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## The Science of Happiness and its Effect on Professional Quality of Life in Mental Health Providers

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**The Science of Happiness and its Effect on Professional Quality of Life in Mental  
Health Providers**

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NRSG 820-A Scholarly Project Implementation

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March 25, 2021

## THE SCIENCE OF HAPPINESS

### Dedications

To my father and mother Douglas and Mary Sue Pauley, thank you for always loving me and encouraging me that I could accomplish anything. You both showed me how to move forward with life no matter the circumstances. You started my love of education with those encyclopedias and the knowledge that there was a big world beyond West Virginia waiting to be explored. Thank you for all the travel, trips to the library, church services, private school, learning the value of hard work and a million other things you taught me by example that have shaped my life.

To my husband Robert, thank you for your support through SO MANY times in school during our marriage. Thank you for always believing in my ability to complete this project and for loving me enough to live out your marriage vows. I could not have accomplished what I have in life without your support and God's grace. I know I have said it before, but I honestly mean it this time, this is the last degree.

To my children Olivia, Jonathan, Robin (and their spouses George and Whitney) as well as my 10 grandchildren, thank you for loving, encouraging, forgiving, and helping me to laugh and appreciate true happiness in life. Accomplishments are valuable, but each of you are my most important legacy I leave this world.

## THE SCIENCE OF HAPPINESS

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## THE SCIENCE OF HAPPINESS

### **Abstract**

**OBJECTIVE:** The science of happiness is part of the field of positive psychology, which should not be confused with positive thinking, self-help, or religious beliefs, but is considered a scientific evidence-based practice. The purpose of this quantitative, descriptive, study was to examine the relationship of education on the science of happiness and a gratitude intervention on subjective happiness and professional quality of life of mental health care providers.

**METHODS:** The mental healthcare providers for this study included psychiatrists, advanced practice nurses, physician's assistants, psychologists, social workers and registered nurses in a large medical system in Tennessee and Kentucky. The PERMA and CREATION health theoretical models were used for this scholarly project. This study utilized two Survey Monkey surveys and included the Subjective Happiness Scale and the Professional Quality of Life: Compassion Satisfaction and Fatigue: Version Five (ProQOL) as pre- and post- tests. The intervention included viewing a video by Sonya Lyubomirsky on the science of happiness followed by the participants keeping a gratitude journal for three weeks. There was data obtained from three qualitative questions, concerning personal happiness, the effects of keeping a gratitude journal, and suggestions to improve overall professional quality of life.

**RESULTS:** The study was presented to 430 mental health providers in a large medical system in Tennessee and Kentucky in December 2020. Ten respondents completed both the pre and post-tests and the data were analyzed using a Wilcoxon Rank Test which did not show a statistically significant difference in the pre and post test scores after viewing the science of happiness video

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and keeping the gratitude journal for three weeks. The data did show a moderate positive correlation between the subjective happiness scores and the secondary traumatic stress scores.

**CONCLUSIONS:** Although this study did not show a statistically significant difference on the overall subjective happiness and quality of life scales with the utilization of the interventions of the science of happiness education and the gratitude journaling, there was useful clinical data obtained. The data showed a moderate positive correlation between higher levels of happiness and secondary traumatic stress scores. It is theorized that the higher secondary traumatic stress scores are related to the increased empathy levels of the providers. Further research with this provider population may provide clues to causation, early diagnosis, and treatment modalities for burnout, compassion fatigue and secondary traumatic stress.

## THE SCIENCE OF HAPPINESS

### **The Science of Happiness and Its Effect on Professional Quality of Life in Mental Health**

#### **Providers**

#### **CHAPTER ONE**

##### **Background and Significance of Proposed Project/Intervention**

Numerous research studies have been performed in the last twenty years on the science of happiness and how this concept relates to overall quality of life (Gurdogan, 2019; Burkhart, 2019; Scorsolini-Comin, 2010). The review of professional articles, books, and videos demonstrates that definitions of happiness can be related to personal values (Watanabe, 2020) and may be subjective (Ackerman, 2020). In some articles the concept of life satisfaction was equated with happiness (Veenhoven, 2001). Happiness is often used interchangeably in research articles with the subjective term “well-being” and is defined as experiences that offer positive feelings. Lyubomirsky (2007) defined happiness as “the experience of joy, contentment or positive well-being combined with a sense that one’s life is good, meaningful and worthwhile” (p. 32). According to Viswanath and Kubzansky, (2019) there are three sub-categories of well-being or happiness. The first category is known as hedonic well-being which is what most people think of as happiness; the second type is eudemonic well-being which relates to a sense of purpose and meaning; and the third is evaluative well-being which looks at a person’s overall satisfaction with their quality of life. In some scientific literature, happiness is referred to as *hedonia* which is the presence of positive emotions and the absence of negative emotions (Ryan & Deci, 2001).

The science of happiness can be defined as “what makes happy people happy.” Mihaly Csikszentmihalyi is honored as being one of the founders of positive psychology, which was labeled as the psychology of uncovering variables and principles that help people to

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flourish (Seligman & Csikszentmihalyi, 2014). The science of happiness is part of the field of positive psychology, which was initially introduced by Abraham Maslow in the 1950s, with the introduction of the term “positive psychology” in 1954. Maslow advocated for mental health professionals to investigate human potential as well as psychological difficulties (Theodore, 2020). Positive psychology according to Christopher Peterson, is the scientific approach to studying human thoughts, feelings, and behavior, with a focus on strengths instead of weaknesses, building the good in life instead of repairing the bad, and taking the lives of average people up to “great” instead of focusing solely on moving those who are struggling up to normal (Peterson, 2006). Many techniques are used in the practice of positive psychology, and the field is based on the scientific evidence of evaluating theories, although it is still considered by some to be a soft science. Peterson was very clear that positive psychology was not to be confused with positive affirmation, self-help, positive thinking, or religion (Ackerman, 2020).

In 2002, Martin Seligman published his work entitled *Authentic Happiness* which studied positive emotions but, more importantly his research showed that these positive emotions and strengths enable individuals and communities to thrive. Seligman (2002), one of the pioneers of positive psychology was known for his theories of learned helplessness and learned optimism. Seligman was influenced by his professor, Aaron Beck, who developed the field of cognitive therapy and identified its use in treating depression. Seligman utilized the scientific method to discover why happy people are truly happy. Seligman’s questionnaires revealed that happy and satisfied people exploited their own signature strengths such as persistence, temperance, and humility (Seligman, 2002). Seligman’s research showed that happiness

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has three dimensions, and most importantly it can be cultivated and is not just an inherited personality trait. The three divisions of happiness according to Seligman are the Pleasant life, the Good Life, and the Meaningful life. In the pleasant life, a person will learn to savor and appreciate the basic things in life, such as companionship, the natural environment, and bodily measures. This division is considered basic happiness, and some people may choose to stay in this stage. Basic happiness can be built upon by discovering the individual's own unique virtues and strengths, which is considered the Good Life. In Meaningful life, people build upon the basics above and learn to use their unique strength in the service of others. According to Seligman, the way that a person develops self-esteem is being valuable to fellow human beings. Seligman's theory reconciles two somewhat opposing definitions of happiness - the individualist approach that looks out for the self-versus the altruistic approach that looks for the common good of all involved (Seligman, 2002).

Von Hippel (2019) presented how happiness is a tool that evolution uses to incentivize one to do what is in the best interest for the individual, as well as functioning as a great motivator. Von-Hippel (2019) points out that evolution does not really care about the person's happiness, but that they are reproductively successful. He further proposes that happiness is just a tool used to do what is in the genes' best interest, and if humans could have lasting happiness, then evolution would lose ways to motivate change. Happiness plays a role in the connection between mind and body.

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Studies have shown that older persons tend to remember more positive emotions whereas younger people tend to remember both positive and negative emotions and situations. According to Von Hippel (2019), the immune system evolved to run at peak capacity when people are happy, but slows down when they are not; thus, unhappiness could lead to death due to its immune suppressing effects. He further postulates that the reason elderly people focus more on the positive things in life is not because they fear that their days are limited, but instead that the body realizes that it helps to raise its immune functioning. Recent research has shown that having positive emotions assists in raising CD4 counts, which function to fight off infections and enhances the immune system. This research reported by Von Hippel (2019), is consistent with other studies that reveal the role happiness plays in people remaining healthy and leads to longevity. In a study reported in Health.com (2015), people that were moderately or very happy had a 35 % less chance of dying in a 5-year period compared to their less happy peers (Macmillan, 2018). In the end, Von Hippel agrees that there is no one purpose of happiness, but it motivates humans to do things that help them reproduce and remain healthy and survive (Von Hippel, 2019).

Barbara Frederickson's extensive research led to the broaden and build theory of positive emotions. This theory proposes that positive emotions signal well-being and produce optimal functioning over the long term. Frederickson's studies showed the importance of the proportion of positive to negative emotions and their effects on

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subjective well-being. This theory states that positive emotions broaden the person's thought action repertoire thus increasing the thoughts and actions that come to mind, whereas negative emotions tend to produce a narrower attention scope than even a neutral state. Frederickson's broaden and build theory suggests that positive emotions help to broaden people's attention and thinking, help to reduce negative emotional arousal, encourage the acquisition of personal resources, and triggers upward spirals of well-being in the future (Csikszentmihalyi, M. & Csikszentmihalyi, I., 2006). One of the most important findings from her research is that positive emotions are beneficial in effective coping which leads to psychological resiliency (Frederickson, 2004).

