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What are People Grateful for? Investigating the Relationship between Gratitude, Mental Well-Being and Depression: A Qualitative Study

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Abstract

Depression is the leading cause of disability worldwide. Although there are effective treatment methods, these are associated with high costs as well as possible adverse effects. Therefore there is a need to provide less expensive and less severe treatment options that are easy to access. Gratitude interventions showed promising effects on mental health and well-being and several studies investigated the relationship between gratitude and depression. However, little is known until now about what people are grateful for. Researchers from the University of Twente conducted a longitudinal study (randomized controlled trial) to investigate the effect of a gratitude intervention on several outcome variables. Using a qualitative research design, this study aimed to examine what people are thankful for and how this relates to their mental well-being and depressive symptoms. In addition, participants' reflections of the gratitude intervention were analyzed to find out about the possible relationship between the topics of reflection and the outcome variables. In total the data of 25 participants were analyzed. The qualitative data were analyzed by means of content analysis and then linked to the difference scores of mental well-being and depression between pre- and post-measurement by correlation analysis. The content analysis of the gratitude statements revealed ten aspects that participants mentioned when describing what they are grateful for: *Relationships with Others, Health and Well-Being, Work, Personal Strengths, Enjoying the Environment, Life Needs, Freetime Activities, Objects of Material Value, Negative Events* and the own *Pet*. The reflection part revealed seven further topics about participants' perceived impact of the intervention: *Awareness, Positive Emotions, Mental Growth, Shifting Focus, Negative Emotions and Consequences, Altering Behavior* and *Influence on Relationships*. No significant correlations have been found between the codes and the outcome variables, except one. The code *Altering Behavior* had a significant negative correlation with the difference score of depression and a significant positive correlation with the difference score of mental well-being. The data provide a good overview of the aspects people are grateful for, however more research is needed to find out which aspects of gratitude have the most positive impact on people's life and which aspects might have a negative impact, especially for depressed individuals.

Introduction

According to the World Health Organization (WHO) “depression is a common mental disorder, characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities.” It is the leading cause of disability worldwide, with more than 300 million people suffering from it. There was an increase in prevalence of more than 18% between 2005 and 2015. Depressive symptoms often lead to a decrease in quality of life, causing the affected individual to function poorly at work or in school and having problems to maintain social contacts. Moreover, when symptoms are long-lasting and severe, depression can result in suicide (WHO, 2017). Although there are effective psychological and pharmacological treatments, these are associated with high costs as well as possible adverse effects, especially when treated with antidepressant medication. Therefore, there is a need to provide treatment options that are less expensive, less harmful and easy to access.

One promising treatment option for depression are positive psychology interventions. In the past decades positive psychology became a field of increasing interest. Traditionally, clinical psychology primarily focused on psychopathology and repairing damage, thereby applying a disease model of mental health. However, the WHO defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014). According to this definition, well-being depends not only on the absence of psychopathology, but also on the presence of positive psychological means, a view that is supported by different researchers (e.g. Ryff, 1989; Sin & Lyubomirsky, 2009). Positive psychology aims at increasing people’s well-being, by directing research and treatments on character strengths, personal growth and flourishing, rather than personal deficits (Seligman & Csikszentmihalyi, 2000). Focusing on the valuable things is nowadays of central concern when it comes to psychological interventions and therapies, since positive psychology interventions showed to be effective in enhancing well-being and weakening depressive symptoms (Bolier et al., 2013).

Gratitude interventions received much attention since the beginnings of positive psychology, showing promising effects on mental health and well-being (Emmons & McCullough, 2003; Seligman, Steen, Park & Peterson, 2005; Alkozei, Smith & Killgore, 2017). Gratitude is a term which is difficult to define since it has been variously described as emotion, psychological state, attitude and life-orientation (Emmons & Shelton, 2002; Wood, Froh & Gerathy, 2010; Alkozei et al., 2017). One important aspect of gratitude includes the

experience of feeling thankful as a result of another person's benevolence, for example when receiving something of value. However, people can also feel grateful for more abstract things in life which do not necessarily have to be associated with a specific benefactor, meaning that gratitude can be more intrinsic in nature (Alkozei et al., 2017). Due to the different facets of gratitude, a more general definition will be used in this study, according to which gratitude includes "noticing and appreciating the positive in the world" (Wood et al. 2010, p. 890).

A number of studies investigated the relationship between gratitude and depression. Disabato, Kashdan, Short and Jordan (2017) conducted a longitudinal examination of gratitude and meaning in life testing whether the experience of more positive life events mediated the relationship between both gratitude and meaning in life, which in turn should decrease depressive symptoms. Their results showed that higher levels of gratitude as well as meaning in life predicted a reduction in depressive symptoms at both 3- and 6-month follow-up measurements. On behalf of eight studies, Lambert, Fincham and Stillman (2011) demonstrated that gratitude is related to fewer depressive symptoms and that this relationship is mediated by mechanism of positive reframing and positive emotion. Other mechanisms explaining the association between depression and gratitude were found by Lin (2015). Using path-analyses, he showed that self-esteem and psychological well-being act as full mediators of the relationship between gratitude and depression. Lin (2015) was even able to demonstrate that gratitude led to more self-esteem, which in turn enhanced psychological well-being, resulting in a decrease of depressive symptoms. In another mediation analysis, Petrocchi and Couyoumdjian (2015) evaluated three types of "self-to-self" relationships to gain more knowledge about possible underlying mechanisms that explain the impact of gratitude on depression and anxiety. According to their results, gratitude predicted less symptoms of depression and anxiety and this relationship was partially mediated by mechanisms of criticizing, attacking and reassuring the self. It seemed that people, who were less critical, less punishing and more compassionate with themselves, benefited the most from the experience of gratitude (Petrocchi & Couyoumdjian, 2015).

Several studies suggest that gratitude is effective in enhancing well-being and weakening depressive symptoms. In their groundbreaking study, Emmons and McCullough (2003) experimentally determined the effect of gratitude on mental health over time by using daily diary methods. They found that participants in the experimental group, who had to write down things they were thankful for, improved in coping behaviors, mood and physical health symptoms compared to participants in the control groups (Emmons & McCullough, 2003). In two longitudinal studies, Wood, Maltby, Gillett, Linley and Joseph (2008), investigated the

relationship between gratitude and social support, stress as well as depression, finding that gratitude leads to more social support and less stress and depression over time, with no evidence for a reverse relationship.

