagement</td>
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<td>23.83 (4.56)</td>
<td>.186 (1, 85)</td>
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<tr>
<td>PP-Relationships</td>
<td>26.83 (4.58)</td>
<td>25.66 (5.18)</td>
<td>.843 (1, 86)</td>
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<td>27.93 (3.36)</td>
<td>25.75 (4.52)</td>
<td>1.679 (1, 85)</td>
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<td>PP-Accomp.</td>
<td>26.95 (3.69)</td>
<td>25.46 (4.16)</td>
<td>.029 (1, 84)</td>
<td>.092</td>
<td>.034</td>
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<tr>
<td>PP-Health</td>
<td>23.59 (5.63)</td>
<td>23.16 (5.28)</td>
<td>.000 (1, 82)</td>
<td>.741</td>
<td>.001</td>
</tr>
<tr>
<td>PP-Loneliness</td>
<td>3.46 (2.71)</td>
<td>4.92 (2.73)</td>
<td>2.019 (1, 86)</td>
<td>.016</td>
<td>.066</td>
</tr>
</tbody>
</table>

Notes: SE = Standard error; SHS = Subjective Happiness Scale; CES-D = Center for Epidemiologic Studies Depression Scale; AHS = Adult Hope Scale; NAPAS = Negative and Positive Affect Scale; PHQ = Physical Health Questionnaire; HAche = Headache; GI = Gastrointestinal; Resp. = Respiratory; PP = PERMA-Profiler; Accomp. = Accomplishment; PE =Positive Emotion; NE = Negative Emotion

*p < .05, **p < .01, # indicates a significant result on Levene’s test of Homogeneity of Variance

**ANCOVA Results (Teachers Only EXP w/ Email [Group 3] vs. CON [Group 2])**

One-way ANCOVAs were conducted to compare the effects of the intervention on goal-oriented hope, depressive symptoms, positive and negative affect, physical health, and well-being for teachers only in the control group and the experimental group receiving emails.
Preliminary assumption checks revealed the following: Levene’s test indicated the assumption of homogeneity of variance was not violated for any of the outcome measures. ANCOVA results indicated that there was no significant effect of the happiness for educators workshop on total scores for any of the outcome measures (see table 6).

### Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teachers Control estimated means and SE</th>
<th>Teachers Experimental w/ Email Support estimated means and SE</th>
<th>$F$ (df)</th>
<th>$p$ – value</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHS</td>
<td>18.00 (2.44)</td>
<td>17.87 (2.20)</td>
<td>.226 (1, 76)</td>
<td>.893</td>
<td>.000</td>
</tr>
<tr>
<td>CES-D</td>
<td>10.24 (7.71)</td>
<td>11.94 (9.64)</td>
<td>.486 (1, 69)</td>
<td>.458</td>
<td>.008</td>
</tr>
<tr>
<td>AHS-Agency</td>
<td>27.15 (3.60)</td>
<td>26.43 (2.92)</td>
<td>2.646 (1, 76)</td>
<td>.512</td>
<td>.006</td>
</tr>
<tr>
<td>AHS-Pathway</td>
<td>26.72 (3.37)</td>
<td>26.60 (3.06)</td>
<td>.136 (1, 74)</td>
<td>.718</td>
<td>.002</td>
</tr>
<tr>
<td>AHS-Total</td>
<td>53.80 (6.34)</td>
<td>52.03 (5.11)</td>
<td>2.263 (1, 74)</td>
<td>.899</td>
<td>.000</td>
</tr>
<tr>
<td>NAPAS-Neg</td>
<td>10.85 (2.98)</td>
<td>11.97 (3.67)</td>
<td>3.564 (1, 74)</td>
<td>.123</td>
<td>.032</td>
</tr>
<tr>
<td>NAPAS-Pos</td>
<td>15.95 (3.05)</td>
<td>16.63 (3.75)</td>
<td>3.604 (1, 74)</td>
<td>.481</td>
<td>.007</td>
</tr>
<tr>
<td>PHQ-Total</td>
<td>33.44 (10.41)</td>
<td>36.72 (10.86)</td>
<td>.308 (1, 73)</td>
<td>.228</td>
<td>.020</td>
</tr>
<tr>
<td>PHQ-Sleep</td>
<td>12.88 (4.37)</td>
<td>14.56 (4.48)</td>
<td>.055 (1, 75)</td>
<td>.121</td>
<td>.032</td>
</tr>
<tr>
<td>PHQ-HAche</td>
<td>7.70 (3.70)</td>
<td>8.11 (4.41)</td>
<td>2.447 (1, 75)</td>
<td>.675</td>
<td>.002</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>8.82 (4.17)</td>
<td>4.23 (2.69)</td>
<td>141.15 (18.77)</td>
<td>25.54 (4.42)</td>
<td>13.85 (5.56)</td>
</tr>
<tr>
<td></td>
<td>10.68 (5.75)</td>
<td>3.84 (1.85)</td>
<td>134.56 (18.11)</td>
<td>24.16 (3.88)</td>
<td>15.16 (5.39)</td>
</tr>
<tr>
<td></td>
<td>5.003 (1, 74)</td>
<td>4.461 (1, 75)</td>
<td>.664 (1, 73)</td>
<td>.976 (1, 76)</td>
<td>1.515 (1, 76)</td>
</tr>
<tr>
<td></td>
<td>.231</td>
<td>.558</td>
<td>.225</td>
<td>.200</td>
<td>.142</td>
</tr>
<tr>
<td></td>
<td>.020</td>
<td>.005</td>
<td>.020</td>
<td>.022</td>
<td>.029</td>
</tr>
</tbody>
</table>

Notes: SE = Standard error; SHS = Subjective Happiness Scale; CES-D = Center for Epidemiologic Studies Depression Scale; AHS = Adult Hope Scale; NAPAS = Negative and Positive Affect Scale; PHQ = Physical Health Questionnaire; HAche = Headache; GI = Gastrointestinal; Resp. = Respiratory; PP = PERMA-Profiler; Accomp. = Accomplishment; PE = Positive Emotion; NE = Negative Emotion