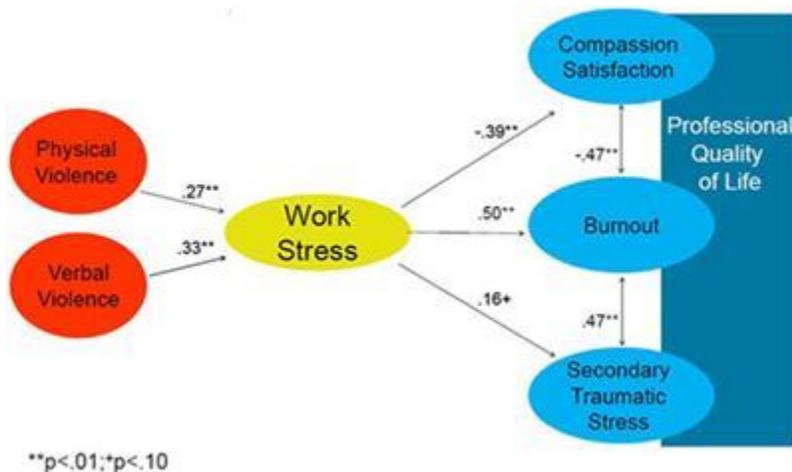
### **OBJECTIVES:**

This project evaluated how the science of happiness (positive psychology) affects the professional quality of life in mental healthcare providers. Mental healthcare providers for this project included the professions of psychiatrist, advanced practice nurses, physician assistant, registered nurse, social work, and psychologist. Professional quality of life is defined as the quality one feels in relation to their work in a helping profession. Research has shown that both positive and negative aspects of helping people affects the professional quality of life (ProQOL.org, 2020). It is important to look at the role motivation plays in people's lives and the relationship between needs, values and the environments that satisfy them. Individual motivation takes many forms according to personality traits, temperament, and previous history (Csikszentmihalyi, M. & Csikszentmihalyi, I., 2006). In studies of nurse's professional quality of life, personal factors were influential but factors such as the perception of professionalism, working conditions, perception and ability of caregiving, workplace violence, religious beliefs,

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nursing experience, nursing position, and hours worked were all important components (Yilmaz & Ustun, 2018).

Compassion satisfaction and compassion fatigue are two equally important parts of professional quality of life and are part of the precarious balancing act attempted by many of the helping professions. Compassion satisfaction is felt to relate to the positive aspects of the helping professions, whereas compassion fatigue is felt to relate to the negative aspects. Compassion fatigue is broken down into two sub-parts: the first sub-part consists of things such as exhaustion, easy frustration, unusual anger, and experiencing depression- symptoms that are typical in *burnout*. The other sub-part is secondary traumatic stress which is a negative feeling that is caused by fear and exposure to work-related trauma. In the mental health field, providers may be exposed to primary trauma which may be physical or psychological. The secondary exposure to patient' trauma can contribute to changes in the way providers view themselves or the world around them, which can lead to vicarious traumatization (Pro QOL.org, 2020



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**Figure 1 Work Stress and Professional Quality of Life**

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Looking at the professional literature over the last 10 years reveals that the experience of burnout in health professionals is affecting not only the United States but most industrialized nations and health systems (Tsai et al, 2019; Schadenhofer, et al., 2018; Lee et al., 2016). It is important to define *burnout* as this is used to express many different emotions and actions. Macoveanu (2016), defines *burnout syndrome* as emotional, physical, and mental exhaustion which is experienced by the healthcare professional in the care of patients in a stressful environment. According to Fong et. al., (2016) burnout can also be identified as a clinical syndrome which encompasses listlessness, hopelessness, worthlessness, and there can be a connection between depression and burnout. Burnout has serious consequences for the individual providers as well as the healthcare organizations. Burnout is associated with sleep deprivation, medical errors, low quality of care, as well as low patient satisfaction ratings. In intensive care units which had a large percentage of staff with high levels of emotional exhaustion, there was higher patient mortality ratios. (Montgomery et al., 2019). According to Dyrbye et al., (2017), more than one half of all US physicians are experiencing symptoms of burnout. This is especially true for doctors on the frontlines such as emergency medicine, family medicine, internal medicine, and neurology. Burnout is twice as high for physicians compared with other professionals in other fields of work in the US. In a study of 10,000 registered nurses in 1999, 43 percent had a high degree of emotional exhaustion. Data also suggests a similar prevalence of burnout in physician assistants and nurse practitioners (Dyrbye et al., 2017).

This scholarly project specifically targeted mental health providers and their professional quality of life. According to Jorgenson et al. (2019), burnout in mental health professionals can be multifactorial due to levels of job satisfaction, lack of support by management, increased staff to patient ratios, high risk for violence from patients, as well as the

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increased acuity level of patients. Dattilio (2015), noted that “next to air traffic controllers, police officers, firefighters and professional bomb squad units, mental health professionals have one of the most stressful professions in the world” (p 393). The mental health professionals belonging to the American Psychological Association in 2013 were polled and reported experiencing moderate to severe burnout with the most common symptoms being emotional exhaustion, depersonalization, and a decreased self-evaluation. Among mental health professionals, the top three most stressful careers identified were mental health social workers, art therapists and psychiatric nurse practitioners. The studies have shown that healthcare professionals are more likely to experience burnout if they have less experience, lack confidence in their overall skills, do not have a good support network, are perfectionists, use self-deprecating humor and do not set proper boundaries (Fradera, 2018; Morse et al., 2012). According to a study of the American Psychological Association in 2013, the specific stressors that affected their work were issues with burnout, countertransference, vicarious traumatization, personal losses, problems with collecting fees for service and co-worker conflicts. For mental health professionals dealing with continued exposure to patient traumas, there can be an emotional toll. All mental health providers are at risk for negative effects, but it is alarming that male psychologists have a three and one-half -times greater risk of suicide than the public (Dattilio, 2015).

**Project Objectives:** This project looked at the science of happiness and its role in the professional quality of life of mental health providers. The **PICOT** for this project was:

**Population of Interest** Advanced practice nurses, psychiatrists, physician assistants, registered nurses, social work, and psychologists practicing in mental health in a medical system in Tennessee and Kentucky.

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**Intervention** Education on the science of happiness (per video), followed by the intervention of keeping a gratitude journal three times per week for three weeks duration.,

**Comparison of Interest** - Comparison of levels of subjective happiness and professional quality of life questionnaires prior to and at week one and week three of gratitude journaling. The participants were asked one question with the pretest - What are the top three things that bring you joy, or happiness in life? With the post- test the participants were asked two questions; the first question: What are three benefits you noticed from keeping a gratitude journal? The second question; What are three recommendations that you would make to improve your professional quality of life?

**Outcome of Interest** Will the use of the science of happiness education and the gratitude intervention (gratitude journaling) impact overall scores on the happiness and professional quality of life evaluations? Is there a positive correlation between subjective levels of happiness and professional quality of life scores in mental health providers?

**Time** The project took place in the fall of 2020 through spring of 2021.

This scholarly project was offered to mental health providers working in both the in-patient units as well as the out-patient clinics. The only inclusion criterion was that the provider be actively practicing (full or part time) in this medical system at the time the survey was taken. The actual number of providers in the system that met this criterion was around 430, and the goal of this project was to obtain data from approximately 79 participants, which would provide an adequate sample size.

This research evaluated initial levels of happiness in the participants by utilizing a subjective happiness scale which was developed by Lyubomirsky and Lepper (1999). This instrument was chosen for its construct validity as well as its usability for this project. This four-

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question instrument has been extensively tested in the United States and Russia, and the data has been collected to show its use and function in different languages and cultures. The second instrument is the Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (Pro QOL) (Stamm, 2012). This 30-question instrument is useful in assessing mental health professionals as it evaluates the sub-categories of compassion satisfaction and compassion fatigue. The participants took the two surveys mentioned above as a pre- and post-test. The participants were also given education on the science of happiness and how this cutting-edge research can be applied to everyday life. The educational information was presented in a YouTube video which the participants watched after completing the pre-tests. The participants were given information concerning the gratitude intervention and were requested to keep a 21-day gratitude journal and to list three things 3x per week for which they feel gratitude. The participants returned to the website at one week and three weeks of gratitude journaling and took the post-tests of the above-mentioned instruments and answered two additional questions. There was no personal contact between the researchers and the participants, and the gratitude journals were not seen by anyone other than the participants. The data was collected using a SurveyMonkey survey which would also allow exporting of the data into the SPSS program for analysis. A statistician was consulted for complete analysis and verification of the data. In preparation for this project, books, journal articles, videos, psychology websites, as well as a course on the science of happiness that is taught by the University of California at Berkeley's Good Science Center were reviewed.

This study was important due to the issue of stress in mental health providers and their risk for secondary traumatization, compassion fatigue and burnout. A pre-COVID study of nurses by the American Nurses Association in 2019 found that 82% of nurses surveyed

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expressed that they felt at significant risk for illness due to workplace stress (Kates, 2020). Since the severe acute respiratory syndrome corona virus 2 (SARS-CoV2) was first identified in Wuhan China late December 2019, there has been considerable stress and uncertainty in the medical community concerning its cause, effect, and treatment. This new virus has caused unprecedented changes to personal, professional, and financial functioning and due to the high morbidity and mortality has caused excessive strain on healthcare resources both individual and corporately. As of April 2020, the COVID 19 virus had spread to 198 countries, infecting 2.4 million people, and had caused 150,000 deaths and was classified as a global pandemic. Looking at the figures for March 23, 2021 there have been 124,683,027 COVID cases worldwide, affecting 219 countries with a death toll of 2, 740,557 people. Mental health issues have increased dramatically due to the above concerns, and this has affected medical and mental health professionals (Shaukat et al., 2020). The psychological impact on healthcare workers included anxiety, stress disorder, depression, and insomnia according to the above article. It is noteworthy that the reported anxiety was higher in females than males and higher in nurses than physicians. Due to the required quarantine of people in this country and worldwide, there has been much concern about the mental health and coping mechanisms that have been employed. There has been a surge of patients in crisis attempting to seek care during this pandemic, particularly ones from underserved communities due to concerns over finances, employment, as well as health issues. Mental health professionals will need to build resilience to deal with their own personal issues as well as the tsunami of patients that have presented for treatment due to this crisis (Brier, 2020).