These studies demonstrate that gratitude has a positive impact on well-being and is effective in weakening depressive symptoms. Moreover, there seem to be several mechanisms that are able to explain the positive impact of gratitude on depression. However, all of these studies used questionnaires to measure the levels of gratitude and to investigate the relationship with depression. Until now, little is known about what people are thankful for and if this can be linked to different levels of depression and well-being. The question emerges if specific aspects of gratitude can explain the relationship between gratitude and depression or well-being.

Researchers from the University of Twente conducted a longitudinal study (randomized controlled trial) to investigate the effects of a 6-week gratitude intervention on several outcome variables. Each week, participants received a new gratitude exercise including a reflection task at the end of the week to reflect on their experiences with the exercise. The reflection task is a useful supplement of the intervention, since participants' experiences provide researchers a better understanding of participants' thoughts, feelings and commitments concerning a specific construct (Reid, Flowers & Larkin, 2005). By means of reflection, participants can describe in detail how they experienced the different gratitude exercises and how the intervention affected their daily lives. Therefore, the outcomes of the reflection task enable deeper insights into participants' experiences with the intervention as well as the concept of gratitude.

This research aims to examine what people are thankful for and how this relates to their well-being and depressive symptoms. Moreover, participants' reflections of the gratitude intervention will be analyzed to find out about the perceived impact of the intervention and the possible relationship between the topics of reflection and the outcome variables. The following research questions will be investigated:

1. What are People grateful for?
2. What are the topics of participants' reflections of the intervention?
3. How does gratitude relate to people's well-being and depressive symptoms?
 - a. What is the relationship between the aspects people are grateful for and mental well-being as well as depression?
 - b. What is the relationship between the topics of reflection and mental well-being as well as depression?

Method

Design

A qualitative research design was used to find out what people are grateful for and how they experienced the intervention. The qualitative data were examined by inductive content analysis. In addition to that, quantitative methods have been used to investigate the relationship between gratitude and mental well-being as well as depression. This was done by measuring participants' difference-scores in depression as well as mental well-being between pre- and posttest of the intervention and correlating them to the outcomes of the content analysis.

Setting

The data used in this research are part of a longitudinal study that was conducted at the University of Twente. The study investigated the effects of two acts of kindness interventions (with and without reflection) as well as a gratitude intervention.

Participants were approached via regional and national newspapers, the online newsletter Psychology Magazine as well as Facebook advertisement. After online application, there was a screening to find out if participants met the inclusion criteria, i.e. being above 18 years old, experiencing a low or moderate level of well-being, having sufficient internet connection and an e-mail-address, mastering the Dutch language, and signing the informed consent. Exclusion criteria were the presence of serious depressive or anxiety symptoms. After signing the informed consent, participants had to fill in a screening questionnaire and were then assigned to one of five groups by stratified randomization. They were evenly distributed over the groups regarding the variables gender, education and flourishing. There were three experimental groups, namely *acts of kindness with reflection*, *acts of kindness without reflection* and *gratitude intervention with reflection*, as well as two control groups, namely *acts of kindness for yourself* and *wait-list-control condition*. Since this study is about gratitude, the focus of this paper will be on the gratitude intervention.

One day before the intervention started, participants received an email with a short introduction to the set-up of the intervention. The whole gratitude intervention is described under *Materials*. Before (t_0) and directly after (t_3) the intervention as well as six weeks (t_4) and six month (t_5) follow-up, participants had to fill in nine questionnaires, measuring well-being (MHC-SF), depression (CES-D), anxiety (GAD-7), positive and negative emotions (mDES), gratitude (GQ-6-NL), positive relations (PGGS), interest in the self and others (SO-II), optimism (LOT-R) and stress (PSS). A small sample of questionnaires was also given to

participants two (t_1) and four weeks (t_2) after the intervention. However, only the well-being scale and the depression scale are of interest for this research.

Participants

In total there were 423 participants in this study of whom 85 took part in the gratitude intervention. It was decided to only analyze the data of participants who filled in the whole happiness journal (see Method, *The Gratitude Intervention*), since it was assumed that these participants conducted the intervention most conscientiously. Of the 85 participants only 29 filled in the happiness journal including the reflection part completely. Due to missing data, four further participants had to be excluded from the analysis. Therefore, the data of 25 participants were analyzed in this research. In total, 22 Dutchmen took part in this study, the other three participants were from Serbia, Russia and France. Participants were between 38 and 64 years old with a mean age of 50,5 years, 24 were female and 1 was male.

Materials

The Gratitude Intervention

The gratitude intervention lasted six weeks. Before the intervention, participants received the information that the intervention was designed to develop two different forms of gratitude, namely “general gratitude” and “gratitude for others”. The intervention was composed of two parts.

1. Each week participants had to perform a new gratitude exercise. The exercise, including a short introduction into the topic of the exercise, was sent to participants by email each Sunday before the week started. The six different exercises are outlined below.
2. On Saturday, participants had to fill in an online happiness journal to record what they felt grateful for on each day during the last week. This happiness journal was apart from the exercise they conducted. Additionally, participants were asked to write a short reflection about the experiences with the exercise of that week.

In week one, participants were asked to write about three good things that had happened to them during each day, for about 15 minutes. Apart from describing the events precisely, they also had to write down why they felt thankful during these situations.

The exercise in the second week was about gratitude for all the things people take for granted because they are present in everyday life. Participants were asked to write about one aspect of their daily life each day for 10 to 15 minutes and to imagine that this aspect is not present anymore.

In week three, participants had to think about one person a day that did something in favor for them during the last week or month. They were then asked to write a letter of gratitude to this person. Additionally, participants were invited to communicate their thankfulness with that person.

During the fourth week, participants were asked to take 15 – 30 minutes each day to write about people, things and moments in their life, which they are most thankful for. They also had to describe precisely what these mean to them.

The fifth week was about the negative things that happen in one's life. Participants were asked to write about difficult moments in their life, for instance an argument with a friend or the loss of a loved one. Then they had to think about the positive impact they can derive from that situation. Additionally, participants were asked if there is something they are thankful for.

During the sixth week, participants were asked to think about gratitude in general. Every morning they had to take five minutes to remember their intention to live a grateful life. This included to ask themselves if they can be thankful for the fact that they just woke up and to think about the things that will happen during the day. The second part of the exercise was to take the time to dwell on the valuable things in life which are not natural and short-term.

