



Gratitude as a Tool for Emotional Empowerment in Orphaned Adolescents: A Positive Psychology Perspective

¹Sathyapriya Sakarias, ²Dr. Jeena Madhavan

¹ PhD research scholar, Dept of Psychology and Allied Science, Jain Deemed to be University, Bangalore, 560027, India

² Associate Professor, Dept of Psychology Allied Science, Jain Deemed to be University, Kochi, Kerala, 682042, India

Abstract

Adolescents living in orphanages often face significant emotional challenges due to limited familial support, exposure to trauma, and unstable life circumstances. This study aimed to investigate the effects of a structured four-week gratitude intervention on the emotional well-being of adolescents residing in orphanages. A quasi-experimental design was used, 20 participants aged 13 to 18 years from institutional care. The study utilized the Scale of Positive and Negative Experience (SPANE) to assess the emotional well-being of the participants. The four-week intervention included weekly group sessions and daily gratitude-based homework. Activities included gratitude journaling, mindful walks, peer conversations, and creative exercises like the gratitude flower. Daily homework reinforced emotional awareness and gratitude practice outside the sessions. The results indicated a significant increase in positive affect and a reduction in negative affect, leading to improved affect balance post-intervention. No significant gender differences were observed. These findings support existing research suggesting that gratitude enhances psychological well-being, promotes emotional regulation, and strengthens resilience among adolescents. This study contributes to the fields of psychology, social work, and child welfare by presenting gratitude as a low-cost, adaptable tool for emotional empowerment. It emphasizes the need to integrate structured gratitude practices into mental health programs for vulnerable adolescents. Future research with larger samples and control groups is recommended to validate and expand upon these results.

Keywords: Emotional empowerment, Gratitude intervention, Orphaned adolescents, Positive psychology, Psychological wellbeing

Introduction

Adolescence is a transition period that acts as a link between childhood and adulthood. It found that globally around fourteen percent of adolescents are likely to face mental health problems (World Health Organization, 2024). Even though adolescence is a complex stage that includes physical, psychological, intellectual and social changes, it also offers growth opportunities that are both positive and transformative, which can have lasting effects on one's life (National Academies of Sciences, Engineering, and Medicine, 2019). However, this transition phase is not without challenges. Research studies that focus on the mental health of adolescents reveal that during this period, adolescents face risks of emotional problems like anxiety, depression, stress, isolated feelings, difficulty in social interaction, and different behavioral problems (Kaur et al., 2018). Gratitude practices can help in developing a positive mindset, positive relationships, improve self-esteem, enhance hope, promote positive behaviors, and reduce negative emotions (Diniz et al., 2023). Thus, incorporating gratitude interventions into daily life helps adolescents navigate different challenges they face, ensures emotional empowerment and serves as a tool to increase positive affect and maintain emotional balance.

This study aimed to explore the impact of a gratitude intervention on the emotional growth and well-being of adolescents residing in orphanages. Adolescents living in orphanages are often more vulnerable than non-orphans and

are at more risk for mental health challenges, behavioral problems due to their circumstances (Sahad et al., 2017). By focusing on a gratitude intervention, this study aims to examine whether regular gratitude practices can empower adolescents emotionally, enhancing positive affect, reducing negative affect, and improving overall affect balance. Affect refers to the general experience of feeling or emotion, which may not always be linked to a specific cause. Positive affect is the experience of pleasant emotions like joy and interest (Miller, 2011). Negative affect is a general feeling of emotional distress, including emotions like anxiety, sadness, anger, and guilt (Stringer, 2013). When individuals experience more positive emotions than negative ones, they are said to have a positive affect balance, and it ensures greater well-being. On the other hand, a negative affect balance is when negative emotions occur more often and it is linked to emotional distress (Diener et al., 2010).

It was hypothesized that participants would demonstrate a significant increase in positive affect and a significant decrease in negative affect from pre- to post-intervention, as measured by the SPANE. Furthermore, it was expected that the overall affect balance, which is calculated as the difference between positive and negative affect, would improve significantly after the intervention. Finally, the study explored whether the effects of the intervention differed by gender.