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### **Theoretical Model**

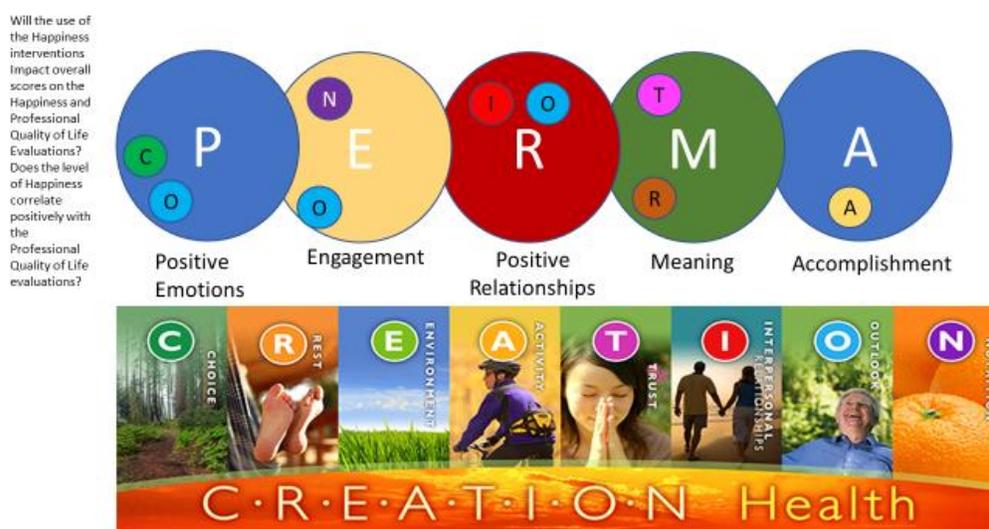
This research project utilized the PERMA theoretical model of well-being, this model includes five pillars that was developed by Seligman. These five pillars are *1. Positive Emotion-* these positive emotions are necessary for psychological well-being as well as overall health. *2. Engagement-* when people are engaged in activities that play to their strengths they are “in flow” and they experience less anxiety and have peak performance. *3. Relationships-* having positive relationships which include understanding and respect lead to a source of support. *4. Meaning-* when people find purpose for their life, this contributes to finding meaning in everyday experiences. *5. Accomplishment-* when people accomplish tasks, it gives them a sense of pride and ability to move forward. According to the PERMA model, the use of these five pillars gives individuals a sense of well-being and helps to build resiliency in dealing with life’s obstacles (Pascha, 2020).

According to Seligman’s research and his PERMA model, the happiness quotient that a person has is influenced by genetics and is normatively distributed in the population. It is also possible to influence the happiness percentage by performing certain behaviors. Seligman (2002) suggests one such exercise is that the person write down three things nightly that went well that day and why it went well. Research has shown that just doing this one behavior is somewhat addictive, people enjoy this behavior, and in six months it lowered depression, anxiety, and improved overall satisfaction with life (Seligman, 2002). Positive psychology exercises tend to be self-reinforcing which means they are more likely to continue. With positive psychology it is important to identify and use signature strengths (moral strengths) to build well-being. Positive psychology also encourages meaning and purpose and individuals being part of something bigger than just themselves. The positive psychology research has also shown that

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self- discipline and grit (how persistent you are) are more important than IQ in how successful a person will be (Seligman, 2011).

Mona Yeary



Creation Health 2020 <https://creationhealth.com/>

### Figure 2- Theoretical Model

This research also incorporated the CREATION Health theoretical model which encompasses the whole person, (mental, physical, social, and spiritual) by utilizing the eight Biblical evidence-based health principles. This model was created by Advent Health and proposes that by consistently practicing the eight principles of health presented in the Bible, overall health can be improved. CREATION Health's eight guiding principles are: Choice, Rest, Environment, Activity, Trust, Interpersonal Relationships, Outlook, and Nutrition. The eight Principles that are put forth in the Creation Health Model are considered the prescription that can restore health, happiness, balance and joy" (Cummings, 2014, p. 13). This scholarly project investigated the value of gratitude and happiness, and whether it can be correlated to

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overall quality of life. The plan was to evaluate each person holistically as well as explore the eight Health principles set forth in CREATION Health. The 8 Principles are:

1. *Choice*- God gave mankind choices from the beginning, and this is a precious gift.

Scientific observations and studies reveal that managing your health is a result of the choices that are made daily, and that choosing realistic small goals are the way to make changes. This research project assessed the participant's current subjective happiness and overall quality of professional life to include choices that may improve the situation. It is important that participants be allowed to prioritize the steps to put into action plans to achieve their personal goals (Miller & Rollnick, 2013).

2. *Rest*-Nature shows the importance of rest as God modeled for humans when he created the world in 6 days and then rested on the 7<sup>th</sup>. Today people are getting less rest than ever, and researchers feel this is secondary to the person's stress experience. Science has shown that rest and recovery are the ways to balance out the stress that is found in everyday life. This project looked at the risk of burnout and compassion fatigue in mental health providers and the importance of rest and recovery. The Bible states that true rest comes in Jesus Christ, and that He can supply the rest that all people need. Individuals may access that rest through prayer, reading the Bible, and giving worries to God, who hears and cares about all needs (Cummings, 2014).

3. *Environment*- There is a special healing relationship between the environment and nature.

It is important to look at the environment at home as well as work and employ the different senses in a positive way to impact overall calmness and joy. Mental health providers should make their offices inviting for the patients, and themselves, as this can affect overall well-being (Cummings, 2014).

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4. *Activity*- Activity may be the fountain of youth, as well as the best medicine for fighting disease. Activity helps with depression as the body releases neurotransmitters such as dopamine and serotonin. Activity improves sleep and can relieve pain. It is important for mental health providers to be active, as dealing with traumas on a regular basis can lead to increased stress, cortisol levels, and ultimately weight gain (Scott, 2021).

5. *Trust*- Trust in God gives stability even when events in life are precarious. There are recent studies that show that people who pray and have trust in a higher power are happier, have greater well-being and fewer physical and mental health issues. For many years it was taught that religion and medicine could not co-exist, but Dr. Larry Dossey has published numerous studies on the positive effects of prayer and healing (Cummings,2014).

6. *Interpersonal Relationships*- God provided examples of relationships and how people should treat others. God looks upon his children with grace, love, truth, and time to nourish relationships. God did not mean for people to be alone. He put individuals in families, communities, churches and even work relationships. Lives are enriched by relationships and it is important for mental health providers to have people in their lives that encourage them on a regular basis. The Bible shows by examples that helping others can also be beneficial to mood and health. Proverbs 11:25 states “Whomever brings blessing will be enriched, and one who waters will himself be watered”. Isaiah 58:10 “If you pour yourself out for the hungry, and satisfy the desire of the afflicted, then shall your light rise in the darkness and your gloom be as the noonday”.

7. *Outlook*- God designed each person as a unique creation. Mankind was designed to have a positive outlook in life, (not that reality or hardships are ignored), but to continually look for the good in people and situations. Science has shown that people with a positive outlook on life

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will live longer and better than people who dwell on the negative. People can learn to forgive others and not dwell in the past. It is most important for mental health providers to have an attitude of hope and acceptance which is termed positive regard. This positive regard of every person encourages a therapeutic relationship (Noel, 2010).

8. *Nutrition*-Science has shown that people are affected by what they eat, and that eating a varied plant-based diet can enrich health and prevent many diseases. The Bible encourages eating fruits, vegetables, seeds and nuts and science is recognizing the positive health benefits of this diet. God advised that these earthly bodies are the temple of the Holy Ghost and should be treated respectfully to honor Him. Good health is most important, it allows people to work and care for family and friends. For mental health providers, it is important that they partake of wholesome, healthy, nutrient rich foods, which will impart energy to allow performance of jobs, and enjoyment of personal lives (Cummings, 2014).

The principles revealed in scripture are to aide all people to live their best lives possible. God intended for mankind to live with both health and healing (Cummings, 2014). CREATION health teaches that making more healthful decisions on everyday matters can have a lasting impact on health. Many of the chronic conditions that are prevalent today such as obesity, cardiac disease, cancers, and many others are due to lifestyle choices and with healthy lifestyle changes some diseases can be prevented or even reversed.

It is interesting to note that both theoretical frameworks utilized for this project look at a holistic approach to health and encourage individuals to take an active role in prevention of disease, as well as determinants of what is important to their quality of life. There is considerable amount of overlap in the concepts as shown in the diagram above (Figure 2.0) even though the PERMA model is an evidence based positive psychology model and the CREATION model is

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biblical based. It is noteworthy that in the recent past science expressed that there was no place for religion in the field of psychology, and at times even counted faith or religious practice as a form of pathology. Recent research has shown that to treat the patient holistically spiritual and religious beliefs should be included in the treatment if they are a source of comfort and/or are culturally relevant to the person. (Golmakani, et al., 2018).