Questionnaires

Positive mental health was measured with the Mental-Health Continuum-Short Form (MHC-SF; Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes 2010). It comprises 14 items that represent different types of well-being, namely subjective, psychological and social well-being. On a 6-point-Likert scale, ranging from 0 = “never” to 5 = “each day”, participants have to indicate how they felt during the last month. One item, corresponding the subscale *psychological well-being*, being for instance: “During the last month, how often did you feel that your life has a sense of direction or meaning to it?” A high mean score on the MHC-SF is equal to a high amount of well-being. The validity and reliability of the Dutch version of the MHC-SF are moderate to high (Lamers et al., 2011). In this study, a Cronbach's alpha of $\alpha=.85$ of the MHC-SF was computed.

The current level of depressive symptoms was measured with The Center for Epidemiologic Studies Depression Scale (CES-D), which is a self-rating questionnaire with the emphasis on the affective component of depression, called depressive mood. On a 4-point Likert scale, ranging from 0 = “rarely or none of the time” to 3 = “most or all of the time”, participants have to indicate their feelings during the last week. The CES-D includes twenty items, for example one being “I felt lonely”. The sum scores range from 0 – 60, with a high sum score indicating

more depressive symptoms. The validity and reliability of the CES-D are moderate to high (Radloff, 1977). In this study, the Cronbach's alpha of the CES-D was $\alpha=.60$.

Data analysis

Qualitative Analysis

The qualitative data were analyzed by inductive content analysis and were coded with the program atlas.ti. This was done separately for the data of the happiness journal, in which participants stated each day what they were grateful for and for the reflection part. Firstly, the statements and reflections were read with accuracy in order to screen for similarities and differences in topics. While screening the data, notes were taken to cluster similar topics. Secondly, the notes were structured to get a first version of a possible coding scheme. Then, the data were read two more times to revise possible codes, either by merging two or more topics or by splitting them up. Codes were merged when they seemed to be very similar or when one topic occurred rarely. In the second case, it was decided if a topic could fit one of the other categories, for instance by formulating them broader. Codes were split when the data revealed that one code showed a variety of different topics that could not be combined by one term.

The data of the aspects people were grateful for were coded per day. Each day, participants had to indicate one aspect they feel grateful for. When participants mentioned two different topics on one day, the statement was coded twice. The first version of the coding scheme of topics people were grateful for included 11 codes with 13 different sub-codes: *Relationships with others* (including *Presence of Significant Others*, *Spending Time with Significant Others*, *Receiving Affection*, *Receiving Support or Help* and *Receiving Gratitude*), *Health* (including *Own Health*, *Health of Significant Others*, *Self-Care*, *Exercising with Others* and *Good Health Care System*), *Work* (including *Having Work in General*, *Success in Working Life* and *Nice Colleagues*), *Objects of Material Value*, *Pet*, *Enjoying Free Time*, *Enjoying the Environment*, *Good Things that Happen to Others*, *Memories of Positive Past Events*, *Basic Needs and Negative Events*.

The data of the reflection part were coded per reflection, regardless of the length of the reflection. For each reflection, it was analyzed if a code occurred or not. Sometimes, a code was assigned to one word or one sentence and other times a code was assigned to a whole paragraph. The first version of the coding scheme of participants' reflections revealed 12 codes: *Awareness*, *Mindfulness*, *Shifting focus*, *Appreciating Self-Evident Things and Persons*, *Positive emotions*, *Negative emotions*, *Acceptance of Negative Things*, *Taking the Good out of the Negative*, *Altering Behaviour*, *Sharing Gratitude with Others* and *Life Lessons*.

To find out if the first versions of both coding schemes can be generalized, a sample of five participants was chosen, whose statements were coded by two researchers separately. Afterwards, the results were discussed. Since the coding schemes were not distinct enough, several adaptations had to be made. This procedure was repeated with the second version of the coding schemes. As in the previous case, the statements of a sample of five participants were coded by two researchers to test the quality of the revised coding-scheme. After discussing the second coding round, a few further adaptations were made. The most relevant changes are outlined below.

In the coding-scheme of the topics that participants were grateful for, the sub-code *Receiving Gratitude* had to be withdrawn, since this topic overlapped with the sub-code *Receiving Affection*. The code *Health* was redefined to *Health and Well-Being*. It was decided to withdraw the sub-codes *Exercising with Others* and *Good Health-Care System* as well as the codes *Memories of Positive Past Events* and *Good Things that Happen to Others*, because they were too specific and occurred rarely. Moreover, it became clear that one topic was completely missing in the coding scheme, which included aspects like personal growth or autonomy. Therefore the code *Personal Strengths* was created. The final version of the coding scheme concerning participants' gratitude statements is displayed in table 1.

In the coding scheme for the reflection part, the code *Awareness* was divided into three sub-codes: *Personal Awareness*, *Appreciation* and *Mindfulness*. Additionally, the discussion led to the decision to withdraw the codes *Taking the Good out of the Negative* and *Acceptance of Negative Things*. Two codes had to be redefined and renamed. The code *Sharing Gratitude with Others* became *Influence on Relationships*, while the code *Life Lessons* became *Mental Growth*. The final coding scheme of the reflection part can be found in table 2.

For both coding schemes, Cohen's kappa was computed to assess interrater reliability. A kappa-value of .70 or higher reflects a substantial agreement and a kappa-value of .81 or higher reflects an almost perfect agreement (Viera, & Garrett, 2005).

Quantitative Analysis

The quantitative data were analyzed with SPSS and a significance level of $\alpha=.05$ was accepted. Before conducting the quantitative analyses, a Kolmogorov-Smirnov test (K-S test) was conducted to determine if the data were normally distributed. It was chosen for the K-S test as it is also suitable for small samples. When the significance level is higher than $\alpha=.05$ the data are normally distributed, since the null-hypothesis of the K-S test assumes a normal distribution. The scores of the pre- ($p=.12$) and posttest ($p=.20$) of the MHC-SF were normally distributed. Also the scores of the pre- ($p=.16$) and posttest ($p=.20$) of the CES-D were normally distributed.

Therefore, a paired t-test was used to reveal whether there was a significant difference between pre- and posttest of the MHC-SF and the CES-D.