*p < .05, **p < .01

Table 7
Open-Ended Responses in the Post Survey: The Most Helpful Interventions Included in the Workshop

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Example Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse and dimension</td>
<td></td>
</tr>
<tr>
<td>Savoring intervention</td>
<td>“How to savor things that make you happy. Don’t just let the moment pass you by, savor it and let it sit with you.”</td>
</tr>
<tr>
<td>Sleep strategies intervention</td>
<td>“The value of sleep! And how many people struggle with sleep, including me!”</td>
</tr>
<tr>
<td>Three good things intervention</td>
<td>“The strategy of thinking of three good things that were great about your day and how oneself was involved in making those moments happen.”</td>
</tr>
<tr>
<td>Gratitude writing intervention</td>
<td>“The importance of incorporating gratitude…into connections with others. John was able to engage the audience and many of the happiness interventions were interesting and seemed approachable.”</td>
</tr>
<tr>
<td>Mindfulness intervention</td>
<td>“Mindfulness strategies can increase my health, happiness, and general well-being. Being mindful of the positives that happen.”</td>
</tr>
<tr>
<td>Breathing intervention</td>
<td>“Even though I have practiced diaphragmatic breathing for years, I have been finding</td>
</tr>
</tbody>
</table>
myself practicing the breathing techniques …, especially when I wake up at night.”

Three step trick (feel the feeling) intervention “I liked the three-step trick process…He was a great public speaker…and overall engaging with his stories.”

**Post-Test Only Feedback**

**Table 8**

**Evaluation of PPIs by Experimental Group Participants**

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>$N$</th>
<th>Minimum</th>
<th>Maximum</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-Three Good Things</td>
<td>141</td>
<td>2</td>
<td>4</td>
<td>3.31</td>
<td>.623</td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-Mindfulness Meditation</td>
<td>140</td>
<td>1</td>
<td>4</td>
<td>2.75</td>
<td>.788</td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-Sleep Strategies</td>
<td>141</td>
<td>1</td>
<td>4</td>
<td>3.01</td>
<td>.793</td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-</td>
<td>141</td>
<td>1</td>
<td>4</td>
<td>2.89</td>
<td>.790</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----</td>
<td>---</td>
<td>---</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Savoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-</td>
<td>140</td>
<td>1</td>
<td>4</td>
<td>3.34</td>
<td>.687</td>
</tr>
<tr>
<td>Gratitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-</td>
<td>140</td>
<td>1</td>
<td>4</td>
<td>2.79</td>
<td>.744</td>
</tr>
<tr>
<td>Coping with triggers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-</td>
<td>141</td>
<td>1</td>
<td>4</td>
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<td>.807</td>
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<tr>
<td>Therapeutic Writing</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of Evidence Based Happiness Strategies-</td>
<td>141</td>
<td>1</td>
<td>4</td>
<td>3.03</td>
<td>.783</td>
</tr>
<tr>
<td>Positive distractions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Participants in Experimental Group Not Receiving</td>
<td>104</td>
<td>1</td>
<td>2</td>
<td>1.79</td>
<td>.410</td>
</tr>
<tr>
<td>Emails, did you receive the emails from another source or were other PP materials shared?</td>
<td>137</td>
<td>1</td>
<td>2</td>
<td>1.74</td>
<td>.442</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Did you participate in any other PP or resiliency sessions during the Feb. 13, 2023 professional day?</td>
<td>138</td>
<td>1</td>
<td>2</td>
<td>1.62</td>
<td>.486</td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Three good things?</td>
<td>137</td>
<td>1</td>
<td>2</td>
<td>1.43</td>
<td>.497</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
<td>( F )</td>
<td>( p )</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------</td>
<td>---</td>
<td>------</td>
<td>----</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Mindfulness meditation?</td>
<td>137</td>
<td>1</td>
<td>2</td>
<td>1.49</td>
<td>.502</td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Sleep strategies?</td>
<td>138</td>
<td>1</td>
<td>2</td>
<td>1.46</td>
<td>.500</td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Savoring?</td>
<td>138</td>
<td>1</td>
<td>2</td>
<td>1.73</td>
<td>.445</td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Gratitude?</td>
<td>137</td>
<td>1</td>
<td>2</td>
<td>1.46</td>
<td>.500</td>
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<tr>
<td>Question</td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----</td>
<td>------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Coping with triggers?</td>
<td>137</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.19</td>
<td>.394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you apply any of the evidence-based happiness strategies from the Education Summit in your teaching-Therapeutic writing?</td>
<td>138</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.62</td>
<td>.488</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you did apply an evidence-based happiness strategy with students, how</td>
<td>109</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.10</td>
<td>.384</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
effective did you find it?

Considering the happiness for educators workshop experience in its totality, how likely are you to participate in positive psychology/happiness interventions in the future?

<table>
<thead>
<tr>
<th></th>
<th>141</th>
<th>1</th>
<th>6</th>
<th>1.92</th>
<th>1.410</th>
</tr>
</thead>
</table>

**Post-Hoc Results**

**Paired Samples T-Tests EXP Groups 1 and 3**

To look at the pattern of workshop attendee responses, I conducted a paired samples t-test with EXP 1 and 3 (not including a control group comparison). Paired sample t-test results indicated that there was a significant effect of the happiness for educators workshop on NAPAS-Total scores from Time 1 ($M = 29.65, SD = 7.11$) to Time 2 ($M = 27.40, SD = 5.68$), $t = 3.084$, $p = .002$ (two-tailed). The mean decrease in NAPAS-Total scores was 2.24 with a 95% confidence interval ranging from .80 to 3.68. The eta squared statistic (.06) indicated a moderate effect size.

Paired sample t-test results also indicated that there was a significant effect of the happiness for educators workshop on NAPAS-Neg scores from Time 1 ($M = 12.34, SD = 3.74$)
to Time 2 ($M = 11.26, SD = 3.11$), $t = 2.861, p = .005$ (two-tailed). The mean decrease in NAPAS-Neg scores was 1.09 with a 95% confidence interval ranging from .34 to 1.84. The eta squared statistic (.05) indicated a moderate effect size.

