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Review

An Overview of Gratitude as a Mind-Body-Spirit Practice in Optimizing Health and Human Functioning

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Abstract

This paper provides an overview of gratitude as a concept and as a mind-body-spirit practice, impacting health and human functioning throughout the lifespan, that can be integrated into daily life to great benefit at no cost. Current society is rife with increases in stress, anxiety, depression, lifestyle-related diseases, and social isolation. The practice of gratitude and its interrelated pro-social, health-enhancing, resilience-building effects suggest that promoting gratitude from childhood through adulthood may provide much-needed, accessible reinforcement towards optimal health and wellbeing.

Keywords

Gratitude; health; resilience



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1. Introduction

"Gratitude is the ability to experience life as a gift. It liberates us from the prison of selfpreoccupation." – John Ortberg

It is well known that pursuing optimal health for a lifetime includes a wide range of healthenhancing behaviors such as eating fruits and vegetables and daily exercise; however, there are less well-known, no-cost behaviors such as a regular gratitude practice that can have a powerful, positive effect on emotional and physical well-being. Integrating gratitude into daily living can be quite simple and has demonstrated positive physiological effects in areas such as immune functioning and recovering from illness, and psychologically impacting stress management capabilities, outlook, mood, and mental health [1]. Gratitude is so influential that it even impacts health behavior management by improving the ability to choose positive health behaviors more readily and consistently [2]. The World Health Organization [3] acknowledges a multifaceted, integrated model of health promotion from a biopsychosocial-spiritual perspective, and gratitude falls squarely into this holistic approach. Practicing gratitude is efficacious during childhood, on college campuses, in the adult workplace, in community, and as a method of self-care and resilience.

1.1 What is Gratitude?

The word gratitude is derived from the Latin word gratia meaning graciousness or gratefulness, and can be regarded as a feeling that encompasses appreciation for a person, place, or thing that can be viewed through a positive lens. Some researchers suggest gratitude is a response to a gift or kindness [4], while others expand that understanding to include being thankful/grateful for things that are not happening or going wrong in any given moment or experience. Practicing gratitude is a type of brain-focus training that involves pausing and noticing in the moment what is happening for which one can be grateful; the more this awareness is practiced, the more seamlessly being grateful is a part of daily thinking. Research on brain structure using MRI has revealed increased gray matter in individuals who practice gratitude regularly, suggesting that brain structure is responsive to continually practicing gratitude [5]. Experiencing gratitude can involve simple, succinct moments such as pausing and appreciating the beautiful sky, or can be as subtle as enjoying a smile delivered from another. A gratitude journal in which one lists or describes items of gratitude or a mindfulness meditation gratitude practice, are examples of effective and easily accessible activities that foster improvements in mood and reductions in stress. More broadly, gratitude can be integrated as a lifestyle perspective, predicated on foundational spiritual beliefs, often creating a deep appreciation for life itself [6].

2. Gratitude and Psychological, Physical, Social, Spiritual Aspects of Wellbeing

Psychological, physical, social, and spiritual components of well-being are inextricably linked facets impacting a human's health and their ability to flourish. The biopsychosocial-spiritual model of self-care was assessed among 20 physical therapy and dental students who participated in a five-week seminar, and the results demonstrated improvements in self-compassion and mindfulness, while stress, anxiety, and depression scores were reduced [7]. Stress is deeply embedded in our current culture; the pernicious effects of stress pervasively impact health and functioning. As a result, stress management is a pressing public health issue of our time. In 2022, 51% of Americans

reported mental health challenges as a critical health matter, up from 35% in 2021 [8]. The American Institute of Stress reports that 77% of people experience stress that affects their physical health, and 73% of those surveyed say stress affects their mental health. Stress is equally prevalent among college-age students, as demonstrated by the research conducted by the American College of Health Association [9]. Through extensive data collection, researchers found that 77% of students reported experiencing psychological distress, 35% of students were diagnosed with anxiety, and 27% with depression. In addition, 89% of the students reported that when they faced difficult academic experiences, it impacted their mental health. An ongoing, multifaceted approach to managing the pressure and stress associated with young life and academic pressure is essential. Research suggests those who are more grateful have better psychological wellbeing; therefore, practicing gratitude may play a productive role across society and among college students [10]. During a 16-week hybrid complementary therapies college course in health, college students' self-reported data described the many benefits they found in studying the science and practice of gratitude. They reported an increased appreciation for the people in their life, noticing the small and larger things that provided meaning, an increased gratitude towards God, family, and friends, and reportedly started to use a gratitude journal and integrate a gratitude practice—among other things [11].