For further analyses, the difference scores ($t_3 - t_0$) of the MHC-SF and the CES-D were computed. To find out if there was a relationship between the aspects people are grateful for and the MHC-SF difference scores as well as the CES-D difference scores, correlation analyses have been applied. The K-S test revealed that only the data of one code were normally distributed, namely *Enjoying the Environment* ($p=.94$). Therefore, Pearson's r was used to calculate the correlation between the code *Enjoying the Environment* and the differences in mental well-being as well as depression, while for all other codes, the correlations with the outcome variables were calculated by means of Spearman's ρ . The same measure was applied when investigating the relationship between the topics of reflection and the MHC-SF difference scores as well as the CES-D difference scores. All correlations were computed by means of Spearman's ρ , except the sub-code *Appreciation*, which showed a normal distribution ($p=.20$). Pearson's r was used to calculate the correlation between the code *Appreciation* and the differences in mental well-being as well as depression.

Results

Aspects people are grateful for

The content analysis of the gratitude statements revealed ten topics that participants used to describe what they are grateful for: *Relationships with Others*, *Health and Well-Being*, *Work*, *Personal Strengths*, *Enjoying the Environment*, *Life Needs*, *Free Time Activities*, *Objects of Material Value*, *Negative Events* and *Pet*. The results of the content analysis are displayed in Table 1.

People were most grateful for their *Relationships with Others*. In particular, the sub-code *Spending Time with Others*, stood out as it was used more than twice as frequently as every other code. It seemed that participants were most grateful for the moments they experienced with other people. This included especially the time they spend with their family, like the spouse or children, and their friends. The common moments were appreciated most, like a nice conversation or having meals together. Participants were also grateful for the *Presence of Significant Others*, meaning the fact that someone is part of their lives. This mostly included family members. Furthermore, participants stated to feel gratitude for *Receiving Support or Help*, especially during difficult life periods, for example while being sick or after a loved one died. Additionally, participants were thankful for small helpful actions, like help in the household or a good advice of a doctor. When writing about *Receiving Affection*, it was

noticeable that participants felt most gratitude for little gestures they received from others, for instance when they received a friendly card or text message, or were given a compliment. These gestures were especially appreciated when they occurred unexpectedly.

Another important aspect participants were grateful for was *Health and well-being*. This code had three different topics. Firstly, people felt gratitude for the things they did for their own well-being, namely *Self-Care*. Two aspects of self-care were reported most frequently by participants, including exercising, like jogging or yoga, as well as going for a walk. The former was sometimes mentioned in association with other people and the latter was often associated with the nature. Participants also reported the time they took for themselves to relax or for a healthier eating pattern. Another important aspect of health and well-being seemed to be *Own Health and Well-Being*. Several participants reported to feel grateful for just being healthy. Other participants were thankful that they felt healthy enough to exercise. Moreover, several participants seemed to have problems with health issues, but they reported to feel gratitude that their body is able to cope with their problems in a positive way. Additionally to their own health and well-being, the *Health and Well-being of Others* did play an important role for participants. Most frequently mentioned by participants was the feeling of gratitude for the recovery of family members who experienced severe health issues like cancer. Others reported that they were thankful for the birth of a healthy child. Additionally, participants pointed out several aspects, such as being grateful for the nice day one's husband experienced or that a solution was found for the fears of failure of one's son.

Participants often reported work-related topics when writing down what they felt grateful for. Regarding the code *Work*, two important aspects were mentioned. When writing about their work it was conspicuous that participants emphasized the value of their friendly, trustworthy and *Nice Colleagues*. It was noticeable that participants often mentioned time spent with their colleagues, like a good conversation, or small gestures that they received by a colleague, for example saving them a piece of a cake. Furthermore, good and supportive co-working was appreciated. Participants' statements about their *Working Life* included all work-related issues except colleagues. Several participants mentioned that they were thankful for having a job. Sometimes positive feelings associated with this job were added. A second important aspect people reported, was the success many experienced regarding their job, for example a good job interview or a successful project completion.

Apart from feeling gratitude for outside experiences, participants also appreciated their *Personal Strengths*. When mentioning inner strengths, participants seemed to experience personal growth most of the time. For example, they described what they learned from difficult

life periods and how they gained more insight in themselves. Furthermore, autonomy was an important aspect of one's personal strengths. One participant mentioned that she is grateful for being able to stand up for her interests in a meeting while another reported to be thankful for the steps she has taken on her own.

Participants reported to be thankful when *Enjoying the Environment* and when having the possibility to carry out *Free Time Activities*. In mentioning the former, participants mostly wrote about the beautiful nature, and the latter was mainly about small spontaneous activities, like reading a book.

Many participants reported gratitude for the fulfillment of *Life Needs* and for *Objects of Material Value* that ensure them a good standard of living. These codes included things that people often take for granted, but which are essential for a fulfilled life. When mentioning *Life Needs*, it was conspicuous that participants were most grateful for living in a warm and safe house. However, it was also salient that participants felt gratitude for more abstract life needs, like love, freedom and peace.

Some participants wrote about *Negative Events* when reporting what they are grateful for. The disease or the death of a beloved person were mentioned several times by participants. Most participants did not specify which positive consequences emerged from these negative events, this was mostly done in the reflection part.

Table 1

Coding scheme of participants' gratitude statements including the frequency each code occurred with. Interrater-reliability displayed with Cohen's Kappa

Code	Subcode	Explanation	Examples	Kappa = 0.95
Relationships with Others (n=327)	Spending Time with Others (n=146)	Being thankful for spending time with one or more specific person(s). This can be just a conversation on the phone or spending the whole day together.	"Visiting my daughter" "Conversation with friend where we shared emotions and experiences"	0.88
	Presence of Significant Others (n=72)	Gratitude for the fact that a specific person is part of one's life. This can also include the love and trust that this person gives to you.	"My friend, who is always there for me" "The unconditional love of my husband"	1.00
	Receiving Support or Help (n=60)	Another person supports you when you need help. This can be support in difficult situations or just a helpful gesture.	"My husband took a day off to go with me and support me after my surgery"	1.00
	Receiving Affection (n=49)	Another person shows that he or she appreciates you, e.g. by a nice text message, a nice gesture or a compliment. This also includes doing something for another person and this person shows you how thankful he or she is.	"Received flowers and love of my husband" "Got a message of our son at 12pm, Mom, thank you for preparing slices of bread"	0.83
Health/ Well-Being (n=108)	Self-Care (n=54)	Doing something for your own health and well-being, for example by going for a walk, taking a yoga lesson or exercising. This also includes sport with others.	"Physio, exercising is steadily getting better" "Taking part and keep up with October Sober – drinking no alcohol during October"	0.77
	Own Health and Well-Being (n=35)	Feeling of gratitude for being healthy, having a high level of well-being, or being able to cope with life stresses and health issues in a positive way.	"I was happy of course that I woke up every day being healthy and able to step out of my bed"	1.00
	Health and Well-Being of Others (n=19)	Feeling of gratitude for the health and well-being of significant others.	"I was thankful for the fact that my husband woke up in a good health condition, because it turned out that a few days ago he had brain concussion"	1.00
Work (n=98)	Nice Colleagues (n=51)	Thankfulness for a good working atmosphere and the nice and supportive colleagues.	"sick colleagues, team solved it together"	1.00
	Working Life (n=47)	You are thankful for the fact that you have a (good) job and/or you feel gratitude for the successes you experience during your working life. This can also include a feeling of proud, pleasure and ambition.	"Work" "Taking the step to apply, proud of myself"	0.90