Gratitude: A catalyst for balancing positive and negative affect

Gratitude is an emotional and cognitive process that plays an important role in enhancing well-being. It is characterized by feelings of happiness, thankfulness, or appreciation (Emmons & McCullough, 2003) often emerging from actions by others or relief from negative circumstances or recognizing positive aspects in one's life (Watkins et al., 2003). Conceptually, gratitude is defined as a positive emotional response to tangible or intangible benefits one receives and it involves two stages, acknowledging the goodness in life and recognizing the sources of this goodness (McCullough et al., 2004). Gratitude functions both as an emotional state in response to a specific situation and as a trait where a person consistently experiences and appreciates positives in life over the long term (Jans-Beken et al., 2020; McCullough et al., 2002).

In the framework of positive psychology, gratitude is not just limited to happiness felt in that moment but it's an emotional strength that, when practiced regularly promotes long-term emotional balance and well-being (Seligman & Csikszentmihalyi, 2000; Fredrickson, 2004). According to Fredrickson's Broaden-and-Build Theory of Positive Emotions (2004), when people feel grateful they focus less on problems and exhibit more flexible and open thoughts and actions and this concept refers to the broadening of thought-action repertoire. This broader thinking helps to develop physical, social, and

mental well-being, in broaden and build theory this process is referred as building resources. Thus Broaden and Build Theory suggests that gratitude helps to develop cognitive and behavioral capacity and helps individuals to build internal strengths.

Gratitude is a learned response that is shaped through social, emotional and cognitive development (Hussong et al., 2019; Nelson et al., 2013). Expression of gratitude develops over time and therefore age-appropriate interventions during adolescence can play a crucial role in strengthening emotional balance.

Emmons and Shelton (2021), in the chapter Gratitude and the Science of Positive Psychology, explain gratitude as both a personal strength and a socially valuable character trait that promotes psychological well-being, prosocial behavior and enables individuals to face difficulties with a positive and optimistic approach. Therefore cultivating gratitude in young people is not only beneficial for emotional development but also helps in building a more ethical, empathetic and unified community.

A substantial amount of research supports how gratitude enhances positive emotions. Emmons and McCullough (2003) state that individuals who engaged in gratitude exercises such as writing things they are grateful for showed increased life satisfaction and positive emotional states. Also, daily gratitude practices lead to a greater increase in emotional well-being compared to weekly reflections.

According to Dickens(2017), Gratitude interventions ensure positive benefits like happiness, improvement in overall mood, and positive affect. Evidence shows that practicing gratitude can lower depressive symptoms. This confirms the use of various gratitude interventions, such as journaling blessings and gratitude letter writing, as effective ways to enhance positive affect. Regular gratitude practices strengthen emotional stability, making gratitude a preventive emotional regulation tool, especially for adolescents, whose emotional balance is still developing. Similarly in a study with university students, those who practiced gratitude reported higher levels of positive affect, resilience and better coping resources (Kilbert et al.,2019). Diniz et al. (2023) conducted a meta-analysis and found that gratitude interventions can be used as a therapeutic tool for anxiety and depression and are beneficial in promoting emotional well-being in the general population.

Indian research also states gratitude is positively correlated to well-being among adolescents. A quasi-experimental study by Khanna and Singh (2016) evaluated the impact of a five-week classroom-based gratitude program on 177 adolescents aged 11 to 14 in North India. The intervention involved activities such as gratitude journaling and expressions of thankfulness. Findings revealed that participants in the intervention group experienced notable improvements in psychological well-being, life satisfaction, and positive emotional states when compared to those who did not receive the

intervention. The study suggests that incorporating structured gratitude practices can effectively promote emotional health in adolescents. Similarly, Iqbal and Dar (2022) found that a six-week counting blessings intervention blessings exercise significantly improved life satisfaction, increased positive affect, and reduced negative affect, with the strongest effects observed among adolescents with low baseline self-esteem (Iqbal & Dar, 2022).