Mental health and overall health behaviors are pertinent factors to consider when investigating the relationship between gratitude and physical health. Research by Hill, Allemand, and Roberts [2] examined the predictive value of gratitude on physical health among 962 Swiss adults. They found a positive, linear relationship between the level of gratitude and reported physical health-this relationship was mediated by mental health and chosen health behaviors and grew stronger with age. The most influential health behaviors impacted by gratitude were physical activity, adequate sleep, and self-care. Further exploring emotional state, physical health, and gratitude, Emmons, and McCollough [12] conducted research among college students who spent ten weeks recording things they were grateful for and compared them to students who recorded life's hassles during the same time period. The gratitude group of students reported being more optimistic, feeling better about their lives, having fewer physical ailments such as headaches or muscle pain, and exercising considerably more than those who recorded their daily hassles. Additional research explored the effects of having a disposition of gratitude on physical health, querying if experiences of loneliness mediated this relationship [13]. Among a sample of 118 people, researchers found that people with higher levels of gratitude reportedly had fewer physical health issues such as headaches, respiratory problems, and gastrointestinal upset. Through mediation analysis, they further uncovered that the relationship between gratitude and physical health was mediated by levels of loneliness, meaning levels of gratitude were inversely related to the degree of loneliness and predictive of self-reported physical health issues. Cultivating gratitude as a regular practice to combat stress, improve physical health, and support social ties can function as a first-line mechanism of wellness in health promotion.

2.1 Social Connections, Prosocial Behavior, and Gratitude

Affirming social connections and interpersonal relationships are highly correlated with optimizing health, increased life satisfaction, and longevity [14]. Experiencing gratitude may be considered a feeling or emotion that promotes meaningful connections with others. Among adolescents, higher levels of gratitude were associated with better perceptions of peers, family, social support, and self

[15]. Gratitude is typically categorized as prosocial behavior; this essentially means acting in a way that benefits others. A lab experiment that involved people receiving a favor versus people who enjoyed a positive outcome by chance, found that the favor experience was viewed more positively, generated increased gratitude, and in turn, created more prosocial behavior [16]. Having social connections and emotionally intimate relationships is strongly correlated with immune function, longevity, and emotional well-being [17, 18]. Strong, meaningful social connections—not necessarily considered hundreds of anonymous likes—are associated with a 50% increased likelihood of surviving and a decreased incidence of serious diseases [19]. The prosocial behavior of gratitude supports social connections and, in turn, optimal health.

2.2 The Power of a Smile and The Magic of a Thank You

People who generally express positive emotions are often perceived by the receiver of those emotions, as an individual with whom they will more likely and easily interact. Clark and Monin [20] suggest that people who deliver a smile are reportedly perceived as happy, thought of as likable, considered more kind, and helping them is more likely to occur. When a benefactor, one who gives something to another, is acknowledged by a grateful receiver, that receiver is more likely to freely thank, smile, and possibly hug the benefactor—while also expressing their gratitude to another for the benefactor [21]. The literature reveals that positive health outcomes occur for the person receiving praise in the form of a "thank you" when that "thank you" is delivered as an expression of gratitude. Science demonstrates that the person to whom we say thank you, acknowledging them and their actions, derives powerful health and mood state benefits from our simple expressions of thanks. A study recently involved measuring the neurological responses of exchanges of gratitude through brain imaging involving two sets of co-workers seated face to face, with one coworker reading a letter of gratitude aloud to their counterpart. The researchers measured brain activity of both people and found a more robust neural circuit response in the person receiving gratitude; at a brain-activation level, they benefited the most [22]. These findings identify a magnificent opportunity to impact the well-being of another by simply expressing words of thanks and gratitude in their direction. Employing this method of "other focused" expression to improve wellbeing, can be enjoyed among family members and within community groups, in educational settings, at places of employment and worship—just about anywhere that people gather and have the opportunity to express thanks one to another. Positive emotions and expressions of gratitude draw people together, ultimately contributing to strengthening psychological, physical, and social outcomes; the interrelatedness of these variables is depicted in Figure 1. An illustration of more opportunities for maximizing the benefits of gratitude for self and others is provided in Table 1.

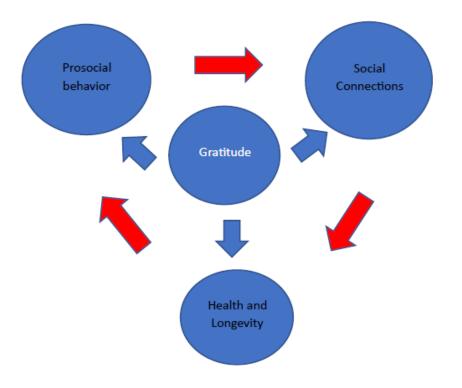


Figure 1 Gratitude Prosocial Behavior and Health.