Table 1 (Continued)

Coding scheme of participants' gratitude statements including the frequency each code occurred with. Interrater-reliability displayed with Cohen's Kappa

Code	Explanation	Examples	Kappa = 0.95
Personal Strengths (n=51)	Gratitude for one's personal strengths. This includes the ability to use psychological resources, personal growth, autonomy etc.	"That I am more aware of my own resilience after the death of my partner"	0.76
Enjoying the Environment (n=50)	Being grateful for the beauty of nature and the more abstract things in life, e.g. art.	"I was walking through the warm sun" "watched and listened to nice art"	0.85
Life Needs (n=42)	Feeling thankful that the life needs are fulfilled, e.g. love, freedom, enough food and water, being alive etc.	"That we live in peace"	1.0
Free Time Activities (n=36)	You are grateful for all the things you can do in your leisure time. This is about doing things you like, e.g. going to the theatre, playing on the piano or working in the garden.	"The nice bicycle tour" "Time to read my book"	0.88
Objects of Material Value (n=34)	You are grateful for objects of material value that are self-evident for most people. You appreciate the fact that you have a house, a car etc. This also includes less expensive things, e.g. a bed.	"washing machine" "car"	1.00
Negative Events (n=26)	You can also be thankful for negative life events. This does not include that you feel grateful for the event itself, but for the positive things you can extract from these events.	"Death of my parents" "Autism of daughter"	1.00
Pet (n=9)	Feeling of gratitude for the fact that you have a pet animal. This also includes spending time with this animal and receiving signs of addiction from it.	"Cuddle of my cat" "My dog"	1.00

Topics of participants' reflections of the intervention

The content analysis of the reflection exercises revealed seven codes: *Awareness*, *Positive Emotions*, *Mental Growth*, *Shifting Focus*, *Negative Emotions and Consequences*, *Altering Behavior* and *Influence on Relationships*. The coding scheme for the reflections is displayed in Table 2.

In the reflection part, participants most frequently wrote about the *Awareness* they gained through the intervention. This topic had three different aspects. *Appreciation* included participants' gratitude for the things that are part of their everyday life and which they often take for granted. It was especially salient that participants noticed that they have many aspects in their lives to be grateful for, regardless of the setbacks they experience. For example, two participants reported that even though they had a bad day there are still a number of things that make life worth it. According to participants, the intervention helped them to be more aware of the positive things they have in life. Sometimes participants wrote about *Personal Awareness* they gained through the intervention. It seemed that the intervention helped participants to gain deeper insights into their own life situation or specific thinking or behavior pattern. For example, some participants noticed how often they concentrate on the negative things in their lives, while others realized that they already appreciated the positive things in life before the intervention. Another outstanding aspect was that some participants experienced difficulties with the intervention, since they had problems to filter out the positive or to come up with new things they were grateful for after a few weeks of the intervention. As a third aspect of awareness, participants described to experience moments of *Mindfulness*. They wrote for instance that the intervention helped them to dwell on the positive moments in their lives. Several participants reported that they took the time to enjoy these moments more consciously. This seemed to have a positive influence on their feelings.

Many participants reported *Positive Emotions* that were evoked by the intervention. The feeling of happiness as well as the statement that participants feel better were pointed out most frequently. Other feelings that several participants mentioned were calm, gratitude, optimism, satisfaction or warmth.

Almost all participants described experiences that were related to *Mental Growth*, either as a result of the intervention or as a result of previous life events. When reflecting on the exercise, in which participants had to think about negative events that happened to them in the past, many of them described that they gained strength during these life periods and that they were able to accept what they cannot change. Some participants described that they now have another view on their lives because of the intervention. Others were proud of themselves

because of their coping strategies, described behavior that was driven by a feeling of autonomy, or stated that they gained more insight into their inner selves.

Participants reported that the intervention encouraged them to pay more attention to the positive things in their lives. *Shifting Focus* seemed to be a conscious process, meaning that participants intended to shift their focus away from the negative to the positive aspects. One participant even stated that aspects, which you give conscious appreciation, will grow.

It was not always possible for participants to only concentrate on the positive things. In some cases, the reflection about the gratitude exercises evoked *Negative Emotions or Consequences*. Most participants who described negative feelings like sadness or pain were able to return to the positive aspects. However, some of them reported that they cannot see any positive aspects in their situation. It seemed that, for a few participants, the confrontation with the negative aspects of their lives was too difficult and hence resulting in remaining negative feelings.

According to some participants, the intervention motivated them to change their behavior. When writing about *Altering behavior*, participants most frequently reported that the intervention stimulated them to continue with a specific exercise or to concentrate more on the positive aspects in general. They stated for instance that they want to practice more often, also after the intervention. Some participants also reported to be motivated to maintain contacts that feel important to them and one participant even pointed out that she behaves more friendly towards others as a result of the intervention.

Several participants mentioned that the intervention had a positive *Influence on relationships*. Sharing their gratitude with others was of high value for participants. They realized that this evoked positive emotions in themselves as well as others, which seemed to positively influence their relationships. One participant for instance reported that conflicts did not arise as often as before, while another participant felt a stronger bond to family and friends.

