Mature Gratitude in Positive Psychiatry

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“After a severe seizure of cluster headache, I sat upright in my bed and thought that I had to find something to be grateful for, otherwise I wanted to end my life. So, I picked up a piece of paper and started writing. The first words were the names of my sons and I got angry at myself because there had to be more in life to be grateful for than just my children. So, I looked around and started writing, and I wrote and wrote until my paper was filled with gratitudes. There felt a flow inside of me and it was for the first in a long time that I really ‘felt’. I felt that I still could be grateful, despite my severe condition. After this realization, I fell asleep peacefully.”

As a scientist, I am studying gratitude for almost ten years now. Stories as the one above are shared with me on a regular basis when I tell people that my research interest is in the association between gratitude and mental health. People in dire circumstances or just struggling with day-to-day life confide in me about how gratitude is a light in the dark for them. It is fascinating to see how a feeling, a way of thinking or an attitude of gratitude can be of such help in times of adversity. The aim of this chapter is to present the reader with case studies and scientific research on the beneficial association between gratitude and symptoms of psychopathology.

Gratitude

Gratitude has been omnipresent in religious, spiritual, and philosophical ideologies since ancient times. All these ideologies believed that gratitude contributes to the well-being of individuals, to strong relationships between people and to societal cohesion, and it is seen as an essential part of living a meaningful life. The scientific focus on gratitude is relatively new; the first scientific publication on gratitude was published in 1968¹. Scientists agree that gratitude is a positive emotion that arises when people are aware that someone or something has given them a benefit. Before gratitude can arise, four ingredients are required. First, there is the intention of the benefactor. If the benefactor is forced to help or has a double agenda - and this is clear to the beneficiary - then it is hard to feel grateful. It is important that someone is willing to help and that the benefit is given voluntarily; this makes someone feel seen and valued. Second are the costs for the other. Does someone receive \$10 from a mother of four on welfare or from Bill Gates? More gratitude will be felt for the mother because the amount of money is a greater sacrifice for her than for Mr. Gates. Costs are not only about money but also include energy and time spent for the benefit of someone else. Third, gratitude depends on the value of the benefit to the beneficiary. Those \$10 are welcome for a poor student if, thanks to this money, they can buy food at the end of the month. This money becomes no more than a nice gesture if the beneficiary has a generous salary. The last ingredient of gratitude is responsiveness. This means that the benefit someone wants to give or do must fulfill a need or wish of the beneficiary. We can help an old lady cross the street, but if she did not want to be across the street, she will not be

grateful for the help. The positive emotion of gratitude arises when these four ingredients are present and in balance with each other ^{1,2}.

Mature gratitude

In positive psychology, gratitude as a trait or virtue is viewed as a general tendency to recognize small to large benefits, to experience sufficiency, and to acknowledge anything in the world, both human and non-human, with grateful emotion; expression of this emotion promotes one's own well-being and the well-being of others ³. In this broad definition of gratitude – mature gratitude – two dimensions are recognizable: a horizontal and a vertical dimension. The horizontal, immanent dimension includes gratitude for prosperity and adversity that is conceived consciously and within earthly borders. The horizontal dimension of mature gratitude is directed at material and natural objects, expected and unexpected events, and the people with whom we interact. Being grateful for the good things in life is the easier part; we all are able to do so. Being grateful for broken objects, disheartening events, and people who are annoying or hurtful, is a more difficult, but not impossible task. For this it is necessary to accept and transform our frustration, our feelings of powerlessness, and the hurt that we experience. The vertical, transcendent dimension of mature gratitude is a spiritual dimension, with gratitude directed at phenomena that cannot be precisely and mentally located in space and time. Illustrations of this vertical gratitude are cosmic gratitude ⁴, gratitude to God, or spiritual gratitude that can be elicited by, for example, gratitude for ancestors or spirits, but also cultural expressions such as music or art, or an awareness of being part of something big such as the universe. The vertical, transcendent dimension of mature gratitude can assist the experience of the horizontal gratitude but it is not necessary ⁵.

Positive psychology 2.0

An important aspect of mature gratitude is the ability to be grateful for broken belongings, hurtful people, or any other kind of adversity. This premise is derived from positive psychology 2.0 (PP 2.0); the successor of positive psychology 1.0 ⁶. Whereas PP 1.0 focusses on the pursuit of happiness, it becomes clear to us that we cannot avoid or ignore unpleasant issues like suffering and human weaknesses. Our mental health is not immune to adverse effects and we need a way to cope with disruptive issues, acknowledging that suffering is part of living. PP 2.0 posits that life is a struggle in a difficult and dangerous world, and the only way to achieve sustainable wellbeing and a good mental health is to embrace and transform our suffering and human weaknesses into an advantage for personal growth, happiness, and success. PP 2.0 focusses on the buffering effects of positive emotions and character strengths in stressful events, but also on harnessing positive capabilities from negative facets of life ⁶⁻⁸. The acceptance of negative affect appears to be necessary for healthy functioning ⁹. This can be achieved through learning how to make the best use of the dynamic and dialectic interplay between positive and negative life experiences in each context ¹⁰.