Paired sample t-test results also indicated that there was a significant effect of the happiness for educators workshop on CES-D scores from Time 1 ($M = 13.04, SD = 9.61$) to Time 2 ($M = 10.39, SD = 7.62$), $t = 2.816, p = .006$ (two-tailed). The mean decrease in CES-D scores was 2.66 with a 95% confidence interval ranging from .79 to 4.53. The eta squared statistic (.06) indicated a moderate effect size.

Table 9

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$t(139)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPAS-Total</td>
<td>2.24</td>
<td>8.48</td>
<td>3.084</td>
<td>.002</td>
</tr>
<tr>
<td>NAPAS-Neg</td>
<td>1.09</td>
<td>4.49</td>
<td>2.861</td>
<td>.005</td>
</tr>
<tr>
<td>CES-D</td>
<td>2.66</td>
<td>10.97</td>
<td>2.816</td>
<td>.006</td>
</tr>
</tbody>
</table>

Table 10

$T$-Test Paired Sample Statistics
### Table 11

**T-Test Paired Sample Statistics**

<table>
<thead>
<tr>
<th>Paired Sample</th>
<th>PreExpNAPAS-NAPAS-Neg</th>
<th>PreExpNAPAS-NAPAS-Neg</th>
<th>PostExpNAPAS-NAPAS-Neg</th>
<th>PostExpNAPAS-NAPAS-Neg</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPAS-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PreExp</td>
<td>PostExp</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td></td>
<td>29.65</td>
<td>7.11</td>
<td>27.40</td>
<td>5.68</td>
</tr>
</tbody>
</table>

### Table 12

**T-Test Paired Sample Statistics**

<table>
<thead>
<tr>
<th>Paired Sample</th>
<th>PreExpCES-D Total</th>
<th>PreExpCES-D Total</th>
<th>PostExpCES-D Total</th>
<th>PostExpCES-D Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics Pair 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES-D Total</td>
<td>PreExp</td>
<td>PostExp</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.04</td>
<td>9.61</td>
<td>10.39</td>
<td>7.62</td>
</tr>
</tbody>
</table>
**Paired Samples T-Tests for Participants with Very High CES-D Scores**

Although there were no statistical differences between the experimental groups and the control group on the CES-D, as has been reported in previous studies, interesting differences among individual case responses were observed. Specifically, in the combined experimental groups, 34 (24% of the EXP sample) educators obtained scores of 20+ (extremely depressed) at pre-test. Of those 34 educators, 25 (or 73.5%) reported reductions of 10 or more points on the CES-D. In contrast, 14 (21.8% of the Control group) had scores of 20+ at pre-test, with 8 (or 57.1%) experiencing a 10 points or greater reduction in CES-D scores. Overall, it appears there was what might be considered regression to the mean for all educators who were significantly depressed when entering the study. However, the fact that 73.5% of educators who were severely depressed in the experimental group reported substantial reductions in their depressive symptoms may indicate that even a small dose of happiness skills training within the context of a large group, may reduce depressive symptoms in a subgroup of highly depressed educators.

To further explore patterns among educators who were depressed on the CES-D at pretest, I conducted paired samples t-tests on all outcome measures with participants who had CES-D pre-test scores of 15 or higher \( (n = 47; 33\% \text{ of the experimental group sample}) \). Among those participants, patterns of wellness increased substantially, with t-test significance at \( p = .01 \) or greater on 19 of the 22 outcome measures. For depression, among this subgroup, mean scores decreased from 24.0 at pre-test to 12.7 at post-test \( (p = .000) \). Essentially, this indicates that, on average, the one-third most severely depressed educators moved from severely depressed to not depressed on the CES-D.
Why would educators who were depressed at pre-test experience such substantial improvements? Once again, the possible explanations include: (a) a common historical event (e.g., spring vacation), (b) regression to the mean, and (c) something about the brief workshop administered in a large group setting set an anti-depressant process in motion. Without specific follow-up interviews, it is impossible to be sure of what stimulated these changes.

**Summary**

None of the 22 total measures showed statistical significance with ANCOVAs at an alpha level of .05. Statistical significance was demonstrated with paired sample t-tests on three of the 22 total measures in the experimental groups. Affect and depression significantly improved for the treatment group from Time 1 to Time 2. Implications and interpretation of these results are discussed in Chapter Five.
CHAPTER FIVE: DISCUSSION

The purpose of this study was to evaluate the effects of a positive psychology happiness for educators workshop on educator well-being. Participants who completed the workshop as part of a professional in-service day summit were compared to educators who attended the summit but did not take the happiness for educators workshop. The results were inconsistent with the hypotheses, and educators in the positive psychology happiness for educators workshop did not show significantly greater positive pre-post-changes on the five wellness instruments. Positive changes were not detected on hope, positive affect, negative affect, physical health, depression and general well-being. The null hypotheses were not rejected on any of the outcome variables. Intervention and control groups were similar in their demographics, professional positions, and pretest baseline measurements. It is important to note that there were statistically significant positive changes in the experimental groups from pretest to posttest in several wellness dimensions including overall affect, negative affect, and depression, despite the lack of significance when comparing the experimental groups to the control group.

Results from this study were not consistent with current research literature on the benefits of positive psychology interventions (PPIs). Positive psychology interventions have been found to be effective tools for addressing low levels of wellbeing (Neuhaus et al., 2022). Researchers have determined that PPIs are helpful for increasing happiness among participants who engage with them and implement them into their daily lives; practice with interventions is vital to improvement (Neuhaus et al., 2022). Schick et al. (2021) note that PPIs are often brief, self-administered, and designed to enhance positive states. PPIs frequently require little time commitment and fewer financial resources than traditional therapy; they are efficacious and easily implemented in individual or group settings (Schick et al., 2021). As stated in Chapters
One and Two of the current study, individuals and organizations have become more aware of the importance of well-being, and positive psychology courses may help organizations reach their wellness goals for their employees. Improving educator wellbeing while decreasing anxiety, depression, and overall psychological fatigue are important goals. The PPIs implemented in this study have demonstrated their effectiveness among participants and their continued inclusion in educators workshops of this type may help to address some of the challenges facing school districts around the country.