Table 2

Coding scheme of participants' reflection about the gratitude-exercises with the frequency of each code. Interrater-reliability displayed with Cohen's Kappa

Code	Subcode	Explanation	Example	Kappa = 0.88
Awareness (n=134)	Appreciation (n=57)	People appreciate the little things in their life as well as self-evident things and persons.	"I became more aware of how thankful I am for the small things in life"	0.75
	Personal Awareness (n=46)	Through the intervention, people are more aware of their own life situation including their thinking and behavioral pattern.	"Through the exercise of last week I am aware how strict and judging I am to myself"	0.78
	Mindfulness (n=31)	People are more aware of their environment and feelings. People experience more mindfulness moments, i.e. being fully in the present and perceiving the moment as it is without being distracted by thoughts about the past or the future.	"It is about how I experience this moment today"	0.79
Positive Emotions (n=62)		The gratitude exercises lead to positive emotions. For example, people report to feel more calmly, happy and thankful.	"I notice that I am happier in general"	0.88
Mental Growth (n=53)		People experience mental growth. For example, they describe that they are more open minded and look at their lives in a different way. Mental growth is different from awareness and shifting focus in the sense that it goes beyond these constructs.	"I learned to look at my experiences in a different kind of way and that, despite all that happened, I have a lot to be grateful for"	0.7
Shifting Focus (n=38)		People shift their focus away from the negative to the more positive things in life. They pay more attention to the positive aspects.	"Writing forced me to shift my focus. Sometimes I really had to ponder but when I began to write I steadily came up with more things I was thankful for"	0.7
Negative Emotions or Consequences (n=28)		Some gratitude exercises trigger negative emotions or even lead to negative consequences. This includes for example negative feelings when thinking about (possible) negative life events, like the death of a loved one.	"I experienced this exercise as emotional and intense"	1.00
Altering Behaviour (n=20)		People report that the gratitude exercises motivate them to change their behavior. For instance, they intend to continue with one (or more) exercise(s) or they plan to be more kind to other persons.	"I intended to think more often about what I am grateful for. At the end of the day. Has to become some kind of ritual"	0.79
Influence on Relationships (n=11)		People recognize that the gratitude exercises have an influence on their relationships. For instance, they notice the value of sharing their gratitude with others. Telling a beloved person why one is thankful to have him/her in one's life seems to have a positive influence on their relationship.	"I smile at the people next to me and conflicts get less"	1.00

Relationship between gratitude and people's well-being as well as depressive symptoms

Before answering the research question, the possible effectiveness of the intervention on the outcome variables well-being and depression was tested to gain more insight into the meaning of the results. A difference score of .53 ($SD=.51$) between the pre- and the posttest of the MHC-SF has been found, indicating that the gratitude intervention resulted in a significant increase of well-being [$t(24)=-5.18$; $p=.000$]. There was also a significant decrease in depression with a difference score of -2.80 ($SD=4.68$) between pre- and posttest of the CES-D [$t(24)=2.99$; $p=.006$], meaning that participants had less depressive symptoms after the intervention.

Relationship between the aspects people are grateful for and mental well-being as well as depression

No significant correlations have been found between the aspects people are grateful for and the difference scores of the MHC-SF and the CES-D (see Table 3). This means that there was no aspect of gratitude that could explain the relationship between gratitude and an increase in mental well-being or a decrease in depression.

Relationship between the topics of reflection and mental well-being as well as depression

Also, there were no significant correlations between the topics of the reflection of the intervention and the difference scores of the MHC-SF and the CES-D, except the code *Altering Behavior* (see Table 4). A significant negative correlation has been found between the code *Altering Behavior* and the difference score of the MHC-SF, indicating that participants who reported more often that the intervention motivated them to alter their behavior, showed a decrease in well-being after the intervention. There was also a significant positive correlation between the code *Altering Behavior* and the difference score of the CES-D, meaning that participants who mentioned a behavioral change in their reflection more frequently, had more depressive symptoms after the intervention.

Table 3

Correlations (r_s or r) and significance level between the topics participants are grateful for and the difference scores on well-being and depression ($t_3 - t_0$)

Code	Subcode	Δ MHC-SF		Δ CES-D	
		correlation r_s	p-value	correlation r_s	p-value
Relationships with Others	Presence of Significant Others	-.09	.649	.11	.586
	Spending Time with Others	-.24	.252	-.19	.370
	Receiving Affection	-.12	.576	.26	.206
	Receiving Support or Help	-.21	.315	.24	.242
Health and well-being	Own Health and Well-being	-.18	.390	.01	.966
	Health and Well-being of Others	-.17	.420	.05	.807
	Self-Care	.28	.182	-.03	.877
Work	Working Life	-.23	.265	-.03	.900
	Nice Colleagues	.17	.410	-.11	.609
Objects of Material Value		.04	.844	-.13	.544
Pet		.08	.718	-.23	.275
Enjoying the Environment		.06 ^a	.792	.21 ^a	.322
Freetime Activities		.12	.567	-.21	.307
Life Needs		-.25	.223	-.27	.195
Personal Strengths		.12	.576	.08	.692
Negative Events		-.08	.703	-.05	.831

^a Pearson's r

Table 4

Correlations (r_s or r) and significance levels between the topics of the reflections on the gratitude intervention and the difference scores on well-being and depression ($t_3 - t_0$)

Code	Subcode	Δ MHC-SF		Δ CES-D	
		correlation r_s	p-value	correlation r_s	p-value
Awareness	Personal Awareness	.24	.251	-.01	.948
	Appreciation	-.04 ^a	.849	-.08 ^a	.691
	Mindfulness	.01	.977	-.10	.651
Shifting Focus		.11	.595	-.12	.574
Mental Growth		.12	.575	-.25	.231
Positive Emotions		.13	.527	-.08	.716
Negative Emotions or Consequences		-.05	.816	-.17	.407
Altering Behaviour		-.53 [*]	.006	.51 [*]	.009
Influence on Relationships		-.04	.864	.05	.981

^a Pearson's r

^{*} Correlation is significant at the 0.01 level

Discussion

The aim of this research was to find out what people are grateful for and if there is a relationship between the aspects of gratitude and mental well-being as well as depression. Moreover, participants' reflections were analyzed to gain deeper insight into participants' experiences with the intervention and to find out if there is a relationship between the topics of reflection and mental well-being as well as depression.

Aspects of gratitude

The content analysis revealed 16 different topics participants mentioned when reporting what they were grateful for, namely *Relationships with Others*, *Health and Well-Being*, *Work*, *Personal Strengths*, *Enjoying the Environment*, *Life Needs*, *Free Time Activities*, *Objects of Material Value*, *Negative Events* and *Pet*. The most relevant findings will be discussed.