## CHAPTER TWO

### Review of Literature

Current literature was reviewed regarding the science of happiness and how this concept relates to the professional quality of life of mental health providers. Due to the proliferation of research studies concerning the science of happiness, and the interest in professional quality of life, most of the information utilized in this study was limited to the published years of 2010 through 2021. Literature searches were conducted utilizing databases to include CINAHL Complete, MEDLINE complete, Psych ARTICLES, Pub med, and Google Scholar. The keywords used for these searches included *the science of happiness, happiness, well-being, life satisfaction, professional quality of life, burn-out, and mental health professionals*. The top 100 articles identified as appropriate for this research were reviewed.

The literature was reviewed concerning happiness and what was written in the days of Aristotle, Confucius, Socrates, and Buddha around 2500 years ago. The writings of Aristotle expressed belief that the pursuit of happiness is a person's essential purpose in life. Aristotle felt that happiness involved the cultivation of virtues and was necessary to be obtained individually. According to Chang (2006), Aristotle helped to introduce the science of happiness and felt that happiness should be the goal and reason for existence. An important tenet of Aristotle's belief was that happiness required intellectual contemplation, by humans who possess higher level functioning (The Pursuit of Happiness, 2018). Confucius' specific stance showed his concern for the good of humankind and expressed that the way to accomplish this was by performing acts that develop good character (Chang, 2006). Buddha felt that happiness came from understanding the root causes of suffering. One of the modalities to help understand this suffering is meditation, which assists the individual to live in the here and now and experience peace (The Pursuit of

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Happiness, 2018). Socrates lived in Greece and championed that happiness was obtainable and teachable through human effort. All humans desired happiness according to Socrates, and that virtue was necessary to have true happiness. Socrates advised the cultivation of the four basic virtues: courage, wisdom, justice, and self-control, and felt those who followed the proposed advice would have lived an excellent life (Beebe, 2003).

The Christian philosopher C. S. Lewis expressed his opinion on which religion gave followers the most happiness, his reply was that “while it lasts the religion of worshipping oneself is the best” (para 11). He advised that human nature causes man to want to be the center, even making us the GOD, that is what Satan taught humanity. Lewis pointed out that Jesus gave the example of true happiness in the Beatitudes; it is about denial of self (Muehlenberg, 2014). Tim Keller in his classic sermon “The Search for Happiness” advised that the less you are concerned about your happiness and the more you are concerned with God, the happier you will be, (which is opposite of today’s accepted standards). It is also important to note that true happiness is never found in external circumstances, it is a by-product of seeking God’s kingdom and his righteousness (Whelchel, 2016).

Writings from Viktor Frankl an Austrian neurologist and psychiatrist, who survived the cruelties of the holocaust developed the psychological approach known as logotherapy. Logotherapy is a meaning centered psychotherapy, which focuses on the meaning of human existence, and is choice and future oriented. He wrote in his book *Man’s Search for Meaning* that nothing could remove the horrible things experienced during the Holocaust, but it was the “will to meaning,” the ability to look to the future rather than the past, that gave him the courage to continue. When discussing happiness, Frankl said that happiness cannot be pursued, it must ensue (LaCasse, 2017).

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Interestingly, the focus on happiness in psychology is a new concept. Since the mid 1800's psychology focused on pathology or things that were wrong with human life and perspective. With the development of humanistic and positive psychology, research attempted to change the focus to a more positive aspect of human life and what influences well-being (Nelson-Coffey, 2019). Lyubomirsky (2007), showed that people's happiness is not determined solely by genetics as once thought, but more often from experiences and daily life. Another study by Rohrer et al., (2018) showed that pursuing happiness by social means like spending quality time with family and friends is also effective. There were also studies which showed a positive linear relationship between religious involvement and happiness (Krause et al., 2017; Golmakani, et al., 2018).

The topic of happiness in the workplace has been of interest in the last 10 years. There is data to support that employees that are happy have higher productivity, less absenteeism, and are more likely to be physically and mentally healthy (Broom, 2019). Research has shown the positive benefits of happiness in the workplace and many companies have adopted the concepts due to the positive impact on an individual and corporate level (Nelson-Coffey, 2019). The Veteran's Healthcare Administration which is the largest employer of medical providers in the United States is transitioning from focusing on only sick care to promoting well care. The concept of whole health focuses on the interrelatedness of the individual, self-care, professional care, and the community with the goal to empower the veterans and employees to have an improved quality of life (Huybrecht, 2018).

The use of gratitude has been identified as being instrumental in the science of happiness and for improvement of quality of life. Gratitude can be defined as an emotional response to a gift or being the beneficiary of an altruistic act (Csikszentmihalyi, M & Csikszentmihalyi, I.,

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2006). The world's leading expert on gratitude is Dr. Robert Emmons from the University of California Davis, who has researched this topic for many years. Emmons (2003) reviewed the effects of writing gratitude journals on 200 undergraduate students. The students were randomly divided into three groups; one group would keep a gratitude journal expressing positive things, one group would focus on hassles or negative things in their lives, and the third would write about neutral things/situations. This study found that those in the gratitude group felt more positive, more optimistic, had improved sleep and greater satisfaction with their life. (Greenberg, 2015). Other research looked at the science concerning stress levels vs resilience and how it affects the brain causing actual neurochemical changes. (Osorio, et al., 2017). The studies examine whether those changes can be brought on by certain behaviors in people's everyday lives. According to Pinto et al., (2017) these studies have looked at quality of life, comfort, and well-being all of which have shared attributes, but which are also influenced by individual's own perception, values, and beliefs.

There were several meta-analyses identified in the literature that correlate with happiness or well-being in healthcare professionals and many of these were done in other countries and cultures (Deng, J., et al., 2019). Some of the main themes for these studies were well-being and its correlation with health status (Sallon, et al., 2017), spirituality (Hrabe, 2018), and happiness. There was meta-analysis on the use of gratitude interventions and their role with happiness (Davis et al., 2016). Several meta-analyses have looked at job satisfaction, organizational performance, and overall well-being. (Domagala, et al., 2018).

This scholarly project evaluated whether the variable of gratitude had an impact on the subjective happiness and the professional quality of life of mental health providers. Burnout is a stress related condition that is three dimensional, and it leads to emotional exhaustion,

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depersonalization and reduced personal accomplishment. (Morse et al., 2012). There are still many questions to be answered concerning the prevention of burnout, the identification as well as appropriate early treatment, and the literature is somewhat lacking in those areas specifically regarding mental health. In a study by Volpe et al., (2014) it was shown that professionals even early in their careers can develop depression and burnout. This study recommends that the issues of well-being and burnout need to be addressed at a student level, while in training programs to assist with prevention or at the least early detection and intervention. Recent studies have shown that up to 85 percent of mental health professionals may be experiencing significant burnout or compassion fatigue (Dzubak, 2020). It is very concerning that the incidence of suicide is higher in some mental health professionals than the public. According to Datillo, (2015) mental health professionals do not always seek treatment for some of the same reasons as their patients. Some limiting factors in seeking care are social stigma, treatment concerns, risks of self- disclosure, time, finances, fear for their jobs, substance abuse, or even ethical concerns. Some possible suggestions for treatment include utilizing third generation behavioral therapies such as meditation, mindfulness, and gratitude as coping mechanisms (Morse et.al., 2012).

**CHAPTER THREE****Methodology****Research Design**

This proposed Doctor of Nursing scholarly project looked at the evidence-based science of happiness and what role it may play in the professional quality of life of mental health providers in a medical system in the state of Tennessee and Kentucky. This scholarly project utilized a quasi-research /practice-based approach which has as its purpose to investigate or answer a research question that is important and relevant to current clinical practice.

. This was a quantitative descriptive research project which utilized two standardized instruments which were given as a pre and post-test, with the gratitude intervention carried out for three weeks in the interim. The participants were also asked three qualitative questions: Question one which was asked prior to the pretest- *name three things that bring you joy or happiness?* After the pretest and questions the participants were shown a video by Sonja Lyubomirsky that explained the science of happiness, the participants were also instructed in writing concerning the journaling intervention. There were two qualitative questions after the post tests. Question one was: *What were three benefits noted from keeping the gratitude journal,* and Question two was: *What three things might you recommend to improve your professional quality of life?* The requested information was entered into SurveyMonkey surveys. The participants accessed this program anonymously, and the researcher did not have any personal identifying information (PII) on the individuals, they gave consent upon accessing the website and were not allowed to continue without consent being given. Once consented the participants took the pre -tests, watched the video and answered the appropriate qualitative questions and demographic information. The post- test survey was completed at weeks one and three of the

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gratitude journaling and included the two qualitative questions. The data obtained was exported to the SPSS program and was analyzed with the assistance of a statistician. The goal of this project was the dissemination of information with translation into clinical practice to increase the professional quality of life for mental health providers.

### **Setting**

The setting for this project was a medical system in Tennessee and Kentucky. The individual participants were allowed access to the research through their intranet system. The emails concerning this project were sent to all the Mental Health Providers with a link to the surveys.

### **Participants**

This research project was offered to mental health providers to include advanced practice nurses, psychiatrists, physician assistants, registered nurses, social work, and psychologists that practice in the medical system in Tennessee and Kentucky. These participants were identified by the medical system and the email was sent to all eligible participants with basic study information and a link to the study surveys. The inclusion criteria were mental health providers employed full or part time in the health system. The participants were willing to complete the required pre and post tests and the gratitude intervention, participation was voluntary. It was assumed that the participants had the necessary basic computer knowledge and skills to take part in this project. The total number of available participants were approximately 430, the goal was to accrue 79 subjects.