Positive psychiatry

The tenets of PP 2.0 are recognizable in the development of positive psychiatry. Psychiatry used to be a medical profession directed by the illusion that the client's happiness is manufacturable and measurable for the benefit of an economically driven model. However, this disease curing model collides more and more with the values and virtues of the people who need psychiatric help. Psychiatry is changing to a client value motivated model that not only focusses on the cure of distressing symptoms but also on the client's virtues, values, and development of resilience in a personal recovery model. This paradigm shift is based on two changes ¹¹.

The first change concerns putting the client at the center of treatment instead of the disease as the focus. Psychiatry should no longer be the place where only problems and complaints are discussed and treated, but also the place where the focus is on what works in patients' lives, where their competences and resilience are discovered and deployed, positive emotions are strengthened, and hope, gratitude and optimism are nurtured. The second change adds the paradigm of synthesis to the analysis of the client's needs for care. The reductionist medical model can be supplemented by the functional solution-oriented model. This model is about designing and building an outcome that did not exist before, namely enhanced mental well-being. Symptom reduction is not sufficient when dealing with a complex phenomenon such as mental health. The experience of mental well-being is the result of many factors with interdependent interactions. These factors lie within the categories of bodily functions, mental well-being, meaningfulness, quality of life, societal participation, and daily functioning ¹². Health and well-being cannot be understood merely by analysis of the individual psychopathological symptoms but by the synthesis of all the important categories of mental health ^{11,12}.

Gratitude and well-being

Well-being has several domains, each of which is associated with gratitude: physical well-being, psychological well-being and social well-being ¹³. Gratitude is able to contribute more or less to each of these areas. Regarding physical well-being, many articles suggest that gratitude can play an important part in improved physical health. However, not much is known yet about the measurable effects of gratitude on physical functions. There are so few studies published on topics such as brain function, cortisol levels and oxytocin levels, that strong conclusions cannot be drawn yet. Outcomes of some of these studies suggest that keeping a gratitude diary or inducing gratitude in another way seems to lower blood pressure and to reduce inflammatory markers. More replication studies are necessary to strengthen the evidence about the direct health benefits of gratitude. However, some studies do show that gratitude turns out to be beneficial for a good night's sleep. By paying attention to positive things before going to sleep, people will worry less and therefore fall asleep better. Also, grateful people appear to take better care of themselves, are more physically active and more likely to stick to their doctor's instructions. Gratitude may or may not improve physical health directly but gratitude can indirectly improve the physical well-being of people ^{14,15}.

There is much evidence of gratitude being beneficial to psychological well-being. Experiencing grateful emotion acts in a reciprocal dynamic with the experience of other positive emotions such as enthusiasm, awe, satisfaction and cheerfulness ¹⁶. Grateful people are happier, more optimistic, and show greater psychological flexibility ¹⁷. On the other hand, grateful people show less jealousy, aggression, and resentment ¹⁸. When something unpleasant happens in their lives, grateful people are also sad, nervous, or angry, but thanks to their attitude of gratitude they can put the situation into perspective more quickly and they do not get stuck in their negative emotions. People who are ill can stabilize their psychological well-being with the help of gratitude exercises. For example, it turned out that the positive emotions of women with breast cancer remained stable through gratitude exercises; the level of positive emotions of the women who had not done the exercises decreased ¹⁹. Science has provided considerable evidence that gratitude, together with other positive emotions, broadens our attention to facilitate exploration, relationships, and skills development, which in turn help to build resilience and psychological flexibility that is useful when adversity strikes. This theoretical perspective – called the broaden-and-build theory – provides a framework that helps to explain why gratitude is part of human experience and its connections to better mental health ²⁰.

Lastly, gratitude plays a fundamental role in social well-being which is all about feeling comfortable in a relationship with family and friends, and a group, such as the neighborhood we live in or colleagues at work. Science is unanimous about this: contact with other people is essential for our mental well-being, and it does not matter if these others are strangers or people we have met before. Even when strangers do something for us, we can feel grateful. By offering their help, they appear to be kind and apparently think we are worthwhile investing in. This makes them stand out to us, and they might become a new friend ²¹. Another advantage of gratitude is that we pay more attention to others. As a result, grateful people often feel less lonely ¹⁷. And if someone has helped us with something, there is not only the chance that we will return the favor to the benefactor but even do something for someone completely different; grateful people are more prosocial and spread gratitude like ripples in the water ^{15,22}.