**Attrition**

Two hundred and ten participants volunteered for the experimental group for the current study. They completed the pretest questionnaires and attended the happiness for educators workshop on February 13, 2023. Ninety participants volunteered for the control group for the current study and attended the pupil-instruction-related (PIR) day workshops, but did not attend the happiness for educators workshop. One hundred seventy-four participants completed the experimental group posttest and seventy-nine participants completed the control group posttest. After examining the responses for completion and matching pretest email addresses to posttest email addresses, one hundred thirty-nine participants were found to have completed all portions of the experimental group research study (66% of those who began the study) and sixty-two participants were found to have completed all portions of the control group research study (69% of those who began the study). 34% of experimental group participants and 31% of control group participants failed to complete the research study.

Researchers have found a number of reasons for attrition in research studies. Participants who are older and have higher educational levels are more likely to finish research studies they begin (Schroe et al., 2022). In this study, 18% of participants were aged 21-30 and 30% were
aged 31-40. The age of the younger participants may have contributed to the attrition rate. Other reasons for failing to complete the research study include lack of time to complete the questionnaires, lack of useful content included in the interventions, and technical problems with Qualtrics (Schroe et al., 2022). All of these reasons may have contributed to lack of completion for all participants who started the interventions.

Demographics

The current study was completed by participants who are predominantly White (96% experimental, 95% control), predominantly female identifying (87% experimental, 83% control), and predominantly heterosexual identifying (82% experimental, 89% control). Generalizability is a major concern to all those engaged in research as it refers to the validity of the theory or hypothesis in a setting different from the one where it was empirically tested and confirmed (Lee & Baskerville, 2000). Empirical findings that lack generalizability may not be useful (Lee & Baskerville, 2000).

The most recent statistics from the U.S. Census Bureau (2022) indicate Whites comprise 59.3% of the population, Black or African Americans comprise 13.6%, Hispanic or Latino comprises 18.9%, Asian comprises 6.1%, and Native American 1.3% of the total U.S. population. Current gender statistics, as recorded by the U.S. Census Bureau indicate 50.5% of the population is female while 49.5% of the population is male. Statistics for those identifying as trans or non-binary is not available on from the U.S. Census Bureau. However, the Pew Research Center indicates 5.1% of adults under age 30 identify as trans or non-binary.

According to the National Center for Education Statistics, 79% of educators in the U.S. identify as White and non-Hispanic, two percent of educators identify as Asian and non-Hispanic, nine percent of educators identify as Hispanic, and seven percent identify as Black and
non-Hispanic. The National Center for Education Statistics states approximately 76% of educators in the U.S. identify as female while 24% identify as male. The lack of racial and gender diversity in the current research study compared to the larger population in the U.S. limits its generalizability to areas outside Missoula, Montana.

**Group Effects of a Happiness Workshop**

Evaluating and interpreting the effects of a happiness workshop on wellbeing variables is difficult. This has been true in the current study because the workshop was brief, it included a variety of different interventions, and the time dedicated to evaluating participant understanding before implementation was limited. Several possible explanations for the results are offered in the following pages with the understanding that the precise reasons for the results are far from certain. With those stipulations, I offer my interpretations below.

**Depression**

Depression is defined as a specific alteration in mood leading to sadness or loneliness, a negative self-concept associated with self-reproaches and self-blame, regressive and self-punitive wishes, and changes in activity levels leading to reduced interest or agitation (Beck & Alford, 2009). Depression, as measured by the Center for Epidemiological Studies Depression Scale, includes four factors of depression including depressed affect, positive affect, somatic complaints, and interpersonal difficulties (Blodgett et al., 2021). Depression can also lead to disinterest in daily activities thus contributing to anxiety and stress (Rehman et al., 2021). Educators suffering from depression may experience lower quality of interactions associated with these four factors of depression, impacting the quality of education received by students (Pan et al., 2022). From a positive psychology perspective, depression may be caused by a lack of positive cognition (Pan et al., 2022). Pan et al. (2022) also found that depression may be
caused by the lack of the full influence of positive forces in the lives of individuals. Depression is a challenge both educators and the wider population face. While the ANCOVA results did not indicate experimental group significance when compared to the control group, there was significance when examining the pretest (Time 1) and posttest (Time 2) results of the CES-D from the experimental group. Two-paired t-tests also indicated significant results between time 1 and time 2 for those coming to the happiness for educators workshop with high levels of depression as indicated by pretest CES-D results.

The CES-D has been characterized by some researchers as not only a measure of depression, but also a measure of happiness (Joseph, 2007). This is because four items on the CES-D are positively worded. The current study sought to assess participants initial happiness as well as provide direction on how to apply PPIs to increase happiness and well-being in the future. Improvement from time 1 to time 2 on the CES-D by experimental group participants indicates there may have been some support for the alternative hypothesis in research question two. Some experimental group participants may have learned and implemented happiness techniques that led to increased happiness and decreased depression, as evidenced by the improvement in CES-D scores. Had the dosage of the happiness intervention been larger, even more participants may have benefited from reduced depressive symptoms. In some ways, these results may also support the assertion that positive psychology interventions positively impact happiness and reduce depression in those suffering from more significant levels of depression. Specifically, in the post-hoc analysis of extreme scorers on the CES-D, CES-D scores lowered by nearly 11 points, a substantial and unusual reduction in depressive symptoms. For example, in one study of a semester-long happiness class, significance was obtained with an average CES-D reduction of 3 points (Goodmon et al., 2018). This finding is worth further examination, and
may contribute to the growing body of evidence linking positive psychology interventions, such as regular implementation of the three good things intervention or post-intervention contact via email, both of which were included in the happiness for educators workshop, with improved well-being and lower depression (Wu, 2021; Huffman et al., 2016).