The study “*Gratitude and Quality of Life Among Adolescents: The Mediating Role of Mindfulness*” examined how mindfulness influences the link between gratitude and well-being in Indian adolescents (N = 249), results suggest that gratitude enhances mindfulness, which in turn contributes to better overall well-being. The study highlights the need for incorporating gratitude and mindfulness training in adolescent education to improve emotional health. The research adds to the limited Indian literature on gratitude and adolescent well-being, emphasizing the value of culturally relevant interventions.

Sharma (2021) examined 100 adolescents to explore the link between gratitude, happiness, and emotional intelligence. The study found that gratitude was significantly related to both happiness and emotional intelligence, suggesting that more grateful adolescents tend to be happier and emotionally stronger. No gender differences were observed.

The findings by Palani and Jayasurya (2023) align with the current study's focus on the emotional benefits of gratitude in adolescents. Their results highlight that individuals with higher gratitude also tend to exhibit greater optimism and a stronger sense of personal growth initiative. This supports the present study's view that gratitude is not only associated with immediate positive affect but also contributes to long-term emotional development.

Present study adds to the growing body of research demonstrating the emotional benefits of gratitude, particularly for adolescents in institutional care. By focusing on orphaned adolescents, a group often facing emotional neglect and psychological vulnerability, this study highlights the value of structured gratitude interventions in enhancing positive emotions, reducing negative affect, and improving overall emotional balance. Supported by both international and Indian evidence, the findings reinforce the importance of integrating low-cost, culturally sensitive gratitude practices into mental health programs to promote emotional well-being in underserved adolescent populations.

Method

Study Design

A quasi-experimental design was employed to examine the effects of a gratitude intervention on the emotional well-being of adolescents. Twenty participants, aged between 13 and 18 years, were selected through

convenience sampling. Pre-test and post-test assessments were systematically administered to evaluate the outcomes of the intervention. A limitation in this research study is the absence of a control group for comparative analysis.

Participants

Participants were included if they were adolescents between the ages of 13 and 18, residing in institutional settings, able to read and write and provided informed assent along with institutional consent. Exclusion criteria involved any diagnosis of a severe psychiatric disorder or cognitive impairment, current engagement in other psychological interventions targeting emotional well-being, or an inability to complete the intervention sessions.

Tools Used

The study utilized the Scale of Positive and Negative Experience (SPANE) to assess the emotional well-being of the participants. Participants responded to 12 items on a 5-point scale, reflecting how frequently they experienced certain feelings. The tool provides scores for positive affect, negative affect, and an overall affect balance. The SPANE was validated among Indian adolescents (ages 11–17) by Singh et al. (2017), showing good internal consistency ($\alpha = 0.80$ for positive and $\alpha = 0.75$ for negative experiences) and a confirmed two-factor structure (CFI ~ 0.96 , RMSEA ~ 0.06). Cross-cultural research (Iqbal et al., 2022) supported SPANE's reliability among Indian adolescents, with positive correlations to life satisfaction,

confirming its suitability for assessing emotional well-being in youth.

Procedure

Data were collected using a self-report format using the Scale of Positive and Negative Experience (SPANE), before the intervention and after the completion of the four-week intervention program. Participants filled the questionnaires individually, and researcher was present to give guidance if required. Responses were recorded on printed forms and later entered digitally for analysis.

Intervention

The following are gratitude intervention activities spread over four weeks, with steps for each weekly session and assigned homework. Each activity is designed to reinforce the practice of gratitude among adolescents and encourage emotional empowerment.

In week one, the intervention centers on composing heartfelt messages of gratitude. The focus is to help adolescents express gratitude directly to individuals who have positively impacted their lives. As the first step, the session begins with a discussion about the importance of expressing gratitude and its emotional benefits. Then, participants are encouraged to think of someone they feel grateful for, it can be a friend, caregiver, teacher, or anyone meaningful. They then write a message to this person, thanking them and explaining why they are grateful (Khanna & Singh, 2019; Seligman et al., 2005). Participants are reminded to be specific about what actions or qualities they appreciate. Later

those who are willing are invited to share their messages with the group. For homework, participants are asked to deliver the messages in person or through a written note and write down how it felt to express gratitude.