In existing relationships, gratitude strengthens the mutual bond by ensuring that we want to reciprocate for benefits received. If there is someone close by who attends to our needs and wishes, we thank them and a voice in the back of our head reminds us to help them in the future. This reciprocity is the glue for both friendships and romantic relationships. If gratitude is expressed in a romantic relationship, all kinds of positive effects happen for the relationship. If we say thank you to our spouse, they feel seen, they will pay attention to our needs and wishes, and give back. These investments fuel the engagement in the relationship and makes it more resilient. Partners with a strong bond can handle adverse times together and they will lift each other up to overcome the storm ²³. In friendships, people can feel grateful after receiving, for instance, psychological or instrumental support. People with a tendency to be grateful have lower thresholds for experiencing gratitude in

everyday life and feel gratitude towards more people. Grateful people are more likely to be positive about other people and see more goodness in others such as their best friends or neighbors ^{24–26}. Expressing gratitude is therefore an interesting way to reinforce existing relationships and to form new ones. Having social support from relationships is known to be important in the treatment of psychological illnesses and the sustainability of good health. Thus gratitude as a way to form new friendships and strengthen existing ones cannot be overlooked in the clinical practice ¹⁵.

Gratitude in clinical practice

In clinical practice, gratitude can play a positive role regarding several diagnosis. In the following paragraphs, I will highlight four case studies regarding burnout, addiction, chronic pain, and bereavement to illustrate the effect gratitude can have in these serious conditions on the mental health of the people it concerned. The stories will be complemented with research and the possible underlying mechanism of the beneficial effects of gratitude.

Burnout

“My burnout was really disabling me. I could no longer walk or cycle and as a result, I ended up lying on the couch all day long for four months. Although this was the worst period of my burnout, I felt very calm. I felt depressed, but I also liked the forced rest. After four months of living on my couch, I started to walk little by little with the help of a walker. Then I walked around my house, which was about two minutes or so in the beginning. Then I noticed for the first time in my life that my surrounding is changing every day. I had never been aware of the seasons as I was always busy and running around on autopilot. Now I saw the tree in the street that changed every day. In the beginning it was fresh green and then unbelievably beautiful red and orange and then all the leaves were gone... it was so beautiful! I experienced conscious gratitude for the first time. Everything in my life became good again. If I managed to walk one minute longer than the day before, I would be completely grateful and happy.”

Burnout is the end stage of a long period of ongoing distress in which clients suffer from both physical and mental exhaustion. It is thought that the components of burnout – emotional exhaustion, depersonalization, and reduced sense of personal accomplishment – are diametrical opposites of the components of the good life – the pleasant, engaged, and meaningful life. Common psychological symptoms experienced during burnout are, among others, irritability, anxiety, depression, and perceived stress. There is considerable research on gratitude, burnout, and its symptoms. A review of randomized controlled and crossover trials of gratitude interventions showed that all these approaches were moderately effective in reducing stress, burnout, and/or anxiety ²⁷. The levels of emotional exhaustion and depersonalization decreased after a pretest/post-test design study, applying a gratitude intervention in a sample of Chinese schoolteachers ²⁸. Writing down three things one is grateful for improved the mental health of health care workers in the United States up to one year by decreased symptoms of depression and increased feelings of happiness ²⁹.

Responding to anything in the world with gratitude helps us pause and increase our attentiveness to internal and external surroundings, supporting us in mindful acceptance of distressing thoughts and feelings ³⁰. Mindful acceptance appears to positively counteract anhedonia and partly restores reward experience in individuals with anxiety and depression ³¹. Being mindful broadens our attention and increases the likelihood of grateful emotion ³², whereas a narrower outlook on events may hinder the ability to observe what is positive or beneficial, hampering the experience of grateful emotions in individuals with psychopathological symptoms. The studies on gratitude and burnout support the above case study that an attitude of gratitude as part of the pleasant, engaged, and meaningful life can be part of healing from a burnout.

Addiction

“I learned the power of gratitude in the drug addiction clinic. Every evening we had to fill out a diary which included the question to write down three things we were grateful for. This exercise taught me to reflect on my gratitude and now that I am clean, I really feel profoundly grateful. I felt extremely happy when I was writing down my gratitudes in rehab, and that was completely new in my life. Now that I am out of rehab, my life is pure, it is real and not fake anymore. My heart and head are no longer separated but they are connected due to my feelings of gratitude. Gratitude is something we should not only think but also really feel. Now, there are moments in my life where I can experience ultimate gratitude.”