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### **Intervention**

Prior to the research project's implementation, interdisciplinary involvement was necessary for the planning stage. The project required Institutional Review Board (IRB) approval at the medical system as well as through the university before any participant could be contacted or data obtained. Due to this study not collecting PHI (personal health information) and posing only minimal risk of harm to human subjects, it was reviewed and classified as a performance improvement project at the medical system the last week of November 2020. The project did not require full IRB approval by the medical system but was under the auspices of the Quality Improvement Workgroup and the results will be reported for their review. The scholarly project was approved by Southern Adventist University IRB in late November 2020, it required a full review due to the use of human subjects. The survey instruments were developed with the assistance of the required medical system experienced co-investigator. SurveyMonkey which was acceptable to the medical facility was utilized for the pre and post-test surveys. The initial (pre-test) survey was sent out on December 1, 2020 and the follow up surveys were sent out on December 8, 2020 and December 22, 2020. This study required the consultation of a statistician to evaluate the data collection, and clarification of the most appropriate SPSS test for analysis of the data. The study data was exported into the IBM (SPSS) statistical program which is used for data analysis in the social sciences.

The possible candidates for the research project were identified by the medical system in Tennessee and Kentucky. The system provided an email for all the mental health providers and appointed a person to send the email to providers that were not on the master list. (Such as contract clinics). The providers entered this website anonymously and the date of birth and sex were obtained and used as matching criteria for the pre and post-tests. The participants were given

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consent information to include that the project involves research, the purpose of the research, the risks versus the benefits, procedures to be followed, participation was voluntary, and the person had the right to remove themselves from the study at any time. This research did not require the participant to sign a consent form as it would prohibit the study participant from remaining anonymous, they agreed to consent in the initial survey. The study required the participants to take a pre-test (the subjective happiness scale by Lyubomirsky & Lepper, 1999) and the Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 (ProQOL) Stamm, (2012) and answer one question, then they watched a video concerning the science of happiness and were requested to keep a gratitude journal to include documenting three things they are grateful for three times per week. After completion of one week and three weeks of gratitude journaling, the participants returned to the website and accessed the post test. The participants completed two additional qualitative questions and repeated the above measures at the post testing. The gratitude journals were not evaluated by the researchers, as they were only for the participant's use. After IRB approval, the data collection began in early December 2020 with analysis of the data occurring in early 2021. The information obtained was reported in written form as well as an oral presentation to complete the requirements of the scholarly project by May 2021. The information obtained was reported in cooperation with the sub-investigator to the medical center quality improvement committee. The goal of this project was that the information obtained be compiled and presented in a way that would limit the identification of individuals but would allow for common trends or themes to be presented to the quality improvement committee at the medical system and recommendations translated into clinical practice.

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### Measures

This research employed two instruments one evaluated subjective happiness and the second evaluated professional quality of life. The Subjective Happiness Scale developed by Lyubomirsky & Lepper, (1999), is a 4 item, Likert scale. Two of the items ask respondents to characterize themselves using both absolutes and ratings relative to their peers. The other two items on the scale offer descriptions of happy and unhappy individuals, and then ask the respondents to characterize themselves. To score the scale, reverse code the 4th item (i.e., turn a 7 into a 1, a 6 into a 2, a 5 into a 3, a 3 into a 5, a 2 into a 6, and a 1 into a 7), and compute the mean of the 4 items. The maximum score is 7 but the average is 4.5-5.5. The instrument has a high internal consistency and reliability and is offered free of charge if credit is given to the owners. The Subjective Happiness Scale (SHS) has been validated in 14 studies with a total of 2,732 participants. It has been used in the United States as well as in Moscow Russia. This study has also been used on ages from high school to the elderly (Lyubomirsky & Lepper, (1999)).

The other scale that will be utilized is the ProQOL-5 or The Professional Quality of Life Scale developed by Beth Stamm. This instrument was developed in 2005 and is a 30 item Likert scale available for free use with permission, which was obtained in writing. This instrument evaluates three categories: *Compassion satisfaction* and *Compassion fatigue* which is subdivided into *burnout* and *secondary traumatic stress* categories. The score range is identified as 22 or less is low, 23-41 is moderate and 42 or more is high for each of the three sub areas. *Compassion satisfaction* is about the pleasure a person derives from being able to do their job well. There are 10 questions that pertain to compassion satisfaction, and the sum of these scores are used to determine the level of satisfaction with a person's job. (Alpha scale reliability is 0.88). *Burnout* is part of compassion fatigue. It is felt as hopelessness and difficulty with doing your job

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effectively. These negative feelings usually have a gradual onset, and higher scores mean you are at a higher risk for burnout. Certain items on this scale are reversed scored. (Alpha scale reliability 0.75). *Secondary Traumatic Stress* is the second part of compassion fatigue. It is about work exposure to secondary traumatic or stressful events this includes exposure to other's trauma. This can also include primary trauma such as being exposed to dangerous events like physical or emotional attacks or working in a dangerous area. This type of trauma usually happens at a more rapid pace. For this subpart, you add up the scores to the specific questions. If a person has a higher score, they may wish to examine how they feel about their work/ and or their work environment. (Alpha scale reliability 0.81). This instrument's alpha levels are considered adequate. This test has been used extensively and has proven very effective in revealing areas of compassion satisfaction, burnout, and secondary trauma (Stamm, 2009-2012).

. The instrument has undergone several revisions, the current one which will be used for this study is the ProQOL5. (ProQOL, 2020).

### **Analysis**

This was a quantitative descriptive research project which utilized a Wilcoxon Rank test (since the distribution was not normative) to evaluate the difference between the pre and post tests and to investigate the use of the independent variable which was the gratitude journaling for three weeks. The research also used a Pearson's Coefficient Correlation R to evaluate the possible correlation (strength and direction) between the level of subjective happiness and overall professional quality of life. This study attempted to recruit approximately 79 participants from the pool of 430 providers employed in Mental Health, to show significant power. The premise was that if the results from this study showed a positive correlation between the variables, then the use of a gratitude intervention may be a low-cost modality that could be

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employed by various mental health providers to help with the issues of compassion fatigue and prevention of burnout.

### **Ethics**

One of the most important parts of performing research are the protection of the human subjects and carrying out the research using scientific methods to obtain the desired information. For the protection of the human subjects the investigator completed the Collaborative Institutional Training Initiative - (CITI) basic courses on the protection of human subjects required by the university as well as the additional CITI courses required by the medical center IRB. The scholarly study was brought before the university IRB, for review of the planned research, how the participants were recruited for the study, the informed consent, the educational piece provided to the participants, as well as the intervention of gratitude journaling. It is also an ethical obligation to inform the participants of the possible benefits as well as disadvantages of taking part in the study. This study information advised that it may provide positive effects for the person involved, if interventions that contribute to happiness affirming lifestyle changes are made, but it could also cause some people to have mild psychological harm due to causing them to experience negative emotions. The proposed participants were advised that they have the right to take part or refuse and should they join they have the right quit the research at any time without fear of repercussions. In this scholarly project it was important that the participants were assured of anonymity since the information to be accessed concerned their emotional well-being in relation to their mental health professions.

**CHAPTER FOUR****Analysis of Results**

This scholarly project utilized a quantitative descriptive design to investigate the relationship between the independent variable of education on the science of happiness (positive psychology) and the use of gratitude journaling upon the dependent variables of overall subjective happiness and professional quality of life of mental health providers. This study also looked at the possible correlation between subjective happiness scores and professional quality of life scores. A total of 430 mental health providers employed at the medical system were sent an email on December 1, 2020 concerning the project study and were given a link to the initial pre-test survey. There were 58 responses to the pretest survey but due to missing data only 34 were complete and met inclusion criteria for this study. For the week one Post-test survey which was sent out via email on 12/8/2020, seven of the 34 people completed the survey and for the week three post- test survey sent out via email on 12/ 22/20 ten of the 34 people completed the survey. Utilizing the approval from the university and medical center IRB's and following the specifications set in place for this scholarly project, the data from the ten participants that completed both the pretest and week three- posttest surveys were analyzed for this study.

The demographic information revealed the ethnicity of the ten participants were nine Caucasians, and one person chose not to answer. The gender data identified as five males and five females, with ages ranging from 40-73 and their marital status showed nine married and one divorced. The participants religious affiliations were reported as one Catholic, five Christian, one other, and three preferred not to answer. The professionals represented in the ten participants were one Psychologist, five Social Work, one Psychiatrist, and three Advance Practice Nurses. Six of the participants reported watching the video on the science of happiness, four did not

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watch the video. (Physician Assistants and Registered Nurses were not represented in this sample). The participants years in practice ranged from 10 to more than 25 years, and their years of employment with the facility ranged from 1-19 years.

### Primary Hypothesis Testing

The Wilcoxon test which is a non-parametric equivalent of the paired-samples t- test was performed as the data was not normally distributed. This test evaluates whether two related samples are from the same distribution, and the data for the two samples must be at least ordinal. The independent variable was the education on the science of happiness and the gratitude intervention, the dependent variable was the scores on the pre and post tests for subjective happiness and professional quality of life.

Test Statistics				
	CSS Week 3 - CSS Original	BS Week 3 - BS Original	STS Week 3 - STS Original	HS Mean Week 3 - HS Mean Original
Z	-1.499 <sup>b</sup>	.000 <sup>c</sup>	-1.283 <sup>d</sup>	-1.846 <sup>d</sup>
Asymp. Sig. (2-tailed)	.134	1.000	.199	.065

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. The sum of negative ranks equals the sum of positive ranks.

d. Based on positive ranks.