	Benefits Self	Benefits Others
Smiling	\checkmark	\checkmark
Opening a door	\checkmark	\checkmark
Saying thank you	\checkmark	\checkmark
Giving	\checkmark	\checkmark
Sharing	\checkmark	\checkmark
Serving	\checkmark	\checkmark
Loving	\checkmark	\checkmark

 Table 1 Prosocial Gratitude-related Acts, Behaviors, and Opportunities Benefiting Self and Others.

2.3 Spirituality/Religion and Gratitude

The concept of gratitude is an integral component of many world religions, including in alphabetical order, Bahá'í, Buddhist, Christian, Hindu faith, Jewish, and Muslim [23]. Religion may be described as an organized system of beliefs and practices, the teachings and faith of which may impact behaviors and life course and include some reference to God or a transcendent Being [24]. When investigating the effects of religion and spirituality (R/S), using these terms interchangeably due to their similarities, researchers found that R/S was associated with emotional well-being, including the capacity for hope and optimism [25]. Hope is considered a desire or wish for something

to happen that includes a measure of trust that what is hoped for, could, in fact, occur. Research that involved measures of hope and optimism among those with chronic disease, found that higher levels of these attributes were associated with better health behaviors [26]. Additionally, research using brain imaging, through which subjects viewed stories about people receiving help in difficult circumstances, demonstrated powerful physiological responses in the gratitude brain circuitry in subjects who were solely observing others receiving what they may have hoped for, i.e.—help [27]. This begs the question, "Does faith increase one's perspective that one is being heard and that help is available, and does that belief impact our health?" More research is necessary. Asking for help is a key aspect of many R/S in the form of prayer and those who pray more frequently have been found to have higher levels of gratitude [28].

The Latin root of the word prayer is precari or to "ask earnestly" or beg. In Greek, the word prayer is proseuchomai and includes many elements of prayer including praise and thanksgiving. Whether through the practice of prayer with a measure of hope, or other spiritual practices, research has demonstrated an association between people with higher measures of spiritual well-being (SWB) and improved quality of life when battling cancer [29]; SWB and increased self-esteem and ability to cope with adversity [25]; SWB and positive mental health and recovery from mental illness; and SWB and some measure of protection against addictive behaviors [30]. In college students with higher levels of SWB, Anye et al; [31] found a greater level of health-related quality of life and suggested that R/S opportunities on college campuses may prove advantageous to the health and well-being of college students. The World Health Association [3], as previously mentioned, has explored the biopsychosocial-spiritual model as a viable representation of a holistic approach to health promotion, with the latest addition to this model being the spiritual component.

3. Child Gratitude and Well-being

Current research suggests that when children practice gratitude regularly, it may afford them some defense against stress and depression. Children with secure parent attachments and supportive, endearing parents are more likely to have higher levels of gratitude [32]. Parents with high levels of gratitude are more likely to introduce their children to gratitude-inducing activities, suggesting that grateful parents are more likely to raise grateful kids [33]. Modeling grateful expression for children allows for a type of "on-the-job training" in the midst of their lives, as we teach them through our own words and deeds. We can subtly highlight for children when something happens that merits appreciation or a situation exists for which gratitude is warranted. Children can be tasked with finding one or two items per day that spark gratitude, with the expectation of sharing those items at dinner time, during the bedtime routine, or during class time for teachers or leaders of children. This is a simple brain training activity that encourages, first, awareness and then communication of gratitude moments; this can be used as a coping strategy, contribute to overall resilience, and improve outlook.

Saying thank you as an expression of appreciation can also be emphasized for children, encouraging them to both deliver the words of thanks and experience the feelings that are present when someone thanks them for a word or deed. As discussed previously, we can also emphasize to children that expressing gratitude and saying thank you improves the health and wellbeing of the people around them. We can further teach children grateful expression awareness, by acknowledging the power of a smile delivered or received. Research demonstrates that sharing a

smile with another person can improve subjective wellbeing, reduce stress, and elevate mood [34-36]. Albert Bandura's social learning theory posits that we learn through experience and through observation [37]. Parents, caregivers, teachers, coaches, and other trusted adults have frontline opportunities to share gratitude, smiles, and even laughter with children, impacting their short-term and long-term health and well-being. Figure 2 provides a graphical representation of research on gratitude and children, and Figure 3 presents gratitude practices for children.