Week two introduces the concept of gratitude walk. This intervention helps to promote mindfulness and gratitude for the environment by noticing things around them that bring joy or peace. Take the group on a short, slow walk outdoors and ask to notice things they feel grateful for. It could be things in nature, such as trees, sunlight, sounds, or anything that brings a feeling of appreciation. After the walk, ask participants to share what they noticed and appreciated during the walk. As homework participants are asked to take a 5-minute gratitude walk each day and note down three things noticed during the walk that gave a feeling of gratitude (Greater Good Science Center, n.d.).

In Week 3 participants engage in Gratitude Box which focuses on creating a space for expressing gratitude for specific moments, people or actions. A decorated box labeled Gratitude Box is introduced and participants are asked to drop notes of things they feel grateful for. They are encouraged to be specific about what they write for example “I am grateful to my friend for helping with my project”. Before placing the note in the box, each participant is asked to read it aloud and briefly share what it means to them. Then as a group, they reflect on how it feels to express and listen to the feeling of gratitude (Boggio et al., 2020). For homework,

they are asked to write at least one gratitude note daily and add it to a personal gratitude box and reflect on how doing this influences mood and emotions (Emmons & McCullough, 2003).

Week 4 includes two activities, Gratitude Conversations and the Gratitude Flower. Activity 1 is Gratitude Conversations. For this Pair participants and give them cards with a simple question about something to be thankful for. For example, participants may asked to talk about a personal strength or talent and how someone appreciated it recently or to reflect on something they often take for granted but are grateful for (Making Caring Common, 2024). Gather everyone back and discuss how sharing gratitude verbally felt and any new perspectives they gained.

Activity two is Gratitude Flower making, for this provide paper and colored markers for each participant and ask each participant to draw a large flower with several petals and write down one thing they are grateful for in each petal. Display flowers on a gratitude wall to create a visual reminder of each participant's blessings (Shulman & Pan, 2023). As a long-term homework, participants are encouraged to do gratitude journaling; for this, they are asked to keep a book and write three positive experiences or moments of gratitude each day (Emmons & McCullough, 2003).

Ethical Considerations

Detailed information regarding the purpose, procedures, and benefits of the study was provided to the head of the institution and

participants. Participants were also clearly informed that their participation is voluntary, and they could withdraw from the study if they wanted to at any point. Informed consent was taken from the head of the orphanage, and informed assent was taken from the participants.

Data Analysis

Statistical analysis was carried out using the SPSS software. The normality of the data was assessed using the Kolmogorov–Smirnov and Shapiro–Wilk tests. Since all variables had a normal distribution, parametric tests were used for further analysis. Paired samples t-tests were conducted to compare pre- and post-intervention scores for positive affect, negative affect, and affect balance. An independent samples t-test was done to check whether there are gender differences in outcomes.

Results

Normality of the data is tested using Kolmogorov-Smirnov and Shapiro-Wilk tests. The Sig. value is greater than 0.05 in all variables, so all the variables follow normal distribution. Since the data follow normal distribution parametric test can be adopted for further statistical analysis.

Table 1**Tests of Normality**

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-SPANE-P	.128	20	.200*	.973	20	.824
Pre-SPANE-N	.161	20	.189	.963	20	.598
Pre-SPANE-B	.162	20	.177	.948	20	.343
Post-SPANE-P	.140	20	.200*	.965	20	.642
Post-SPANE-N	.187	20	.066	.954	20	.437
Post-SPANE-B	.192	20	.051	.954	20	.426

*. This is a lower bound of the true significance.

To evaluate the effect of the gratitude intervention on positive affect, a paired samples *t*-test was conducted using the SPANE-P scores. The analysis compared the mean pre-intervention score ($M = 19.00$, $SD = 3.92$) with the post-intervention score ($M = 22.65$, $SD = 3.51$) among 20 adolescent participants. Results revealed a statistically significant increase in positive affect following the intervention, $t(19) = -6.707$, $p <$

.001. The significance value ($p < .05$) indicates a statistically significant difference between pre- and post-intervention positive affect scores. This suggests that participation in the structured gratitude activities led to enhanced positive emotional experiences. The findings support the hypothesis that adolescents residing in orphanages would demonstrate a measurable improvement in positive affect after engaging in the gratitude-based program.