**TABLE 1 Wilcoxon Signed Ranks Test**

A Wilcoxon test examined the results of the pre and post tests on subjective happiness and professional quality of life surveys, no significant differences were found in the results ( $Z = -1.846$ ,  $p > .05$ ).

An independent sample t-Test was calculated comparing the mean score of the six participants who watched the video on the science of happiness with the mean score of the four

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participants who did not watch the video to see if there was any difference in the effect on the Pro QOL5 compassion satisfaction scores. No significant difference was found ( $t(2) = .277, p > .05$ )

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
CSS Week 3	Equal variances assumed	.002	.965	.277	8	.788	.917	3.304	-6.702	8.535
	Equal variances not assumed			.265	5.619	.800	.917	3.453	-7.674	9.507

**TABLE 2: Independent Samples t Test**

A Pearson correlation coefficient was calculated for the strength of the linear relationship between the variables (scores) on the subjective happiness survey and the professional quality of life survey. A moderate positive correlation was found between an increased level of happiness and increased level of secondary traumatization which is one of the subparts of the scoring for the professional quality of life test. ( $r(10) = .648, p < .050$ ).

		Correlations	
		HS Mean Week 3	STS Week 3
		3	
HS Mean Week 3	Pearson Correlation	1	.648*
	Sig. (2-tailed)		.043
	N	10	10
STS Week 3	Pearson Correlation	.648*	1
	Sig. (2-tailed)	.043	
	N	10	10

\*. Correlation is significant at the 0.05 level (2-tailed).

**TABLE 3: Pearson Correlation Happiness and Secondary Trauma Stress**

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There was no correlation noted between the subjective happiness score and the compassion satisfaction or compassion fatigue burnout sub-scores for the professional quality of life survey.

When reviewing the scores from the subjective happiness survey for the ten participants, it was noted that on the pretest the score means ranged from 1-7 with the mean being 4.65. The three- week post- test happiness scores mean ranged from 3-5.50, with the mean being 4.55. These numbers were in line with the national mean of 4.5-5.5.

For the PRO-QOL5 survey the pre-test survey showed for the subscale of compassion satisfaction scores in the range of 34-47 with a mean of 46. For the week 3 post- test the scores ranged from 35-49 with the mean being 43 (these scores are considered high for compassion satisfaction). For the subscale of burnout, the pretest scores ranged from 13-28 with the mean being 21. The week three post - test burnout scores ranged from 16-26 with the mean score being 21. (this is considered low risk for burnout). For the secondary traumatic stress subset scale, the pretest scores ranged from 12-26, with the mean being 19. For week three the scores ranged from 11-23 with the mean being 18. (these scores were considered low risk for secondary trauma).

There were three qualitative questions that were asked of the ten participants, these specific questions were added to look for trends and possible motivations of the respondents. Question one was *what are three things that bring you joy or happiness?* The top themes were children, spouses, friends, family, nature, and dogs. There were also some answers concerning the value of work, helping others, reading, listening to music, exercising and sex. Question two was *what were three things that you noted from keeping a gratitude journal?* The main themes revealed by the respondents were using gratitude to stay in the moment, as a form of self-care, seeing events in a more positive light, improving mood, being more optimistic, appreciative for

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current life, and to balance out negative events. Question three was *what are three suggestions you might make to improve your professional quality of life?* The use of professional helpers, getting back to normal, allowing in person meetings when allowed due to COVID restrictions, more windows or at least allow time for breaks to go outside, cooperation with other disciplines, assistance with continuing education, more social contact The themes revealed options that the participants could enact for themselves such as leaving work on time to help with work life balance, learning more to help improve confidence, time management, recognizing personal limits, meditation and prayer and focus on what can be accomplished. The themes also expressed things that administration could do to help with professional quality of life such as allowing more autonomy, better caseloads, increased time to perform therapy, time to teach, more support with peers, and less paperwork and red tape.,

		Correlations			HS Mean
		CSS Original	BS Original	STS Original	Original
CSS Original	Pearson Correlation	1	-.713**	-.058	.323
	Sig. (2-tailed)		.000	.744	.063
	N	34	34	34	34
BS Original	Pearson Correlation	-.713**	1	.330	-.466**
	Sig. (2-tailed)	.000		.056	.005
	N	34	34	34	34
STS Original	Pearson Correlation	-.058	.330	1	.150
	Sig. (2-tailed)	.744	.056		.397
	N	34	34	34	34
HS Mean Original	Pearson Correlation	.323	-.466**	.150	1
	Sig. (2-tailed)	.063	.005	.397	
	N	34	34	34	34

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 4: Pearson Correlation Pre-test Survey Data ONLY**

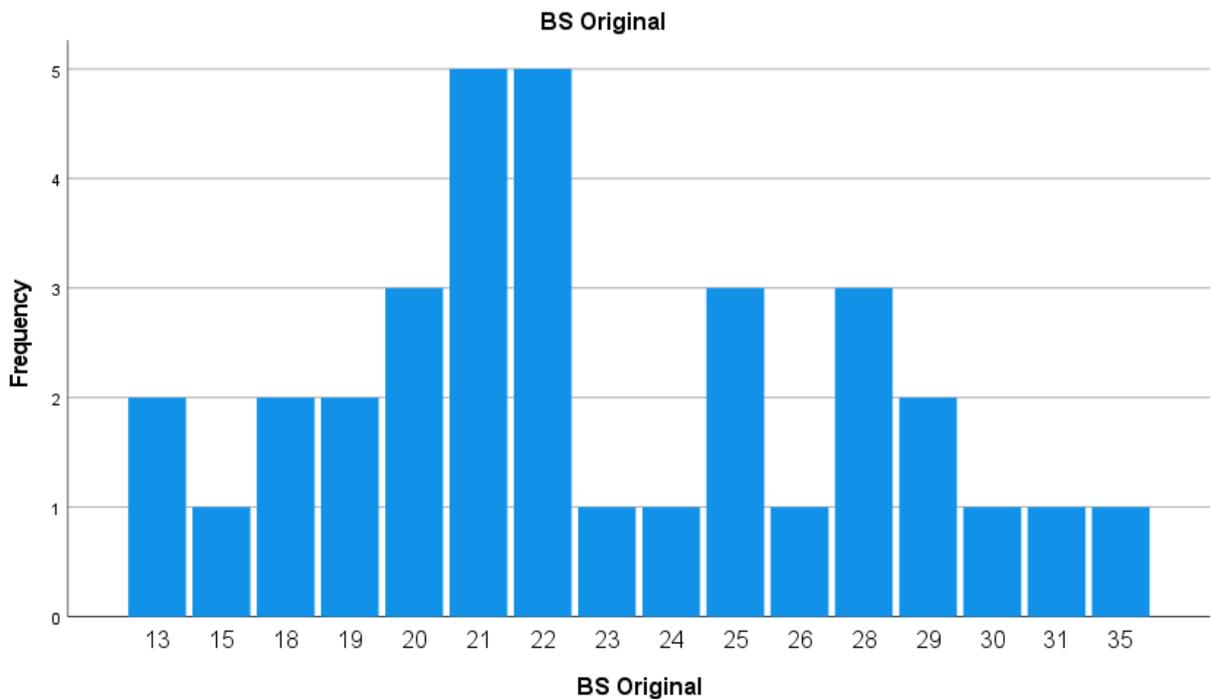
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Data in Table 4 from the 34 participants that only completed the pre-test survey: This data is supplied to offer further information for descriptive analyses.

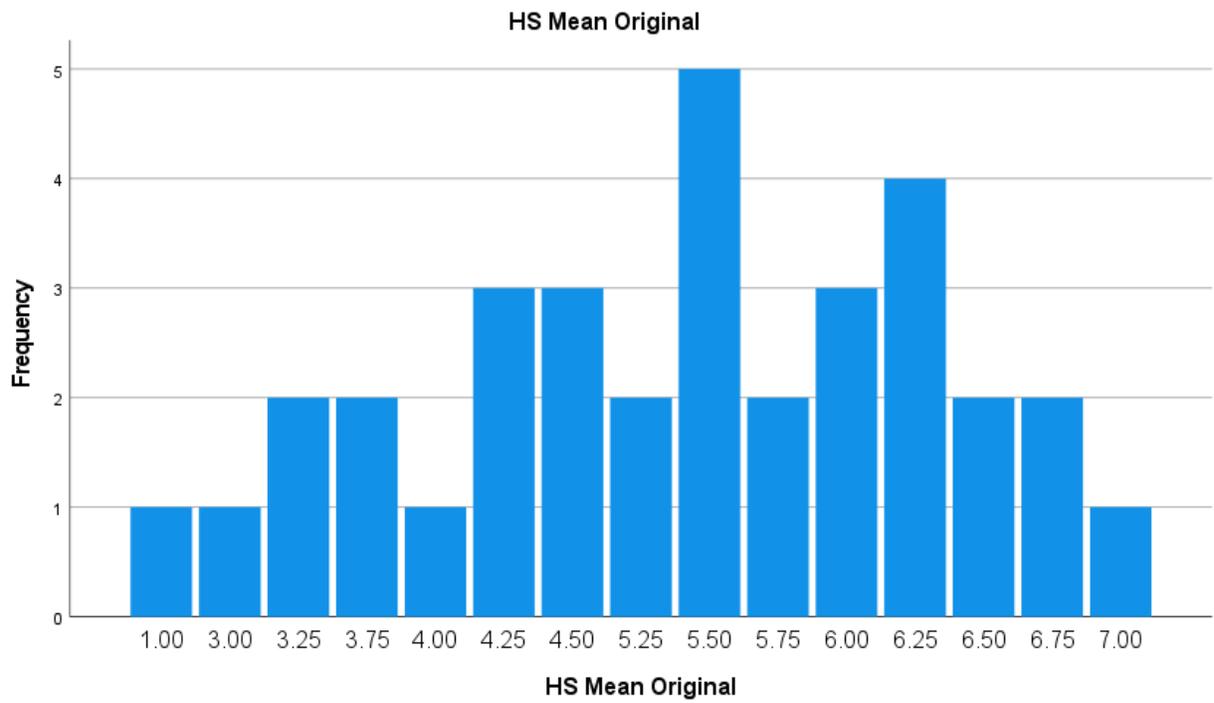
A Pearson correlation was calculated examining the relationship between participants compassion satisfaction and subjective happiness, a weak positive correlation that was not significant was found. ( $r(34) = .323, p > .050$ ).