It is salient that people are grateful for a variety of aspects. However, relationships with others seemed to play the most important role in people's life, since this topic was mentioned most frequently by participants. This is not surprising, because positive relationships with others are an important aspect of psychological well-being (Ryff, 1989), which might explain why people are grateful for having close and warm relationships. Next to health- and work-related issues, people reported to appreciate the small things they often take for granted, like the warmth of the sun or the free access to fluent water from the water tap. It seemed that the gratitude intervention made people aware of all the things they have in life, although they often do not pay enough attention to them, which became clear in the reflection part of the intervention. One interesting finding was that participants reported to feel grateful for their personal strengths, which included personal growth, autonomy and inner strengths. This showed that people are also thankful for their inner qualities apart from external qualities, which is a remarkable outcome, since the literature continually refers to the outer world as the main source of the feeling of gratitude (Wood et al., 2010; Emmons & Stern, 2013; Alkozei et al., 2017).

Although one aspect of gratitude is always mentioned in the literature, namely that gratitude is the experience of feeling thankful as a result of another person's benevolence, people can also feel grateful for the more abstract things in life (Alkozei et al., 2017). The data showed that participants indeed felt grateful after receiving help, support or affection from another person. However, the data also revealed that people feel thankful for many other aspects in life too, which supports the view that gratitude can be intrinsic in nature (Alkozei et al., 2017). This fits the definition of gratitude used in this study, stating that gratitude includes "noticing and appreciating the positive in the world" (Wood et al., 2010, pp. 890). However, it

was also found that some people feel grateful for inner qualities, like personal strengths, which challenges the assumption that the sources of gratitude mainly lie in the outer world. More research is needed to investigate this. One idea for future research could be to conduct semi-structured interviews with participants who took part in a gratitude intervention to find out more about the sources of gratitude. Semi-structured interviews allow researchers to directly react to participants' answers, while remaining focused on the topic under investigation.

Topics of reflection of the gratitude intervention

This study provided interesting insights into the topics participants reflected on. Seven topics were found in participants' reflections of the intervention, namely *Awareness*, *Positive Emotions*, *Mental Growth*, *Shifting Focus*, *Negative Emotions and Consequences*, *Altering behavior* and *Influence on Relationships*. The first code had three different aspects, including *Appreciation*, *Personal Awareness* and *Mindfulness*. The most relevant findings will be discussed.

According to participants, the gratitude intervention did not only increase their awareness of the environment but also made them more aware of their own thinking and behavioral pattern. Moreover, participants stated that the intervention stimulated them to shift their focus away from the negative to the positive aspects, so that participants consciously experienced the positive moments in their life. Many participants reported positive emotions as a result of the intervention, while some of them got stuck in the negative emotions that were evoked by the intervention, for instance when thinking about negative life events. However, it was conspicuous that many participants reported that they were able to extract positive consequences from difficult situations, like more strengths, better insights into themselves or optimism and to see their situation in another light. This is supported by the finding of Lambert, et al. (2011), who demonstrated on behalf of eight studies that gratitude is related to fewer depressive symptoms and that this relationship is mediated by mechanisms of positive reframing and positive emotion.

Additionally, the intervention motivated participants to change their behavior in the sense that they wanted to continue with a specific task or be more kind to other persons. This was closely related to the influence the intervention had on relationships. By expressing gratitude to other persons, these persons felt appreciated, which in turn had a positive impact on the relationship. A possible explanation for this finding might be provided by Alkozei et al. (2017). They conducted a study proposing two interesting frameworks that might explain the positive relationship between gratitude and subjective well-being. Both frameworks have their roots in the broaden- and build-theory by Frederickson (2001). The first one is the *Cognitive*

Framework, which states that gratitude might broaden the mind by interpreting negative events in a more positive way. This increases the attention for the positive aspects of the environment. This in turn might build physical and emotional resources, which help people to cope with difficult life situations, enhancing health and well-being (Alkozei et al., 2017). This framework shows similarities with the data of participants' reflections. Participants shifted their focus to the more positive aspects in life, which helped them to appreciate the small things in their life. This might led to the experience of mental growth as well as positive emotions. The second framework Alkozei et al. (2017) proposed, was the *Psycho-Social Framework*. According to this framework, gratitude for another person's benevolence might broaden the mind in the sense that an individual creatively considers how to express one's gratitude, which in turn builds more positive relationships. This leads to more social support, thereby enhancing health and well-being (Alkozei et al., 2017). This framework may fit the code *Influence on relationships*. In one week of the intervention, participants had to write letters of gratitude to specific persons, including reading them out loud to this person. This prompted the participants to think creatively about the way they want to express their gratitude. Some participants then reported that this task resulted in more positive relationships and that they planned to express their gratitude more often now. Therefore, the results might be a support for the proposed *Psycho-Social Framework*. Another implication for the relationship between gratitude and positive relationships is the longitudinal study by Wood et al. (2008) about the role of gratitude in the development of social support, stress and depression, which indicated that gratitude leads to higher perceived levels of social support. Therefore, this research supports the possible positive influence of gratitude on relationships. If people integrate gratitude more in their everyday life, this will probably help them to maintain close and warm relationships.

Relationship between gratitude and mental well-being as well as depression

There was a significant increase in well-being as well as a significant decrease in depression after the intervention, indicating that the intervention led to more well-being and less depressive symptoms. However, no significant relationship has been found between the 16 aspects of gratitude and mental well-being as well as depression, indicating that no single aspect of gratitude could explain the relationship between gratitude and mental well-being or depression. There was also no significant relationship between eight of the topics of reflection (*Appreciation, Personal Awareness, Mindfulness, Positive emotions, Mental growth, Shifting focus, Negative emotions and consequences* and *Influence on relationships*) and mental well-being or depression, indicating that none of these topics could explain the relationship between gratitude and mental well-being or depression.

The non-significant correlations between the aspects of gratitude and well-being as well as depression show that it might not be important what people are grateful for as long as they experience gratitude in general. The results of this study show that there was an increase in mental well-being and a decrease in depression after the intervention. Moreover, research demonstrates that gratitude interventions have a positive impact on mental health (Emmons & McCullough, 2003; Seligmann, Steen, Park & Peterson, 2005). A possible explanation for the positive effect of the intervention could be that the focus on the positive aspects in life led to positive emotions, which in turn resulted in an enhancement of well-being and decrease in depression, regardless of the specific aspects of gratitude. This might also explain the missing relationships between the topics of reflection and mental well-being as well as depression. Although these findings suggest that the topics of gratitude are irrelevant and only the feeling of gratitude in general is important for a positive mental health, more research is needed to find out if specific aspects of gratitude enhance well-being and weaken depressive symptoms. When implementing a gratitude intervention in future research, categories of gratitude can be provided to participants beforehand so that participants only have to indicate which topic they feel grateful for. This would facilitate further analyses and enhance generalizability.