An addiction is frequently part of comorbidity. Some people start using certain substances as self-medication for their ADHD, depression, or anxiety and become addicted. On the other hand, some substances can cause psychological problems such as psychoses, confusion, anhedonia, or depressive symptoms. To heal from an addiction, elaborate recovery programs have been developed and gratitude is often an important part of these programs as was the case in the above example. A study of a 12-step addiction recovery programs for Alcoholics Anonymous and Narcotics Anonymous showed that grateful people reported better general life outcomes such as post-traumatic growth and an increase in social support; Also, they experienced less stress and physical health problems during the 12-step addiction recovery program ³³. Including gratitude interventions in a recovery program for people with alcohol misuse showed that especially clients with low levels of gratitude at the start of the program, raised their level of gratitude during the recovery period over the course of twelve months ³⁴. A recent qualitative pilot study on a daily journaling practice for people with problems with substance use included writing about the good in the past day. Participants reported that reviewing the good that had happened in the past day helped them to perceive life in the recovery facility as more fulfilling ³⁵.

Reflecting on the things that went well in life in general, and in the past day specifically, appears to help people cope who are going to the difficult recovery process of addiction. Gratitude, compared to other positive emotions such as forgiveness, is an other-oriented process in which people do not have to look at themselves. Ego-orientation is about individualism, materialism,

instrumentalism, and consumerism. Suffering from an addiction is an ego-oriented condition which forces the person to acquire a certain substance or act in a certain way to fulfill their own needs and consequently lose their awareness of others. Gratitude as an other-oriented emotion requires them to be mindful of the needs and wishes of the other and not dwell upon their own needs and rewards ³⁶. This might be the reason why gratitude practices for people with addiction reinforces their positive affective outcomes (Sheldon and Lyubomirsky 2006).

Chronic pain

[Continuing case study from the beginning of the chapter] “When I woke up in the morning, I saw my paper with all the things I was grateful for. I picked it up and went downstairs. I made some coffee and was standing in front of the window with my dog at my feet. I reread my gratitudes and when I looked outside, I noticed two blue tits sitting in a tree since a long time. I started to feel completely warm inside. From that day forward, I decided to write down what I was grateful for in my life every day. Although my seizures of cluster headache had not changed, my world changed as I started to consciously search for the beautiful things in my life. My neurologist saw that something had changed, that I had become stronger. He asked me what I had done that caused such a significant progress, and I told him I had started writing down what I am grateful for. My neurologist urged me to continue my writing, because if I would gain sufficient strength, I could qualify for an experimental operation. That gave me courage. So, I gave gratitude an important place in my life. I started living gratefully. In the meantime, my attacks continued as usual. But now after every attack I thought: this one will never come back! After some months I did get the operation and now I am much better than before”.

Many people are suffering chronic pain. At least 10% of the world’s population suffers from some sort of pain on a daily basis which is about 60 million people ³⁷. Chronic pain is pain that lasts longer or is more severe than expected. Pain affects physical fitness, emotion, cognition, behavior, social contacts and activities, and vice versa. Chronic pain is often accompanied by symptoms of depression and anxiety. Studies of people living with chronic pain show that having a high level of gratitude is associated with low levels of anxiety and depression ³⁸. Similar findings were reported after a longitudinal study in a sample of people suffering from inflammatory bowel disease and arthritis. Over a six-month period, the participants who scored higher on the gratitude scale scored lower on the depression and anxiety scales ³⁹. An intervention study among 81 people with arthritis used a combination of a gratitude journal and mindfulness exercises to improve the coping skills of the participants. The outcomes showed that symptoms such as pain anxiety, pain interference, pain intensity, fear of movement and pain self-efficacy were all improved by the combined intervention over the course of four weeks ⁴⁰. Also, a positive psychology intervention including gratitude over six weeks showed improvement in pain intensity, pain control, pain catastrophizing, pain interference, life satisfaction, positive affect, and depression between the pretest and posttest period. Improvements in

life satisfaction, depression, pain intensity, pain interference, and pain control lasted up to the 2.5-month follow-up⁴¹. These outcomes suggest that inducing gratitude in chronically pain patients can help them cope effectively with their chronic condition.

Gratitude seems to function as a coping skill when exercised by people with chronic pain. Wood et al.⁴² explained the mechanisms of gratitude as a coping skill. They suggested that grateful people were more likely to seek out and use instrumental and emotional social support. Grateful people are motivated to approach and deal with a given problem. Coping mechanisms have been classified as problem or emotion-focused. Problem-focused coping strategies aim to resolve some aspect of the stressor, while emotion-focused strategies represent the attempt to regulate one's emotions in the face of adversity. Grateful people use strategies such as coping actively with the issue, planning to work towards a solution, positive reframing the situation, and trying to find the potential for growth to deal with the problem at hand. On the other hand, grateful people are less likely to show disengaging behavior, to deny that the problem exists, or to escape the situation through maladaptive behaviors such as avoidance and substance use. Lower self-blame because of the other-oriented nature of gratitude, more positive reframing of the given situation and growth despite the suffering are especially important mechanisms in the association between experiencing gratitude and perceived stress⁴².