A Pearson correlation was also calculated examining the relationship between participants Secondary Trauma Scores and the Subjective happiness scores. A weak positive correlation that did not show significance was found. ( $r(34) = .150, p > .050$ ).

There was only one correlation that was found to be significant. A Pearson correlation was calculated examining the relationship between the participants burnout score and Subjective happiness scores. A moderate negative correlation that showed significance was found. ( $r(34) = -.466, P < .050$ ).



**FIGURE 3: Bar Chart of Burnout Scores on Pre-test Survey ONLY**



**FIGURE 4: Bar Chart of Subjective Happiness Scores on Pre-test Survey ONLY**

**CHAPTER FIVE****Discussion of Findings**

The purpose of this study was to evaluate a possible correlation between the education on the science of happiness (positive psychology) and the intervention of gratitude journaling upon the subjective happiness and professional quality of life of mental health care providers. The second question of this study looked at the possible correlation between levels of happiness and professional quality of life. Although the scholarly project data did not show a statistical correlational significance in the use of the interventions and the subjective happiness and professional quality of life scores, there was useful information garnered that could support and further elucidate what is reported in the current literature. The study showed a moderate positive correlation between higher levels of subjective happiness and secondary traumatic stress in the 10 participants that completed the pre- and post- test surveys as well as the gratitude intervention. It is noteworthy that in the 34 that only completed the pretest, there was not a correlation noted between the level of happiness and the level of secondary traumatic stress, there is the possibility that increasing the participants gratitude also increased the empathy levels which led to this correlation, but difficulty to assess the generalizability since the sample size was so small (N=10). This correlates with previous studies which have shown that the altruistic and empathic relationships developed between healthcare providers and their patients, increase the likelihood of the development of compassion fatigue or secondary traumatic stress disorder (Calisir et al., 2020).

The impact of burnout affects not only mental health providers, but all healthcare providers. There is a strong correlation between burnout in surgeons and the risk for medical/surgical errors and malpractice. Mean stress levels of hospital employees show

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correlation with hospital malpractice suits. Burnout levels in hospital nurses increase levels of hospital acquired infections. There is an inverse relationship between nurse burnout and compassion fatigue and patient satisfaction ratings. Burnout has also been associated with physician and nurse intent to leave their employment or even the profession. Burnout can also increase healthcare costs due to turnover or even due to professionals ordering more tests or making more referrals. Burnout can also have very personal consequences in the form of actual suffering in the healthcare providers which can lead to the abuse or dependence on alcohol or drugs. Burnout can lead to increased suicidal ideation (200 percent among physicians) The suicide rate for male physicians is 40 percent higher than the general male population and for female physicians it is 130 percent higher than the general female population (Dyrbye et al., 2017).

This study was offered to 430 mental health providers in a large medical system in Tennessee and Kentucky. The usual completion rate for online surveys of this size is reported by Survey Monkey (2021), as being around 79 percent. This survey was only partially completed by 58 respondents and fully completed by 10 respondents with a completion rate of 17.2 percent which was much lower than would have been expected. According to Survey Monkey some of the reasons for low completion rates are incomplete data, or the participants are sending a message that they do not care for the survey, this low response rate was surprising to the researcher as these surveys were presented in a way that would have allowed the respondents to answer questions in a non-threatening, anonymous online survey. Due to this low level of response, it is possible that the staff did not have adequate time during their workday to complete the study, as it was taken on the medical center's intranet, or it is also possible that they chose not to answer the survey due to fear that the information might be accessed and cause issues with

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their jobs/careers. Some of the respondents may not have seen the need for such a study to be performed, as they felt that their level of happiness and professional quality of life was acceptable, or it could have been that the providers involved felt a sense of hopelessness (which is common with burnout) and did not feel that answering the survey would make a difference in their professional and personal lives. It was also noted that one participant stated that they never received the email for the post test, so this could have also impacted obtaining the post test results. The evaluation of the data from the 34 participants that did the pre-test survey showed more variability in the compassion satisfaction and the burnout scores which was to be expected due to a larger pool of participants.

The mean scores on the Subjective Happiness scales revealed that the respondents had a higher level of happiness and was comparable to what is usually seen in the normal population, which is a mean range from 4.5 -5.5. These higher scores could have been due to selection bias as the respondents who took the time to answer the surveys may have also been the ones who embraced self-care and looked at this as an opportunity for more improvement. It is also noted that the average of the means of the scales went down slightly from the pre- test to the post- test (4.65 to 4.55). This correlates with previous studies that showed when respondents were asked to keep a gratitude journal for three times per week for several weeks that their scores dropped in relation to the pre-test. It has been proposed that the participants may have felt guilty if they could not keep up with the journaling schedule, or the drop may have been secondary to boredom. Previous studies had shown that keeping the gratitude journal on a weekly basis showed a greater improvement in mood than attempting to keep it three times per week (Marsh, 2011).

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For the results of the Professional Quality of Life Survey (ProQOL5) on the subset scores that show Compassion Satisfaction, both the pre and post test showed high scores (46 and 43) which correlates with the participant's satisfaction in the ability to perform their jobs and felt a corresponding reward for those duties. Compassion fatigue is subdivided into burnout and secondary traumatic stress. The burnout scores for pre- and post- test both showed a level of 21 which is considered low risk for burnout. This is lower than would have been expected as previous studies have shown that up to 67 percent of mental health providers have expressed symptoms of risk for burnout. The subset scale for secondary traumatic stress showed pre and post test scores of 19 and 18 which are considered low risk for secondary trauma. This score was also surprising low to the researcher due to the number of trauma related patients that are seen on a regular basis by the mental health staff. The problem with the development of secondary trauma stress or vicarious traumatization is a known risk factor in treating this patient population (Cieslak, 2013).

The results of the qualitative questions were felt to show individuality and assess motivational thoughts, feelings, and actions. The themes that were noted in the responses to question one of *what brings the most joy or happiness to your life* were felt to be standard or what might be expected of this population. The individuals, which were an equal number of males and females, educated, professional, mainly Caucasian, married, Catholic or Protestant living and employed in the southern United States. The main themes reported were of children, spouses, family, friends, dogs, and nature as bringing happiness. It is possible that there may have been different results if this same question was posed to professionals living in a different culture, metropolitan area, or with different religious beliefs. Question two concerning *the use of gratitude* journaling brought only positive themes from keeping the gratitude intervention.

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Most respondents reported that it helped keep them in the moment, appreciate their current life, see the positive on a regular basis, balance out negative events and was a form of self-care.

Question three concerning *recommendations to improve the professional quality of life* showed themes related to what the individual might do as well as what administration or the corporation might do to help with their quality of life and work environment. Individual themes centered around time management, work-life balance, education, social networking with peers, continuing education to help with feelings of competency, as well as the need for autonomy. They expressed the desire to have more control over their patient load, time for teaching and therapy, as well as self-care such as having windows or time allotted to allow time outdoors between patients. The themes that were related more to administration were support for professional helpers, financial support for continuing education, time for networking with peers, better collaboration between departments and less paperwork and red tape. The researcher felt that all these answers were appropriate, timely, generalizable and could have positive effects on the mental health provider's as well as all healthcare provider's work environment.

### **Limitations**

This study was a quasi-experimental descriptive study which although presented to 430 mental health providers, had 58 participants take the initial survey, but only 34 completed all the questions on the initial survey. Due to the dropout rate, there was only data available for analysis on 10 participants. This small sample size (n=10) did not show statistical significance (power). Each profession was not represented as there was not a registered nurse or a physician assistant that completed the required surveys. The ethnic mix did not represent the distribution across the facilities as there are many different ethnic /racial employees in this large medical system, but in this study 9 of the 10 were Caucasian. Also, there may have been selection bias with this study,

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since it may have been those employees that were not as busy, or who saw the benefit of self-care that took the surveys. The total population if accessed may have shown a clearer stratification of happiness versus compassion fatigue (burnout or secondary trauma stress).

Another contributing factor is that the surveys were sent out in December/ holiday season and many people had competing responsibilities for their time and others were not in the office over the holidays. Another limitation may have been the effect of COVID19 on the response rate as individuals were dealing with increased stressors such as children home from school, increased requirements for household duties, illness, and deaths in the family. Another limitation was that the study survey was long with 40+ questions, it also requested that the person return at one and three weeks of gratitude journaling for repeat post- test surveys. Research has shown that the longer the survey and the more time required will reduce the response rate. There was also no financial incentive provided for taking part in the survey, such as a gift card as it was an anonymous survey.