Table 2**Positive Affect**

Paired Samples Statistics							
	Mean	N	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)	Remark
Pre-SPANE-P	19.00	20	3.920	.877	-6.707	.000	Significant
Post-SPANE-P	22.65	20	3.514	.786			

To determine the impact of the gratitude intervention on negative affect, a paired samples *t*-test was performed using SPANE-N scores collected before and after the intervention. The analysis showed a reduction in the mean score from 16.15 ($SD = 2.78$) at pre-test to 13.35 ($SD = 2.78$) at post-test among 20 participants. This difference was statistically significant, $t(19) = 3.538$, $p < .001$, indicating that the intervention was effective in decreasing negative emotional experiences among adolescents residing in orphanages. These findings support the

hypothesis that participation in a structured gratitude program leads to a significant decrease in negative affect.

Table 3*Negative Affect*

Paired Samples Statistics							
	Mean	N	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)	Remark
Pre-SPANE-N	16.15	20	2.777	.621	3.538	.000	Significant
Post-SPANE-N	13.35	20	2.777	.621			

Paired samples *t*-test was conducted on the affect balance scores (SPANE-B), calculated by subtracting the negative affect score (SPANE-N) from the positive affect score (SPANE-P). The analysis showed a significant increase in affect balance following the intervention. Specifically, the mean score improved from 2.85 (SD = 4.89) at pre-test to 9.30 (SD = 4.75) at post-test, $t(19) = -9.561$, $p < .001$. this scores indicates that the gratitude intervention effectively increased positive emotions while reducing negative emotions, leading to a more balanced emotional state among the adolescent participants. These findings support the hypothesis that structured gratitude practices can significantly enhance positive affect balance in adolescents residing in orphanages.

Table 4*Affect Balance*

Paired Samples Statistics						
	Mean	N	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pre-SPANE-B	2.85	20	4.891	1.094	-9.561	.000
Post-SPANE-B	9.30	20	4.747	1.062		

An independent samples *t*-test was conducted to examine whether the impact of the gratitude intervention differed significantly between male and female adolescents residing in orphanages. The mean scores post intervention for males ($M = -6.50$, $SD = 2.95$) and females ($M = -6.40$, $SD = 3.24$) were compared. The results revealed no statistically significant difference between the two groups, $t(18) = -0.072$, $p = .943$. Since the *p*-value exceeds the standard alpha level of .05. This supports the null hypothesis, indicating that gender did not significantly influence the intervention's effectiveness.

Table 5*Gender Differences*

Independent sample T test							
Gender	N	Mean	Std. Deviation	Std. Error	t	Sig. (2-tailed)	Remark

			viat ion	or M ea n	- tai le d)	
MA LE	1 0	- 6.5 00 0	2.9 533 4	.93 39 3	- 0. 07 2	.9 43
FE MA LE	1 0	- 6.4 00 0	3.2 386 6	1.0 24 15		

Not
Signif
icant

Discussion

The present study focused on the impact of a structured four-week gratitude intervention program for adolescents residing in orphanages with the objective of enhancing positive affect, reducing negative affect, and improving overall affect balance.

The results show a significant increase in positive affect scores post-intervention and this supports the hypothesis that gratitude can enhance positive emotions and expressions. From a theoretical perspective of Broaden-and-Build Theory, positive emotions like gratitude expand an individual's momentary thought-action repertoires, helping them develop lasting psychological and social resources (Fredrickson, 2004). Supporting this Isen (2000) found that people experiencing positive emotions are not only more flexible and creative in their thinking, but also more motivated and persistent when they

believe their efforts lead to meaningful outcomes. For adolescents in orphanages, who often face emotional neglect, gratitude practices may thus serve as both an emotional regulator and a motivational force empowering them to build better emotional responses and greater psychological well-being.