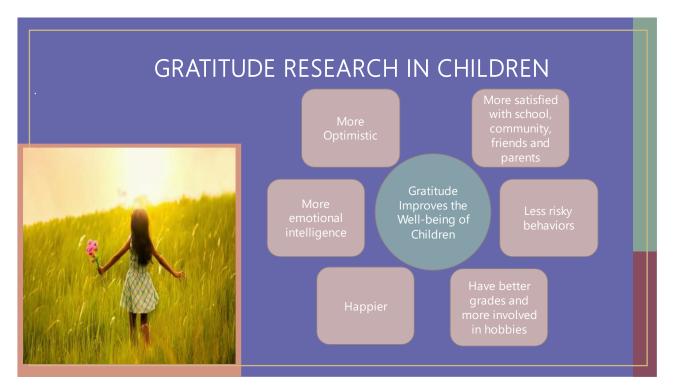


Figure 2 Gratitude Research in Children.



Figure 3 Practices of Gratitude with Children.

4. Gratitude and Leadership

On average we will spend one-third of our lifetime working—this equates to approximately 90,000 hours in total. In the workplace, expressions of gratitude have been associated with more productivity, dedication, and time spent attending to tasks among employees [38]. Cortini and colleagues [39] investigated job satisfaction and performance among Italian public administration employees and found gratitude to be a strong predictor of job performance and job satisfaction. Further research found that employees who participated in a simple two-week self-directed gratitude practice actually took fewer sick days and reported improvements in general well-being [40]. The prosocial component of gratitude serves to draw working teams together and increase collaboration [41]; reiterating items that are going well as a team can impact both cohesion and effort. Unfortunately, the Harvard Business Review reports that 59 percent of employees have not had an employer who "truly appreciates" them, with 53 percent of them reporting they would dedicate more time to the job if they were appreciated more [42]. The business review also stated that the more power an individual wielded within an organization, the less often they shared expressions of gratitude [42].

In their new book Leading with Gratitude, authors Gostik and Elton [43] posit that workers need to know that their work is appreciated, and expressing that sentiment is a fast, easy, inexpensive way to positively impact performance and reduce turnover. Leaders can develop a human-centered approach to managing their employees, creating a company culture through which demonstrations of appreciation are standard practice. Workplace gratitude communication can occur during team meetings, through social media, and by bestowing rewards and accolades; as a result, this can improve morale and encourage team-oriented, performance-centered work relationships. Accentuating the positive can be utilized as a foundational leadership principle, operating as a means of highlighting and illustrating desirable performance.

Innovative employers may further create an environment of positive emotional wellbeing, health preservation, and health promotion by including on-site programming such as mindfulness meditation gratitude sessions and health education covering the value of practicing gratitude. The scientific literature presents a broad range of benefits and positive outcomes related to practicing gratitude. As long as humans are a part of the workforce, gratitude expression will continue to be a desirable behavior.

5. Practicing Gratitude as a Form of Self-care

There are a wide range of opportunities for the integration of gratitude and its positive effects in daily life. Employing simple and practical actions and practices can enhance well-being and can be taught to others as a form of self-care. Table 2 details some useful ideas that can be easily added as chances arise.

Building Gratitude into Daily Life	Practices	
Gratitude journal	Jot down three things per day that you are	
	thankful for	

 Table 2 Examples of Gratitude Practices.

At a meal, each member shares one thing	Children will become accustomed to searching
from their day for which they were grateful	for gratitude items to present at end of day
Take a walk and notice things along your path that you appreciate	Walking mindfully and bringing a grateful awareness to that experience
	•
Say thank you to people whenever you can	Staying on the lookout for goodness that comes your way
Share a smile to demonstrate appreciation	Noticing the positivity that comes from sharing a smile
Note when someone shares thanks with you	Appreciating when a word of thanks comes your way
Mindfulness gratitude meditation	Take five minutes and sit in a quiet place and listen to a gratitude-oriented meditation
Express thanks as part of a spiritual/faith	Expressions of gratitude can be included into a
practice	prayer practice

5.1 Gratitude Meditation

Mindfulness meditation is considered a form of brain-focus training that supports experiencing or being aware of the present moment without judgment or assessment [44]. Becoming comfortable with the focus and attention direction that occurs with mindfulness meditation, is a gradual and enlightening process and should be approached without pressure or evaluation. The more familiar one becomes with the process of a brief mindfulness meditation, the more easily one can drop into that quiet space and enjoy the effects. Like any type of training, there is a learning curve that should be embraced and experienced as a manner of self-care. A guided gratitude meditation is a type of mindfulness meditation that focuses attention with compassion and loving-kindness on things for which we are grateful and may result in improved resilience, optimism, and elevated mood. Individuals who demonstrate more mindful and grateful traits may enjoy heightened physiological and psychological well-being [45]. The Greater Good Science Center offers a ten-minute gratitude meditation created by Dr. Kathi Kemper, who is the executive director of the College of Medicine's Center for Integrative Health and Wellness [46]. Headspace is a health app that also provides gratitude meditations based on the science that demonstrates counting blessings and appreciating simple acts of kindness improves mood and resilience [47]. There are additional gratitude meditations available free on YouTube; searching through and finding a speaker with a sentiment that appeals to the listener is an integral part of enjoying the positive outcomes.