Bereavement

"Instead of enjoying my maternity week with a blushing newborn, I was arranging a funeral and had to choose a coffin for my dead son. Thank God they let us take our son home for a week. That really helped in saying goodbye in that extremely painful and sad period. He had been part of our family for a short time; he had been really at home with us as a family. We could hug him; the grandfathers and grandmothers could see and hold him. I have immensely grateful memories of that week; it was not solely misery and sorrow. There was a lot of love and gratitude for our son, for each other and for all the people around us who shared our grief. I am incredibly grateful for that experience because that week felt like a present. I am deeply grateful that the farewell went like this. I already felt grateful at that sad time, and my gratitude has only grown since. My gratitude ensured me that I could keep an overview of the whole situation from the start. Sure, I was deeply saddened by the passing of our son, but I also realized that my son's death would not be the end of our lives."

Losing loved ones is a stressful life event that is experienced by almost everybody in their lifetime. Grieving is a complicated process where some deal with the loss quite well in their own way and own time and adapt well to a life without that specific person, while others are lost in complicated grief with serious and long-term physical, emotional, cognitive, existential, or behavioral reactions that limit social or professional functioning. While it is important not to pathologize grief by presenting it as if it were a disease, it is also important to recognize that a satisfactory reorganization of one's life after death of a loved one is not always guaranteed. Studies on gratitude and bereavement show that

gratitude can be a protective factor for the consequences that might follow the loss of a loved one such as depression and anxiety ⁴³. Studies with samples of bereaved participants showed that positive reframing of the event lessened intense grief reactions and complicated grief symptoms suggesting that the positive reframing – including grateful reminiscence – made the grief more manageable ^{44,45}. Caregivers who were bereaved after the loss of the person they cared for and who were able to experience positive emotions such as gratitude, were more likely to develop long-term plans and goals which predicted greater psychological well-being 12 months after bereavement ⁴⁶.

When people are asked why they feel grateful after their loss, they mostly answer that they found a new belief that life is precious and that they feel grateful for their loved ones and the time they spent with them. Both the appreciation for life and the other are in agreement with the scarcity heuristic explanation ⁴⁷. The scarcity heuristic proposes that when individuals are reminded of death in a personal manner, they place a higher value on their own life. This theory is supported by science. Accounts of people who have faced death reported a newfound appreciation for life. Outcomes of an experiment in which participants were prompted to think about their own death in a vivid way through a “death contemplation exercise” reported higher levels of gratitude compared to the participants in the control group ^{48,49}. Using gratitude in the clinical practice by positive reframing the loss and working with the scarcity heuristic can assist people in reorganizing their life after the loss of a loved one.

Conclusion

As the case studies and the cited research in this chapter shows, gratitude can be one of the virtues that can assist clients in the clinical practice with their treatment of and coping with symptoms of psychopathology. Although evidence for positive effects of gratitude on physical well-being is limited, evidence for the benefits of an attitude of gratitude for psychological and social well-being is ubiquitous. Mechanisms of gratitude such as mindfulness, the broaden-and-build theory of positive emotions, other-oriented approach behavior, and coping skills such as positive reframing all can assist clients seen in the clinical practice to get better and stay well.

I do want to add a proviso. Sometimes, the practice of gratitude is not the most appropriate method of helping people with psychopathology. There is some indication that exposing clinical clients to positive psychology interventions including gratitude exercises with the aim of decreasing psychopathological symptoms can be deleterious ⁵⁰, and challenging for dysphoric individuals because of self-referential bias ⁵¹ or maladaptive self-focus in individuals with depression ⁵².

Psychopathological disorders are thought to coincide with self-referential bias, whereas individuals with depression relate external events to the self incorrectly ^{51,53}. Their maladaptive self-focus can manifest itself for instance as rumination, where the individual repetitively and passively focusses on symptoms and distress, and their potential causes and consequences ⁵². Asking clients to focus on the deepest thoughts and feelings about stressful experiences from the past can possibly induce negative emotions that might have contradictory effects on their mental well-being. Müller et al. ⁴¹, for

example, reported feelings of discouragement and sadness in participants who were assigned to a gratitude journaling group ⁴¹. Charzyńska et al. ³⁴ reported a decline in gratitude between measurements in participants with drug addiction who received gifts during group therapy. Perhaps these clients felt indebted and obliged towards their benefactors ⁵⁴, leading to actions to protect the self. This might include minimizing the value of the gift or questioning a gift's voluntary character. As we said earlier, these are two of the four ingredients of gratitude and with one of the ingredients missing, there will be no sense of gratitude which reduces not only the perceived social burden of the reciprocity rule but also the personal costs of self-efficacy debilitation ⁵⁵. Lastly, the timing of implementing gratitude interventions in individuals with mental health problems is important. Gratitude interventions for recent trauma victims will be unlikely to produce positive outcomes, as can be similarly expected to be the case when asking individuals in acute phases of depression to focus on perceived benefits ^{56,57}.