The concept of hedonic happiness was not a focus of the happiness for educators workshop. Instead, many of the PPIs included in the happiness for educators workshop emphasized the importance of eudaimonic states of happiness, which defines well-being as a more consistent positive state instead of feelings of intense short-term happiness (Park & Ahn, 2022). Evidence of lower depression and increased happiness as a result of increased usage of eudaimonic-focused PPIs may lead to long-term improvements in depression. This would support the assertion that these types of interventions are good for the long-term improved well-being of educators facing the challenges of the modern education system.

**Negative Affect and Total Negative and Positive Affect**

Individuals with high levels of positive affectivity tend to exhibit a dispositional tendency to experience feelings like alertness, enthusiasm, and liveliness while individuals with increased negative affectivity experience guilt, nervousness, fear, and anger (Toutant & Vandenberghe, 2023). Negative affectivity is further indicated by the presence of negative views of self, pessimistic evaluations of surrounding environments, and sensitivity to workplace stress (Toutant & Vandenberghe, 2023). As indicated in chapters one and two of the current study, educators report experiencing increased negative affect as a result of the challenging environments currently present in school systems throughout the state of Montana and the country. Those who experience higher negative affectivity also suffer from higher incidence of avoidant behaviors, leading to sensitivity to environmental threats and greater escape action.
tendencies (Toutant & Vandenberghe, 2023). As noted in chapter two, another challenge affecting educators is the increased absenteeism from school due to lower well-being, greater negative affect, and higher levels of stress and anxiety. Toutant & Vandenberghe (2023) assert individuals must experience the satisfaction of basic psychological needs, such as autonomy, to achieve well-being. The freedom to complete work duties free from interference and the sense of ownership over work increases well-being (Toutant & Vandenberghe, 2023). Educators facing the challenges confronting them on a daily basis may lose this sense of ownership due to disagreements with students, administrators, and community stakeholders, thus increasing their negative affect. PPIs that decrease negative affect and increase autonomy would contribute to improved well-being. The alternative hypothesis of research question 3 of the current study, may therefore be partially supported due to the improvement in negative affect scores on the NAPAS from time 1 to time 2 as a result of the PPIs being provided to participants in the experimental group. However, again, these findings disappeared when comparing the experimental groups with the control condition. Although I would like to conclude that the PPI intervention reduced negative affect, because the control group negative affect also decreased, the best conclusion is that some common event that both experimental and control participants experienced accounts for the positive changes observed in all groups.

In the past, positive psychology interventions included in the happiness for educators workshop that researchers have found impact negative affect and total affect include the gratitude activity and best possible self-intervention (Seear & Vella-Brodrick, 2012). It is possible that a greater dosage or exposure or practice with these PPIs might result in significant results.
Goal Oriented Hope, Health, Somatic Symptoms, and Contact Post-Intervention

No statistically significant improvements for goal-oriented hope, general health, somatic symptoms, or post-intervention contact were associated with the happiness for educators workshop. The lack of statistical significance may have been due, in part, to improvements reported by the control group. This may be attributed to a historical effect like spring break, that began the day the post-intervention questionnaires were opened to participants. This historical effect may have resulted in a sense of anticipation and excitement for the impending vacation time and may have led to more positive outlooks and increased well-being among those participating in the current quasi-experimental research study control group. Other potential historical factors that may have had a salubrious impact on control participants include participation in alternative summit workshops and anticipation of receiving a $25 gift card for completing the study questionnaires. A longer intervention with more extensive formal instruction, reinforcement, and practice in with the PPIs may be needed to outweigh the effects of naturally occurring historical experiences, such as spring break, participation in alternative educational summit activities, and the $25 reimbursement received by all participants.

Open-Ended Data

The open-ended data collected as part of the current study provides useful information that may be considered when designing future research projects. In combination with post-hoc analyses of the extreme scores on depression, the open-ended data suggests that a sub-set of the sample population was substantially influenced. The open-ended data provided by participants also demonstrates the usefulness of several of the interventions considered most impactful by those providing feedback. Sleep strategies, three good things, and gratitude writing were three interventions believed to be most helpful by those who responded to the open-ended post-
intervention questionnaire. As a result, those three interventions may be emphasized in future workshops. By emphasizing those interventions deemed most effective by participants, researchers may be able to use previous feedback to better understand the impacts of these types of interventions. They may also be able to design workshops that are perceivably beneficial for the largest number of participants. Open-ended post-intervention responses, used in conjunction with other data collected in the current study, are important and deserve consideration for these reasons.

**Implications for Educators**

Improving the overall wellness of educators working schools is of vital importance. Teachers learn very little on the importance of establishing and maintaining their health and well-being during their formal training (Gustems-Carnicer & Calderon, 2013). Gustems-Carnicer & Calderon (2013) also write that teacher education programs spend even less time on recognizing the signs of stress and the procedures and techniques needed to successfully cope with workplace stress. Educational environments are conducive to the development of stress and anxiety (Gustems-Carnicer & Calderon, 2013). This indicates there is a need to provide resources for teachers who are experiencing stress and anxiety and who may otherwise not have resources to address these issues. Effective coping strategies are vital to the perception of well-being (Gustems-Carnicer & Calderon, 2013). Gustems-Carnicer & Calderon (2013) found that providing a wide variety of strategies and mechanisms appeals to a broad range of education professionals and may help them successfully deal with stress resulting from the workplace. The happiness for educators workshop is one such way to provide these resources, however, the current findings imply that greater dosage, increased practice, repeated workshops, or other strategies for increasing the distinct influence of PPIs are needed to obtain a more robust and
significant outcome. For example, workshops like the happiness for educators intervention could be repeated or boosted through offering them on a regular basis. A key variable to reducing, minimizing, or tolerating stress and anxiety is the use of coping strategies, and coping strategies require repeated learning before individuals will integrate them into their daily lives (Gustems-Carnicer & Calderon, 2013).