5.2 Gratitude Journaling

One way to integrate a consistent gratitude practice into daily life is to list or journal items for which we are grateful. This is a process that can involve pausing, bringing attention to, and then experiencing in the moment the good or blessings identified within normal life. When college students were grouped into three different gratitude interventions—journalling, reflection, or app-driven reflection—data suggested that the gratitude journaling group had the greatest positive impact on well-being, with the other two gratitude experiences also showing improvements to a somewhat lesser degree [48]. Students today face significant pressures within and outside of their academic pursuits; developing coping and adaptive skills may improve their levels of resilience.

Researchers recruited 196 undergraduate students to participate in research that explored the effects of journaling 10 items of gratitude, once per week, for ten weeks. There were three gratitude journaling protocols: —the gratitude journal writers either read their list of gratitude items aloud to themselves, read their list aloud to someone else, or presented their list as a prayer to God aloud. The findings demonstrated a reduction in negative affect and the greatest increases in positive affect and hope among the participants who presented their gratitude as a prayer [26]. Further research involved first-year Turkish college students who were identified at pretest to have high measures of stress and low measures of adjustment to university life. The stressed students were then asked to participate in a study that involved gratitude journaling for three weeks. At post-test, and in comparison to the no-treatment control group, the students who journaled on gratitude had significant improvements in scores of gratitude, adjustment to university life, measures of life satisfaction, and positive effect [49].

A gratitude journal intervention can also be clinically effective in populations suffering from diseases such as cancer and heart failure. In patients with advanced cancer, seven days of mindful gratitude journaling resulted in improvements in quality of life, and reduced suffering and psychological distress [50]. Redwine and colleagues [51] investigated the inclusion of gratitude journaling and its impact on biomarkers associated with inflammation in heart failure patients as a part of their therapeutic intervention. After 8-weeks of gratitude journaling, the intervention group had reductions in inflammation and improved levels of gratitude when compared to the "treatment as usual" control group. Table 3 is an example of a working gratitude journal.

Day of the week and date	Three items of gratitude	Did I notice exchanging smiles with others-when how many, how did that feel?	Did I notice items for which I was grateful throughout the day, while it was unfolding, how and why	Do I notice any changes in mood, outlook, stress, or contentment as I continue with this exercise—when, how, and why	Do I notice any shifts in connections with others as I increase gratitude awareness.
Monday		16611			awareness.
Tuesday					
Wednesday					
, Thursday					
Friday					
Saturday					
Sunday					
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

Table 3 Example of Gratitude Journal.

5.3 Writing "Thank You"

Writing letters of gratitude and experiencing the effects as a recipient of this type of intentional activity are two more productive ways to integrate gratitude exercises into regular life. Researchers studied 10th-grade students writing thank you notes to parents, teachers, coaches, and friends over a period of a month and found the students had greater life satisfaction and motivation towards self-improvement when compared to the students who were tasked with achieving better organizational skills [52]. A study published in the Journal of Happiness reported that when a group of 219 men and women wrote three letters of gratitude over a three-week period, they demonstrated increases in happiness and life satisfaction with decreases in depressive symptoms [53]. This concept of communicating thanks through the written word does not need to be limited to paper and pen, or even email. More research is necessary to ascertain the effects of sharing thanks through other mediums such as text, social media, or even roadside billboards.

6. Gratitude for All

We are facing unprecedented levels of lifestyle-related diseases such as obesity, heart disease, and some forms of cancer, along with skyrocketing rates of anxiety, depression, and suicide. Employing no-cost lifestyle health-enhancing behaviors—such as practicing gratitude—can have an impact on all people in every walk of life, can be taught to children as a lifetime coping skill, can be integrated into employment relationships, and overall become an asset as one journeys through the inevitable ebb and flow of this experience called life.

"I cried because I had no shoes until I met a man who had no feet."

—Helen Keller

Author Contributions

Dr. Bryan contributed the research review, formulated the framework and concept for the manuscript, and contributed to the manuscript development. Dr. Hamilton provided extensive editing, proofreading, and contributed to manuscript development.

Competing Interests

The authors have declared that no competing interests exist.

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