Nevertheless, gratitude interventions can be valuable in primary prevention and secondary and tertiary care, and be used as a tool to foster resilience and psychological flexibility in clients with psychopathological symptoms ^{50,56,57}. There are many different gratitude exercises to choose from. Of course, there is the gratitude journal but also the gratitude letter or visit ⁵⁸ and gratitude meditation ⁵⁹ which are ways to foster gratitude. It is important to consider person-activity fit; does the exercise appeal to the client and are they willing to put time and effort in the exercise? A model that can help to do so is the person-activity fit model from Lyubomirsky and Layous ⁶⁰, which represents a first attempt at mapping intrinsic motivation for engaging in positive psychological interventions such as gratitude exercises.

Competency-based working is an indispensable part of health care. This methodology searches for the available competencies of patients and aims at discovering and expanding their skills repertoire. Competence means that patients have sufficient skills to adequately fulfill the tasks with which they are faced in daily life. The starting points of the competence model are to connect with the strengths of patients and activate them in achieving their goals, by hearing their needs, wishes, limits and standards, taking them seriously, and focussing on creating new opportunities ¹¹. One of these competencies can be mature gratitude because it plays a vital role in preventing people from experiencing depression, anger, and anxiety because of suffering. It teaches people a better and more adaptive way to embrace their hardship ⁵. Suffering makes a better human being because of increased capacity for gratitude and other spiritual virtues ⁶¹. Let us explore the untouched healing source of mature gratitude in clinical practice.

All case studies were published with the consent of the persons concerned in the book *Een zoektocht naar dankbaarheid* ⁶².

References

1. Tesser A, Gatewood R, Driver M. Some determinants of gratitude. *Journal of Personality and Social Psychology*. 1968;9(3):233-236. doi:10.1037/h0025905
2. Algoe SB, Zhaoyang R. Positive psychology in context: Effects of expressing gratitude in ongoing relationships depend on perceptions of enactor responsiveness. *The Journal of Positive Psychology*. 2016;11(4):399-415. doi:10.1080/17439760.2015.1117131
3. Jans-Beken LGPJ. Appreciating Gratitude: New Perspectives on the Gratitude Mental Health Connection. Published online 2018. doi:10.6084/m9.figshare.5909782.v1
4. Roberts RC. Cosmic gratitude. *European Journal for the Philosophy of Religion*. 2014;6(3):65-83.
5. Jans-Beken LGPJ, Wong PTP. Development and preliminary validation of the Existential Gratitude Scale (EGS). *Counselling Psychology Quarterly*. Published online 2019.
6. Wong PTP. Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology/Psychologie Canadienne*. 2011;52(2):69.
7. Ivtzan I, Lomas T, Hefferon K, Worth P. *Second Wave Positive Psychology: Embracing the Dark Side of Life*. Routledge; 2015.
8. Kashdan T, Biswas-Diener R. *The Upside of Your Dark Side*. Penguin; 2014.
9. Levin ME, MacLane C, Daflos S, et al. Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *J Contextual Behav Sci*. 2014;3(3):155-163. doi:10/ggjs6c
10. Wong PTP, Mayer C-H, Bowers V. Existential Positive Psychology (PP 2.0) and the New Science of Flourishing Through Suffering. *Frontiers in psychology*. Published online In press. <http://www.drpaulwong.com/existential-positive-psychology-pp-2-0-and-the-new-science-of-flourishing-through-suffering/>
11. Bannink F, Peeters F. *Practicing Positive Psychiatry*. Hogrefe Publishing; 2020.
12. Huber M, Knottnerus JA, Green L, et al. How should we define health? *BMJ*. 2011;343. doi:10.1136/bmj.d4163

13. Westerhof GJ, Keyes CLM. Mental Illness and Mental Health: The Two Continua Model Across the Lifespan. *Journal of Adult Development*. 2010;17(2):110-119. doi:10.1007/s10804-009-9082-y
14. Jans-Beken LGPJ. The Dialectic Dynamics Between Trait Gratitude Subjective Well-Being and Psychopathology Across 30 Weeks. *Counselling Psychology Quarterly*. Published online 2019. doi:https://doi.org/10.1080/09515070.2019.1638228
15. Jans-Beken LGPJ, Jacobs N, Janssens M, et al. Gratitude and Health: An Updated Review. *Journal of Positive Psychology*. Published online 2019. doi:10.1080/17439760.2019.1651888
16. Jans-Beken LGPJ, Jacobs N, Janssens M, et al. Reciprocal Relationships between State Gratitude and High- and Low-Arousal Positive Affects in Daily Life: A Time-lagged Ecological Assessment Study. *Journal of Positive Psychology*. Published online 2018. doi:10.1080/17439760.2018.1497684
17. Frinking E, Jans-Beken LGPJ, Janssens M, et al. Gratitude and Loneliness in Adults over 40 Years: Examining the Role of Psychological Flexibility and Engaged Living. *Aging & Mental Health*. Published online 2019.
18. Deng Y, Xiang R, Zhu Y, Li Y, Yu S, Liu X. Counting blessings and sharing gratitude in a chinese prisoner sample: Effects of gratitude-based interventions on subjective well-being and aggression. *The Journal of Positive Psychology*. Published online 2018. doi:10.1080/17439760.2018.1460687
19. Otto AK, Szczesny EC, Soriano EC, Laurenceau J-P, Siegel SD. Effects of a randomized gratitude intervention on death-related fear of recurrence in breast cancer survivors. *Health Psychology*. 2016;35(12):1320-1328. doi:10.1037/hea0000400
20. Fredrickson BL. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*. 2001;56(3):218-226. doi:10.1037/0003-066X.56.3.218
21. Algoe SB. Find, remind, and bind: The functions of gratitude in everyday relationships. *Social and Personality Psychology Compass*. 2012;6(6):455-469.
22. Nowak MA, Roch S. Upstream reciprocity and the evolution of gratitude. *Proceedings of the Royal Society B: Biological Sciences*. 2007;274(1610):605-610.