Educators are consistently placed in situations that could lead to a decrease in enthusiasm for teaching (Amzat et al., 2021). Some researchers indicate there are two types of coping strategies that have been identified among teachers. They are problem-focused and emotion focused coping strategies (Amzat et al., 2021). Problem-focused coping addresses factors that manipulate relationships between individuals and their surroundings; emotion-focused refers to self-distraction coping that normalizes emotions (Amzat et al., 2021). Amzat et al. (2021) also refer to internal and external support mechanisms in their research. Internal mechanisms are defined as personal variables used to cope while external support involves social and didactic resources (Amzat et al., 2021). Researchers have found that collective proactive strategies in the form of professional training sessions are very effective and will enhance well-being among educators (Amzat et al., 2021). The happiness for educators workshop is one such collective proactive intervention that may address the deficit in well-being currently plaguing education systems.

The challenges facing teachers have been identified and proven by multiple research studies examining the issue. Multiple studies have also acknowledged coping strategies as one of the primary methods for addressing these deficits. The specific types of coping strategies best suited have also been identified and their efficacy has been substantiated by research (Gustems-Carnicer & Calderon, 2013). The happiness for educators workshop implemented these types of
coping strategies. While significance was not found when comparing the experimental results to the control group, positive trends towards improvement in wellbeing were identified when comparing pre and post questionnaire results completed by the experimental group. This study offers useful information in the quest to improve educator well-being. The implications are clear: to determine if educators can substantially and significantly benefit from PPIs, research evaluating longer-term interventions are needed.

**Study Limitations and Implications for Future Research**

The current study has methodological limitations. The study was designed to be a very brief workshop offered during a professional development day for Missoula Country Public Schools. A review of the relevant literature found some support for brief interventions of this nature, especially when working with professionals who have limited resources and availability. Some participants also received four supportive emails over the course of four weeks in order to offer more resources and examine the effect this may or may not have on the success of the intervention. At the conclusion of the study it was determined that many participants in the experimental group who were also supposed to receive the emails did not have access to them. This was due to the method of communication as email filters for the school system tended to route the communications to junk folders due to them being sent from an external email address. This may have limited access to the extended support and the effect the extended support was intended to have on participants’ outcomes.

The study also did not evaluate longer-term effects of the happiness for educators workshop on hope, depression, greater positive affect and lower negative affect, improved somatic symptoms, and improved general well-being and health. While the study suggested there were trends in the right direction towards improving educator health and well-being,
significance was not found when compared to the control group. Studies that are either longer in duration, include verified support post-intervention, or a combination of the two may be more beneficial in formulating the best way to help educators cope with the challenges they face.

The current study did not control for which intervention component was most helpful to participants and which method of communication would have helped deliver the intervention most effectively post-intervention. Educators are individuals facing different challenges. Much like any other group of professionals they have different learning styles and may find PPIs to be helpful or not, depending on their most pressing challenges. Some research has identified which PPIs are generally most helpful in the realm of education, with best possible self, gratitude, and three good things ranked highest (citation). But those findings may not align with the needs of individual educators with different life circumstances. More research on positive psychology for educators in the local area may begin to more specifically identify needs and possible remedies.

There are additional limitations to this study that should be acknowledged. First, this was a non-randomized quasi-experimental design research study. The results may be invalid because participants volunteered for the experimental group and the control group. Those participants who chose to attend the happiness for educators workshop may have been facing particularly difficult challenges or may have attended due to their interest in positive psychology and happiness. Participants may therefore be predisposed to working towards happiness and may have implemented the interventions with more intention than others. Participants facing difficulties in life may also have worked harder to implement change. Although some randomization of samples was implemented as assignment to either the experimental group or the experimental group receiving emails, as noted above, I am uncertain that all of the “email” group actually received and read the emails.
Participants in both the experimental groups and the control group received a small stipend ($25 gift card) in exchange for their participation and for sharing data with the research team. While financial incentives may have had a role in attracting participants to the study, it may have also acted as a limitation. Participants may have attended the workshop and filled out the questionnaires with a focus on receiving the incentive with little thought given to implementing the interventions over the course of the study. The expectation of a financial reward also may have acted as a positive reinforcement for the control group, possibly contributing to their improved outcome scores from pre- to post-workshop.

The history effect is another limitation that should be expounded upon. Spring break for Missoula County Public Schools occurred just as the post-test questionnaires were opened to participants. The excitement associated with having a much-needed holiday away from school may have influenced control group participants, resulting in higher post-test scores than would otherwise be reported. As a former educator, the current researcher is familiar with the optimism and excitement associated with an extended break from the classroom. It can easily be surmised that this may have had an effect on at least some of the participants and their short-term outlooks.

Generalizability is a further limitation that is important to consider. Participants in this research study were recruited from the local school district. Educators in the school district are predominantly female, predominantly White, and predominantly heterosexual. Demographics and U.S. Census Bureau data described earlier illustrate the challenge this limitation presents. The participant demographics of this study do not match the demographics of the population in other parts of the country. The results of this study may help to formulate future approaches to interventions suitable for Montana educators, but a more representative sample composed of
individuals who identify similarly to the population of the U.S. would be needed in order to be able to generalize the results to other geographical areas.

The instruments used in the current study are further limitations worthy of mentioning. All questionnaires provided in this study, with the exception of the experimental group post-test reflection and presenter feedback data questions, were Likert-type scales. It is difficult to know precisely what motivates an individual to answer certain questions in certain ways. Some may be answering due to an assumption that there is a more desirable answer worthy of more consideration. Other participants may have answered in the presence of other individuals, thus increasing pressure to pick the “correct answer.” Another associated limitation is the possibility that self-report measures are inaccurate. There is an assumption they fulfill their intended purpose as precisely as may be assumed. As mentioned in Chapter Three, all measures in this study have strong psychometric properties. But there is always the possibility of inaccuracy.