### **Implications for Future Projects/Research**

The science of happiness (positive psychology) is being utilized on a regular basis to help individuals in their everyday life. There needs to be more research to identify how the concepts of this practice can be utilized to help strengthen compassion satisfaction and decrease compassion fatigue (burnout and secondary trauma stress) in mental health providers as well as all other healthcare providers in the United States. According to Dyrbye et al., (2017), a major limitation of the existing research is that is cross sectional, which limits its effectiveness to show causality. Also, only a limited number of the known factors that cause or contribute toward burnout have been studied. Research studies which look at work settings and years of experience among healthcare providers are also limited. Terminology and measurement tools vary across

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studies, so it becomes very difficult to make generalized assumptions or recommendations.

Instruments with established reliability and validity should be used to measure concepts such as burnout, compassion fatigue, and quality of life across many disciplines. Research should be conducted in the following three areas. 1. *Research to identify organizational and health care system factors that increase risk of stress for healthcare professionals.* 2. *Research to gain further understanding of the implications of healthcare distress and well-being for healthcare outcomes.* 3. *Intervention research to improve the work lives and well-being of healthcare professionals.* This will likely require healthcare legislation and regulations to provide finances for the research and implementation of policies to improve healthcare providers well-being and job satisfaction (Dyrbye et al., 2017).

In the future this researcher would like to do a pilot study with a specific focus on compassion fatigue and its identification as well as treatment modalities. The easiest way to accomplish this research would be to develop a website for health professionals to access at their convenience. This site would have a screening tool to identify levels of compassion fatigue, which would include burnout and secondary trauma stress. There would be educational resources, videos, treatment modalities such as electronic screening or monitoring tools, meditation, or mindfulness apps, as well as links to other supportive resources/websites. It would also be useful to have the names of several professionals that can offer supportive counseling or therapy locally or through telehealth to deal with these issues if identified. Individuals may also be directed to access their EAP programs if available. This researcher plans to complete the educational training to become a certified compassion fatigue educator and offer this specialized counseling to medical and mental health providers locally and through telehealth as there appears to be a need for this type of counseling. The goal is to also offer an educational

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in-service to all the healthcare providers in the medical system on compassion fatigue and burnout and ways to help prevent the condition or identify it early and how to initiate treatment. This plan will be developed and offered to the large medical system in which this study was performed for their approval.

### **Future Directions**

There is still stigma concerning health care providers seeking mental health care. Due to the recent number of suicides in medicine this antiquated thinking must be challenged. It is noteworthy that some of the articles on compassion fatigue link it to depression which if left untreated can lead to the providers leaving their jobs or even their professions. If the depression is not treated there is the risk for suicide and in fact some mental health providers have a higher suicide risk than the public. The American Medical Association is now putting information concerning self-care and mental health care in its curriculum as studies have shown that physicians have a higher rate of suicide than any profession in the United States. The AMA is in fact collecting information on suicides in physicians in training to see if they can identify systemic factors that contribute to the problems so that they can implement changes that may help to save lives. (Murphy, 2018). The American Psychological Association has also realized that compassion fatigue is a significant issue for its members and has recommended training programs address these issues concerning prevention of compassion fatigue (burnout and secondary trauma stress) as well as early identification and treatment. (Clay, 2020). This researcher knows from personal experience in caring for oncology patients for 15 years, how compassion fatigue can impact a provider's ability to care for their patients, as well as care

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adequately for themselves. Providers must learn to treat themselves with the same level of kindness and positive regard that is given to their patients.

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**Appendix A**

## DNP Scholarly Project EOP SLO Synthesis

Mona E Yeary

**PICO Question:** In Mental Health Providers -( Psychiatrist, Advanced Practice Nurses, Physician Assistants, Social Work, Registered Nurses and Psychologists in a health care system in Tennessee and Kentucky) does the use of education on the science of happiness and utilization of a gratitude journal for 21 days increase happiness and overall professional quality of life? Is there a correlation between an increased level of happiness and the professional quality of life?

**1. Cultural Competence:**

**Mentor Christian responsiveness and caring to a global culture through sensitivity and competence for patient traditions and values.**

The health care system to be utilized for this research has many different cultures represented by the patients as well as the healthcare professionals. One of the dominant cultures represented is the military, which can be active duty or veterans from many different eras, each sharing their corporate language, rules, and acceptable behaviors. The military has long honored traditions and most of the military personnel and veterans are proud to integrate this culture into their individual identity. This scholarly project will be offered to all the mental health providers within this health care system, it will be voluntary and anonymous. These providers differ in age, race, years of experience, world views, marital status, religion as well as sexual orientation. This project will endeavor to appreciate and be inclusive of all the different cultures represented. It is the goal of this

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project to examine and delete any personal biases toward those that do not have the same race, religion, or belief systems.

### 2. **Evidence Based Practice:**

**Translate research findings and outcomes to solve problems for quality personalized outcomes.**

This project will review current evidence- based protocols in the field of positive psychology, as well as a review of the literature concerning the science of happiness and professional quality of life issues. This study will trial new interventions (such as the use of gratitude) and will then evaluate the level of effectiveness of these interventions with the translation of these findings into clinical practice. It is also important to share those findings with others in the field through presenting at professional conferences and publishing in evidence- based peer reviewed journals.

### 3. **Health Promotion:**

**Propose evidence- based methods that prevent disease and promote human flourishing through the utilization of a wholistic framework to educate and empower healthy lifestyle choices.**

This scholarly project will look at subjective happiness in the mental health provider and whether the use of gratitude can improve happiness and the professional quality of life. What brings joy or happiness into a person's life is very subjective, and additional research needs to be performed to look at the impact on professional quality of life in a more holistic fashion. There are many things that can be health promoting such as wholesome food, rest, exercise, spiritual practices, and relationships. Motivation is an important factor in the individual and their adoption of these whole health practices.

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### 4. Patient Centered Care:

**Facilitate inter/intra professional healthcare to achieve personalized, compassionate, and coordinated whole person care.**

Mental health providers will be the participants in this research. This area of research is very important due to the level of stress and burnout in this population in the current literature, as well as a lack of studies showing adequate research on effective mental health interventions, including early identification of burnout and compassion fatigue for this population. The proposed research will look at what is important to providers in their personal and professional life and what measures they recommend instituting to help improve overall well-being. In patient centered care the “patient” (in this case the providers) are the ones that dictate the importance of variables in their life and what should be addressed first to allow for changes. Motivational interviewing techniques, and /or open-ended questions will be employed to establish importance of behaviors and willingness to change to assist with improvement of overall health.

### 5. Quality and Safety:

**Evaluate current evidence and outcomes of practice in health care systems to ensure a just culture that minimizes the risk of harm and promotes safety and quality of care.**

This research project has minimal risk for harm, it will consist of education on the science of happiness and the participants will keep a gratitude journal for 21 days, there will be a pre and posttest as well as three open-ended questions. The information will be obtained voluntarily, without coercion and will be anonymous so there should not be any expected negative effects from the information obtained. The only possible safety risks are possible thoughts or emotions that may arise from keeping the journals, including a sense

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of guilt if the gratitude intervention is not completed. The data will be reported in an aggregate manner thereby preventing negative implications for individuals.

### **6. Informatics and Innovation:**

**Analyze healthcare outcomes using knowledge of nursing, computer, and information sciences to manage data, information, and technology ethically and innovatively.**

This information will be obtained electronically which will be beneficial during this time of COVID 19 as most IRBs are limiting new research that involves person to person contact. The technology used will also be beneficial in evaluation of participant's surveys as well as for compilation and analysis of the data. A statistician will also be employed to assist with the analysis of the data utilizing SPSS software.

### **7. Teamwork and Collaboration:**

**Organize effective inter/intra professional teams to promote quality health outcomes and reduce risk.**

This research project will require several team members as well as input from key stakeholders to implement, gather data and complete the project successfully. The most important members will be the participants themselves which may see the benefit of the study. The study requires approval from the university IRB, this is under direction of the research committees as well as the IRB chair. There must be approval from the medical organizational management to allow the employees to participate in the study as a quality improvement study so that the information obtained will be beneficial not only on an individual but also corporate level. Due to the by-laws of the medical organization there is a requirement of a co-investigator with previous research experience. It is hoped that the data will reveal opportunities for personal and professional growth which could

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benefit the employees with less stress and burn-out and could benefit the organization with less turnover of employees.

### **8. Professionalism:**

**Advocate for Christ-centered excellence in nursing roles and professional behaviors throughout the inter/intra professional team.**

The researcher has been a Nurse Practitioner for 22 years and holds board certification as an Adult Nurse Practitioner, Oncology Nurse Practitioner, as well as a Psychiatric Mental Health Nurse Practitioner and has practiced in Oncology and Mental Health in outpatient as well as inpatient environments. In these different roles, professional mentors have modeled how to care for patients as well as how to interact and negotiate with other members of the healthcare team. It should be the goal of all involved to interact with the patients, peers and other health professionals in a kind, Christian way treating others with respect, offering positive regard, and caring for the whole person as this is what Christ teaches in his word. This project is not to find fault with current practices but is to look for opportunities where the provider's lives may be enriched, stress may be reduced and their overall well-being, and professional practice improved. Most importantly, God places individuals where he intends to use them, and the Bible shows the value of people from all walks of life as they are all one of his creations. At this stage of a long nursing career, it is the goal of this researcher that their life counts personally and professionally to show God's light in darkness, which is needed even more today due to this year's COVID 19 reality.