23. Park Y, Impett EA, MacDonald G, Lemay Jr. EP. Saying “thank you”: Partners’ expressions of gratitude protect relationship satisfaction and commitment from the harmful effects of attachment insecurity. *Journal of Personality and Social Psychology*. 2019;117(4):773-806. doi:10/ghrq63
24. Erdugan C, Araz A. The Cognitive, Emotional and Behavioral Indicators of Dispositional Gratitude in Close Friendship: The Case of Turkey. Published online 2019. doi:10/ghrq66
25. McCullough ME, Emmons RA, Tsang JA. The Grateful Disposition: A Conceptual and Empirical Topography. *Journal of Personality & Social Psychology*. 2002;82(1):112-127. doi:10.1037//0022-3514.82.1.112
26. Watkins PC. What Are Grateful People Like? Characteristics of Grateful People. In: *Gratitude and the Good Life*. Springer; 2014:73-100.
27. Ruotsalainen J, Serra C, Marine A, Verbeek J. Systematic review of interventions for reducing occupational stress in health care workers. *Scand J Work Environ Health*. 2008;34(3):169-178. doi:10/fcsmrc
28. Chan DW. Burnout and life satisfaction: does gratitude intervention make a difference among Chinese school teachers in Hong Kong? *Educational Psychology*. 2011;31(7):809-823.
29. Sexton JB, Adair KC. Forty-five good things: a prospective pilot study of the Three Good Things well-being intervention in the USA for healthcare worker emotional exhaustion, depression, work–life balance and happiness. *BMJ Open*. 2019;9(3). doi:10/ghqdjs
30. Catalino LI, Fredrickson BL. A Tuesday in the life of a flourisher: the role of positive emotional reactivity in optimal mental health. *Emotion*. 2011;11(4):938.
31. Geschwind N, Peeters F, Drukker M, van Os J, Wichers M. Mindfulness training increases momentary positive emotions and reward experience in adults vulnerable to depression: a randomized controlled trial. *Journal of consulting and clinical psychology*. 2011;79(5):618.
32. Fredrickson BL, Joiner T. Positive emotions trigger upward spirals toward emotional well-being. *Psychological science*. 2002;13(2):172-175.
33. LaBelle OP, Edelstein RS. Gratitude, insecure attachment, and positive outcomes among 12-step recovery program participants. *Addiction Research & Theory*. 2018;26(2):123-132. doi:10/ghqdmr

34. Charzyńska E, Gruszczyńska E, Heszen I. Forgiveness and gratitude trajectories among persons undergoing alcohol addiction therapy. *Addiction Research & Theory*. 2018;26(4):282-293. doi:10/ghqg5b
35. Krentzman AR. How a gratitude and positive activity journal supports recovery from alcohol and other substance use disorders: a framework derived from grounded theory. Published online March 2020. Accessed December 22, 2020. <http://conservancy.umn.edu/handle/11299/212260>
36. Howells K. *Gratitude in Education: A Radical View*. Springer Science & Business Media; 2012.
37. Jackson TP, Stabile VS, McQueen KAK. The Global Burden Of Chronic Pain. *ASA Newsletter*. 2014;78(6):24-27.
38. Ng M-Y, Wong W-S. The differential effects of gratitude and sleep on psychological distress in patients with chronic pain. *Journal of health psychology*. 2013;18(2):263-271.
39. Sirois FM, Wood AM. Gratitude Uniquely Predicts Lower Depression in Chronic Illness Populations: A Longitudinal Study of Inflammatory Bowel Disease and Arthritis. *Health Psychology*. Published online 2017. doi:10.1037/hea0000436
40. Swain N, Thompson BL, Gallagher S, Paddison J, Mercer S. Gratitude Enhanced Mindfulness (GEM): A pilot study of an internet-delivered programme for self-management of pain and disability in people with arthritis. *The Journal of Positive Psychology*. 2020;15(3):420-426. doi:10/ghrtxq
41. Müller R, Gertz KJ, Molton IR, et al. Effects of a Tailored Positive Psychology Intervention on Well-Being and Pain in Individuals With Chronic Pain and a Physical Disability: A Feasibility Trial. *Clin J Pain*. 2016;32(1):32-44. doi:10/f753tv
42. Wood AM, Froh JJ, Geraghty AWA. Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review*. 2010;30(7):890-905. doi:10.1016/j.cpr.2010.03.005
43. Rosmarin DH, Krumrei EJ, Pargament KI. Are gratitude and spirituality protective factors against psychopathology? *International Journal of Existential Psychology and Psychotherapy*. 2010;3(1):1-5.
44. Lambert NM, Graham SM, Fincham FD, Stillman TF. A changed perspective: How gratitude can affect sense of coherence through positive reframing. *The Journal of Positive Psychology*. 2009;4(6):461-470.