During the analysis phase of the current study it was realized that a key question was left off the control group post-test. The question asked participants to indicate whether they had attended any other professional development workshops on the PIR day associated with positive psychology or resiliency. For example, it is known that, among other workshop alternatives, a resiliency workshop was offered. Participation in workshops like these may have affected how participants in the control group answered the post-test questionnaires, thus affecting the statistical results of the current study. More information on this topic may be useful in ascertaining the reasons for the lack of significance in the comparisons between the experimental group and the control group. This could also affect the design and implementation of future positive psychology interventions.
The dates when responses to the questionnaires were submitted are an additional limitation in the current study. The post intervention questionnaires were distributed to participants in both the experimental and control groups just before the start of Spring Break in the current academic year. Some participants responded to the questionnaires just before Spring Break commenced while others responded once school came back into session. Participants answering the questionnaire before Spring Break may have been influenced by the anticipation and excitement associated with a holiday away from school. Participants responding after Spring Break may have been affected by the end of the holiday and the start of the final months of the semester. This important distinction may have impacted respondents’ answers and is therefore noted as a limitation.

The findings contained in the current study may be helpful for counselor educators, particularly those working with future school counselors. Researchers have demonstrated that challenges exist for educators. School-oriented counselor educators may focus their attention on preparing future counselors for their work with students. But they may also want to prepare future counselors for the difficulties educators face as those will directly impact students. Counselor educators may inform future counselors about the realities of educator stress and depression. They may also work with future counselors to develop workshops that introduce some of the interventions contained in the current study. Counselors who are able to aid educators with the difficulties they face will be positively impacting the students they serve. While more research in the area is needed, the implications are clear. Counselors who can reasonably help educators are also helping students and that is one of the primary parts of their responsibilities in the profession.
Conclusion

Results in the current study were insignificant, with none of the null hypotheses rejected. However, while significance was not found, there was improvement from pretest to posttest for some measures in the experimental group. Despite the lack of significance in this study, a greater dosage of positive psychology workshops for educators may help improve well-being for the population focused on in this research study. Educators who engage with these interventions may realize some benefit as depression improved in the experimental group and less negative affect was present at the conclusion of the study. Previous research indicates that positive psychology interventions have empirical support and this study contributes to our understanding of how dosage, PPI practice, and other factors may be needed to help educators gain from PPI training experiences. Educators contribute to our society in a variety of extraordinary ways. I hope this research will help those who support them to improve their well-being.
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https://doi.org/10.1037//0022-3514.60.4.570


Appendix A

Invitation to Participate in an Evidence-Based Happiness Research Study

Dear Educator,

You are invited to participate in a research study that evaluates the effects of a happiness workshop on the well-being of educators and other school personnel. If you choose to participate in this research study, you will complete a set of Qualtrics questionnaires on or before the morning of February 13, 2023, and another set of Qualtrics questionnaires the week of March 12-18, 2023. These questionnaires will include items pertaining to your demographic information, your mood, physical wellness, hope, and positive and negative emotions.

You may participate in the “experimental” or “control” condition of this research project. The experimental condition involves attendance at the MCPS-sponsored evidence-based happiness workshop with John Sommers-Flanagan on Feb 13. The control condition requires that you NOT attend the evidence-based happiness workshop with John Sommers-Flanagan on Feb 13.

If you choose to participate, your questionnaires will be stored in a password protected database (Qualtrics). Although data from your questionnaires may be used in future professional presentations and publications, no identifying information will be included in these professional presentations and publications. To help us match your pre- and post-workshop questionnaires, we will ask you to list the last four digits of your telephone number.

The risks associated with your participation are minimal. The questionnaires are related to the workshop content and title of the study and so the items shouldn’t be surprising or disturbing. Nonetheless, there is a slight possibility that you might experience distress as a result of completing the questionnaires. You can skip questions that you find too difficult or distressing to answer.

As a means of supporting Montana educators, after completing pre- and post-workshop questionnaires, all participants will receive a gift card for $25 for each set of questionnaires submitted. Your participation may help researchers better understand the effects of happiness workshops and potentially contribute to the science of well-being.

Participation in this project is entirely voluntary. You may refuse to participate or choose to discontinue your participation at any time without penalty.

If you would like to participate in this study, please email Robert Ryan at robert.ryan@umconnect.umt.edu and indicate whether you will participate in the experimental or control condition. Upon receipt of your email, Robert will send you a link to the experimental or control Qualtrics questionnaires, which will include an informed consent form.

Thanks for your interest in this research. We look forward to your participation.
Sincerely,

John Sommers-Flanagan, Ph.D.
Lead Presenter and Researcher

Robert Ryan, M.A.
Co-Presenter and Co-Researcher
Appendix B

Encouraging Emails

Dear (Participant Name):

We hope you are doing well and found the Positive Psychology for Educators Workshop helpful last week. We enjoyed working with you as we introduced some of the foundational concepts and interventions associated with positive psychology. When implemented regularly, these interventions may lead to improved well-being and increased professional achievement. In order to help you realize the benefits of positive psychology, we are sending you one email a week for four weeks with additional positive psychology resources. These resources will focus on a core positive psychology intervention each week.

This week we are focusing on gratitude. Gratitude has been identified by researchers as one of the most beneficial interventions associated with positive psychology. There are many activities linked to gratitude that may be of use to you. Some of those activities are listed here:

https://positivepsychology.com/gratitude-exercises/#bonus-gratitude

We encourage you to take a few minutes with your peers or on your own and engage in one of the activities listed on the webpage above. Once you finish you may reflect on your experience with the intervention and share it with your peers. You may wish to reach out to John or I with questions or thoughts on these activities once completed. Please feel free to do so.

Thank you for your participation and continued interest in positive psychology and its benefits. Another resource email with additional resources will follow next week.

Sincerely,

John Sommers-Flanagan, PhD
Lead Presenter and Researcher

Robert Ryan, MA
Co-Presenter and Co-Researcher
Dear (Participant Name):

We hope you have had a productive week and are finding the information presented on positive psychology useful. This week we would like to focus on acts of kindness. The following webpage contains detailed information on acts of kindness and provides some information on apps that may be useful as you look for ways to implement acts of kindness in your practice or in your classroom:

https://positivepsychology.com/random-acts-kindness/#well-being

The Pay It Forward App may be of help to you as you look for particularly fun activities to engage in with your co-workers in order to experience the benefits of acts of kindness. The app can be found here:


Once you finish you may reflect on your experience with the intervention and share it with your peers. You may wish to reach out to John or I with questions or thoughts on these activities once completed. Please feel free to do so.