However, there was a significant decrease in well-being as well as a significant increase in depression when the topic *Altering behavior* was mentioned more frequently by participants. The relationship found between the code *Altering behavior* and mental well-being as well as depression seems to be controversial. One might expect that a motivation to change behavior would lead to an increased well-being and less depressive symptoms, since the wish to alter the behavior is a positive outcome of the intervention. A possible explanation for the negative relationship between this code and the outcome variables could be that people, who experience the need to alter their behavior, are less happy with their life situation, wherefore they want to change something. Another explanation could be that the wish to change one's behavior leads to stress, since a behavioral change requires some effort. Additionally, a motivation to change does not necessarily lead to a successful outcome. Based on the self-determination theory, several social-cultural conditions facilitate and inhibit the natural processes of self-motivation (Ryan & Deci, 2000). According to this theory, three psychological needs, namely competence, autonomy and relatedness, have to be satisfied to enhance self-motivation and well-being. When these needs are diminished, successful behavior change is less likely to occur (Ryan & Deci, 2000). Maybe, participants felt a motivation to change because one or more of these needs were first increased by the intervention, but then participants were not able to successfully implement the target behavior, which resulted in negative feelings. This might be especially

true for individuals who suffer from depressive symptoms. In a research of Sin, Della Porta and Lyumbomirsky (2010) about the tailoring of positive psychology interventions to treat depressed individuals, an experiment was conducted where participants had to write gratitude letters. The results were unexpected: the dysphoric patients showed an increase in depressive symptoms directly after the intervention. Sin et al. (2010) speculated, that participants experienced the task of writing a gratitude letter as frustrating and difficult, which might evoked negative feelings like guilt, because of the concern that they did not thank a specific person beforehand. Another possible explanation for these results was that the gratitude letter prompted participants with the idea that they had little to be grateful for (Sin et al., 2010). This might also be true for this intervention. When writing about *Negative Emotions and Consequences* some participants mentioned to experience difficulties coming up with new things they could be grateful for after a few weeks of the intervention. This led to frustration. It might be that participants, who had these negative feelings, therefore experienced the wish to change. However, Armenta, Fritz and Lyubomirsky (2016) conducted a research about gratitude as a motivator of self-improvement and positive change, indicating that expressing gratitude leads to motivation and effort towards self-improvement via the mechanisms of connectedness, humility, elevation and negative states like indebtedness or guilt. Armenta et al. (2016) proposed the idea that feelings of indebtedness or guilt motivate people to be a better person. Therefore, the wish to alter one's behavior could possibly be evoked by negative feelings, which would explain why participants, who intended to alter their behavior, firstly experienced less well-being and more depressive symptoms. In future research, the relationship between gratitude and behavioral change in depressed individuals could be investigated using the experience sampling method. The advantage of experience sampling is, that participants can indicate feelings that are associated with behavioral change directly when they occur, which prevents memory bias.

Strengths, limitations and implications for future research

One strength of this research were the coding schemes of the qualitative data. The content analysis was only based on the data, since no literature had been found concerning the topics people are grateful for. By means of two researchers, both coding schemes were discussed and revised two times, resulting in kappa-values that were substantial to almost perfect. Another strength was the use of qualitative as well as quantitative methods. Although the main method used was qualitative content analysis, the results were more meaningful through explaining them by means of quantitative analyses.

This research has three limitations. First, the sample used in this research might not be representative. It was chosen to only include 25 participants out of the 85 who conducted the intervention. All participants of the sample filled in the whole happiness journal, while the rest filled it in only partially. It was assumed that the chosen sample therefore conducted the intervention most conscientiously. As a result, the sample might be not representative for the other 60 participants or the whole society. However, it is assumed that the completeness of the happiness journal is not related to the aspects people are grateful for. The selection of the sample additionally resulted in a slight increase of the mean age and participants under the age of 38 were not included in the analysis. However, only a minority of participants were considerably under the age of 38, which raises the question if the intervention was not suitable or valuable for younger participants. Furthermore, it should be considered if young people feel grateful for other aspects than do older people. In future research, the topics of gratitude should be investigated in a broader, more representative sample. It would be interesting to examine, if there is a difference between young adults, middle-aged adults and older adults regarding the aspects they feel grateful for. Moreover, future interventions should contain questions to ask for reasons (e.g. absence of time or need) why participants did not fill in the whole intervention.

Secondly, the relationships between the aspects and reflection of gratitude and mental well-being as well as depression were only measured by means of correlation analysis, although a correlation does not give any information about the causality of a specific relationship. Future research should examine which aspects of gratitude lead to an enhanced well-being and less depressive symptoms. This could be tested in a randomized controlled trial where participants are assigned to different groups and each group is asked to focus on a specific aspect of gratitude, including a control group. Additionally, it could be interesting to find out more about gratitude in depressed individuals, for instance about the long-term effects of gratitude interventions and if some gratitude exercises really evoke negative feelings in participants that lead to more depressive symptoms.

Finally, there was one limitation regarding the intervention design. The data revealed that some participants were confused by the different tasks they received. Several participants did not understand that the gratitude exercises they conducted during the week were not necessarily related to the online happiness journal, which they had to fill in at the end of the week. Only the reflection part was about the intervention tasks but the journal, in which participants had to report what they were thankful for, was apart from the exercises. Future practice should concentrate on more specific tasks to make the aim of the intervention more

distinct for participants. This would also be beneficial when analyzing which aspects of gratitude lead to an increase in well-being and a decrease in depressive symptoms.

Conclusion

This research revealed that participants are grateful for many different aspects in their lives and that gratitude in general has a positive impact on well-being and leads to a decrease of depressive symptoms. However, not all aspects of gratitude are beneficial, some can lead to negative emotions. Although the data give a good first overview of the aspects people are grateful for, more research is needed to find out which aspects of gratitude have the most positive impact on people's life and which aspects might have a negative impact, especially for depressed individuals.

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