The findings are also supported by Emmons and McCullough (2003), who found that individuals who regularly focused on gratitude reported higher levels of positive affect and overall well-being. Similarly, Watkins et al. (2003) states that higher gratitude scores are linked to greater well-being and findings showed that gratitude focused thinking enhanced mood. Findings by Khanna and Singh (2016) examining the effects of a structured gratitude intervention on well-being indicators among adolescents in North India further support the result of the present study, after the intervention program, students in the intervention group showed more gratitude, felt happier and were more satisfied with their lives compared to those who did not get the training. This supports the current study's findings and shows that gratitude activities can help adolescents lift emotional empowerment. Similarly, Iqbal and Dar (2022) found that gratitude interventions significantly increased positive affect and life satisfaction while decreasing negative affect among Indian adolescents, particularly those with low self-esteem. The current study supports these outcomes, showing similar emotional improvements among adolescents in orphanages,

a group that faces even greater emotional challenges.

The current study also confirms a significant decrease in negative affect post-intervention. This aligns with the findings of Dickens (2017) who analyzed many studies stated that gratitude interventions consistently lower symptoms of anxiety and depression. Kilbert et al. (2019) found that university students who wrote about gratitude every day had fewer negative feelings and handled stress better. It also suggests gratitude interventions may be well-suited to help individuals to build on existing positive experiences and gratitude activities can help people make the most of good experiences by helping them stay in a positive mood for longer

The present study shows similar results in orphaned adolescents, suggesting that gratitude can help calm their emotions and support them even without strong family or social support. The findings of this study are further supported by meta-analysis by Diniz et al. (2023), it was observed individuals who participated in gratitude interventions reported increased feelings of gratitude, improved mental health, and significantly reduced symptoms of anxiety and depression. Also, gratitude interventions helped to increase positive feelings. These findings suggest that gratitude can be a helpful tool in improving emotional well-being. In the current study, this supports the idea that gratitude activities can help orphaned adolescents feel

emotionally stronger by reducing negative feelings and building more positive ones.

In the current study affect balance scores show a statistically significant improvement, indicating a more emotionally balanced state of mind among participants. Also, both male and female adolescents showed similar improvements in positive affect, reductions in negative affect, and enhancements in overall affect balance. Significant gender differences were not found in the impact of the intervention. These results are supported by Palani and Jayasurya (2023) who found a positive link between gratitude, optimism, and personal growth initiative among adolescents and young adults. Their research also noted that these traits remained consistent across different age groups, genders, and family types. It supports the current study's observation that the benefits of gratitude are not influenced by gender. Similarly, Sharma (2021) reported strong associations between gratitude, emotional intelligence, and happiness in adolescents, with no significant gender differences. These findings suggest that gratitude-based interventions can support emotional empowerment in adolescents, regardless of their gender. This outcome is particularly relevant for institutional settings like orphanages, where gender-based programming may not always be feasible.

Limitations

One limitation of this study is the absence of a control group. To improve the accuracy of future findings, it is recommended that researchers use a randomized controlled trial

design and include follow-up assessments to see the benefits in the long run.

Conclusion

The present study underlines the effectiveness of gratitude based interventions in enhancing emotional well-being among adolescents living in orphanages. The structured four-week intervention program led to an increase in positive affect, a reduction in negative affect, and an overall improvement in emotional balance. These findings suggest that gratitude can be an effective tool for promoting emotional empowerment in adolescents. The results also showed that males and females benefited equally from the intervention, thus gratitude activities can be helpful for all adolescents, no matter their gender. From an interdisciplinary perspective, the study contributes to the fields of psychology, child welfare, and social work by emphasizing the potential benefits of gratitude interventions in fostering emotional well-being among adolescents living in orphanages. Additionally, the findings underscore the importance of further research in this area to gain deeper insights into the long-term effects of gratitude interventions on emotional well-being and mental health.