Have a great weekend and a fantastic week and we will be in touch next week with more useful resources.

Sincerely,

John Sommers-Flanagan, PhD
Lead Presenter and Researcher

Robert Ryan, MA
Co-Presenter and Co-Researcher
Dear (Participant Name):

We hope you continue to have productive experiences and that you are finding the information presented on positive psychology useful. This week we would like to focus on mindfulness. The following webpage contains detailed information on mindfulness, including data on how mindfulness is used to reduce stress and anxiety.

https://positivepsychology.com/mindfulness-positive-psychology-3-great-insights/#techniques

The section on techniques used may be particularly helpful as you seek ways to implement interventions that focus on the challenges associated with your profession.

Once you finish you may reflect on your experience with the technique and share it with your peers. You may wish to reach out to John or I with questions or thoughts on these activities once completed. Please feel free to do so.

Have a great weekend and a fantastic week and we will be in touch next week with more useful resources.

Sincerely,

John Sommers-Flanagan, PhD
Lead Presenter and Researcher

Robert Ryan, MA
Co-Presenter and Co-Researcher
Dear (Participant Name):

We hope you have had a productive week and that this post-intervention period has been filled with experiences that have demonstrated the usefulness of positive psychology. This email will be the last regular communication we send as part of the workshop intervention. We hope it has been useful to you as you seek ways to apply what you have learned to your daily professional practice. This week we would like to focus on the best possible self intervention. The following webpage contains detailed information on how to conceptualize your best possible self and how the exercise may help when applied regularly.


Imagining your best possible self with vivid details may help you to gain the most out of the exercise. Concentrating on attainable goals as you create a best possible self journal may also be helpful so you can look back and see a written record of your drives and desires.

Once you finish you may reflect on your experience with the intervention and share it with your peers. You may wish to reach out to John or I with questions or thoughts on these activities once completed. Please feel free to do so.

Have a great weekend and a fantastic second semester!

Sincerely,

John Sommers-Flanagan, PhD
Lead Presenter and Researcher

Robert Ryan, MA
Co-Presenter and Co-Researcher
Appendix C

Information and Consent Form

Project Title: The Effects of a Happiness Workshop on the Well-Being of Educators and Other School Personnel

Principal and Co-Investigators:
John Sommers-Flanagan, Ph.D.
P JWCE 201, 406.243.4263
John.sf@mso.umt.edu

Robert Ryan, M.A.
robert.ryan@umconnect.umt.edu

Purpose: The following describes the purpose of this project and outlines your basic rights as a research participant. You are invited to participate in a research study that evaluates the effects of a happiness workshop on the well-being of educators and other school personnel.

Procedures: If you choose to participate in this research study, you will complete a set of Qualtrics questionnaires on or before the morning of February 13, 2023, and another set of Qualtrics questionnaires the week of March 12-18, 2023. These questionnaires will include items pertaining to your demographic information, your mood, physical wellness, hope, and positive and negative emotions.

Confidentiality: If you choose to participate, your questionnaires will be stored in a password protected database (Qualtrics). Although data from your questionnaires may be used in future professional presentations and publications, no identifying information will be included in these professional presentations and publications. To help us match your pre- and post-workshop questionnaires, we will ask you to list the last four digits of your telephone number.

Limits of Confidentiality: Exceptions to your confidentiality involve situations where we might be obligated by law to share information. For example, if at any point during your participation we learn that you are currently at risk of harming yourself or someone else, we might be required to inform someone or emergency responders who may need to perform further assessment.

Risks: We believe the likely risks associated with your participation are minimal. The questionnaires are related to the workshop content and title of the study and so the items shouldn’t be surprising or disturbing. Nonetheless, there is a slight possibility that you might experience distress as a result of completing the questionnaires. You can skip questions that you find too difficult or distressing to answer. If, for whatever reason, you become distressed or desire assistance please let a member of the research team know how you’re feeling so we can assist you in accessing support.

Benefits to you: As a means of supporting Montana educators, after completing pre- and post-workshop questionnaires, all participants will receive one gift card for $25 once both questionnaires are submitted. Your participation may help researchers better understand the effects of happiness workshops and potentially contribute to the science of well-being.
Voluntary Participation/Withdrawal: Your participation in this project is entirely voluntary. You may refuse to participate or choose to discontinue your participation at any time without penalty.

Future Research: The data you provide will be entered into SPSS and will not include any personal identifiers. Anonymous data from this study may be used in future research or shared with other researchers without additional informed consent from you.

Thank you for considering participation in this study and for helping to advance research at the University of Montana.

Questions: If you have any questions about the research now or during the study contact: John Sommers-Flanagan—406-243-4263, or Robert Ryan—407-595-3979.

If you have any questions regarding your rights as a research subject, you may contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Consent Statement: I have read and understood the above statements of my rights as a participant in this project. I understand that my participation is entirely voluntary and that I may refuse to participate or choose to discontinue my participation at any time without penalty.

Participant: ______________________________________________

Please Print Name

Signed: _________________________________________________ Date: ___________

A copy of this form will be given to you upon your request.
Appendix D

Demographics Questionnaire

1. Please type your email address here to be eligible for the $25 electronic gift card (this will be deleted after we match your pre/post questionnaires and send you the gift card link):

2. What words do you use to describe your sex (male, female, other)?

3. What words do you use to describe your sexual orientation?

4. What words do you use to describe your gender identity?

5. What is your age?

6. Which label best describes your job?
   A. Teacher/Educator
   B. School Counselor or School Psychologist
   C. Administration
   D. Student Services
   E. Other

7. What is your ethnicity?
   A. Native American or Alaskan Native
   B. Black or African American
   C. White
   D. Latino or Hispanic
   E. Asian
   F. Pacific Islander
   G. Other
8. Which statement best describes you?

A. I tend to have an optimistic outlook on life

B. I tend to have a pessimistic outlook on life