45. Riley LP, LaMontagne LL, Hepworth JT, Murphy BA. fre. *Death Stud.* 2007;31(4):277-299. doi:10/dzgfhv
46. Stein N, Folkman S, Trabasso T, Richards TA. Appraisal and goal processes as predictors of psychological well-being in bereaved caregivers. *Journal of Personality and Social Psychology.* 1997;72(4):872-884. doi:10/fg82qb
47. King LA, Hicks JA, Abdelkhalik J. Death, life, scarcity, and value: An alternative perspective on the meaning of death. *Psychological Science.* 2009;20(12):1459-1462. doi:10/cwspsh
48. Frias A, Watkins P, Webber AC, Froh JJ. Death and gratitude: Death reflection enhances gratitude. *The Journal of Positive Psychology.* 2011;6(2):154-162.
49. Greene N, McGovern K. Gratitude, psychological well-being, and perceptions of posttraumatic growth in adults who lost a parent in childhood. *Death Stud.* 2017;41(7):436-446. doi:10/ghrvck
50. Sin NL, Della Porta MD, Lyubomirsky S. Tailoring positive psychology interventions to treat depressed individuals. In: S. I. Donaldson, M. Csikszentmihalyi, Nakamura J, eds. *Applied Positive Psychology: Improving Everyday Life, Health, Schools, Work, and Society.* Routledge; 2011:79-96.
51. Beck AT. The evolution of the cognitive model of depression and its neurobiological correlates. *Am J Psychiatry.* 2008;165(8):969-977. doi:10/fcrxc3
52. Nolen-Hoeksema S, Wisco BE, Lyubomirsky S. Rethinking Rumination. *Perspectives on psychological science : a journal of the Association for Psychological Science.* 2008;3(5):400-424. doi:10.1111/j.1745-6924.2008.00088.x
53. Frost RO, Graf M, Becker J. Self-devaluation and depressed mood. *Journal of Consulting and Clinical Psychology.* 1979;47(5):958-962. doi:10.1037/0022-006X.47.5.958
54. Emmons RA, Shelton CM. Gratitude and the science of positive psychology. *Handbook of positive psychology.* 2002;18:459-471.
55. Tsang J-A. Gratitude and prosocial behaviour: An experimental test of gratitude. *Cognition & Emotion.* 2006;20(1):138-148.
56. Lies J, Mellor D, Hong RY. Gratitude and personal functioning among earthquake survivors in Indonesia. *The Journal of Positive Psychology.* 2014;9(4):295-305. doi:10.1080/17439760.2014.902492

57. Parks AC, Biswas-Diener R. Positive interventions: Past, present and future. In: Kashdan T, Ciarrochi J, eds. *Mindfulness, Acceptance, and Positive Psychology: The Seven Foundations of Well-Being*. New Harbinger Publications; 2013:140-165.
58. Seligman M, Rashid T, Parks AC. Positive psychotherapy. *American Psychologist*. 2006;61(8):774-788. doi:10.1037/0003-066X.61.8.774
59. Kyeong S, Kim J, Kim DJ, Kim HE, Kim J-J. Effects of gratitude meditation on neural network functional connectivity and brain-heart coupling. *Scientific Reports*. 2017;7(1):5058. doi:10/gbnm4b
60. Lyubomirsky S, Layous K. How do simple positive activities increase well-being? *Current Directions in Psychological Science*. 2013;22(1):57-62.
61. Wong PTP. Second wave positive psychology's (PP 2.0) contribution to counselling psychology. *Counselling Psychology Quarterly*. 2019;32(3-4):275-284. doi:10/ggsw6r
62. Jans-Beken LGPJ. *Een Zoektocht Naar Dankbaarheid*. 1st ed. Uitgeverij Jans-Beken; 2019.