Author contributions

Conceptualization, Sathyapriya Sakarias; methodology, Sathyapriya Sakarias; formal analysis, Sathyapriya Sakarias; investigation, Sathyapriya Sakarias; resources, Sathyapriya Sakarias; data curation, Sathyapriya Sakarias; writing—original draft preparation, Sathyapriya Sakarias; writing—review and editing, Sathyapriya Sakarias, Jeena Madhavan; supervision, Jeena Madhavan. All authors

have read and agreed to the published version of the manuscript.

Competing interests

The authors declare no competing interests.

Corresponding Author

Sathyapriya Sakarias

PhD Scholar, Dept of Psychology and Allied Science, Jain deemed to be University, Bangalore, India.

Mobile No.: 8105735956, ORCID: 0009-0003-7759-4724, E mail: sathyapriyasakarias@gmail.com

References

- Anand, P., Bakhshi, A., Gupta, R., & Bali, M. (2021). Gratitude and quality of life among adolescents: The mediating role of mindfulness. *Trends in Psychology*, 29, 1–15. <https://doi.org/10.1007/s43076-021-00077-z>
- Boggio, P. S., Giglio, A. C. A., Nakao, C. K., Wingenbach, T. S. H., Marques, L. M., Koller, S., & Gruber, J. (2020). Writing about gratitude increases emotion-regulation efficacy. *The Journal of Positive Psychology*, 15(6), 783–794.
- Dickens, L. R. (2017). Using gratitude to promote positive change: A series of meta-analyses investigating the effectiveness of gratitude interventions. *Basic and Applied Social Psychology*, 39(4), 193–208. <https://doi.org/10.1080/01973533.2017.1323638>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156. <https://doi.org/10.1007/s11205-009-9493-y>
- Diniz, G., Korkes, L., Tristão, L. S., Pelegrini, R., Bellodi, P. L., & Bernardo, W. M. (2023). The effects of gratitude interventions: a systematic review and meta-analysis. *Einstein (Sao Paulo, Brazil)*, 21, eRW0371. https://doi.org/10.31744/einstein_journal/2023RW0371
- Diniz, G., Korkes, L., Tristão, L. S., Pelegrini, R., Bellodi, P. L., & Bernardo, W. M. (2023). The effects

of gratitude interventions: a systematic review and meta-analysis. *Einstein (Sao Paulo, Brazil)*, 21, eRW0371. https://doi.org/10.31744/einstein_journal/2023RW0371

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. *Journal of personality and social psychology*, 84(2), 377–389. <https://doi.org/10.1037//0022-3514.84.2.377>

Emmons, R. A., & Shelton, C. M. (2001). Gratitude and the science of positive psychology. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 459–471). Oxford University Press.

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359(1449), 1367–1377.

Greater Good Science Center. (n.d.). *Gratitude nature walk*. University of California, Berkeley. <https://ggie.berkeley.edu/>

Hussong, A. M., Langley, H. A., Rothenberg, W. A., Coffman, J. L., Halberstadt, A. G., Costanzo, P. R., & Mokrova, I. (2019). Raising Grateful Children One Day at a Time. *Applied developmental science*, 23(4), 371–384. <https://doi.org/10.1080/10888691.2018.1441713>

Iqbal, N., & Dar, K. (2022). Gratitude intervention and subjective well-being in Indian adolescents: Examining the moderating effects of self-esteem. *Child Indicators Research*, 15(1), 177–195. <https://doi.org/10.1007/s12187-021-09871-8>

Isen, A. M. (2000). Positive affect and decision making. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 548–570). Guilford Press.

Jans-Beken, L., Jacobs, N., Janssens, M., Peeters, S., Reijnders, J., Lechner, L., & Lataster, J. (2019). Gratitude and health: An updated review. *The Journal of Positive Psychology*, 15(6), 743–782. <https://doi.org/10.1080/17439760.2019.1651888>

Jovanović, V., Rudnev, M., Iqbal, N., Rice, S. P. M., & Żemojtel-Piotrowska, M. (2022). Cross-Cultural Measurement of Positive and Negative Emotions in Adolescence: Evidence from Three

Countries. *Journal of happiness studies*, 23(7), 3143–3160. <https://doi.org/10.1007/s10902-022-00521-6>

Kaur, R., Vinnakota, A., Panigrahi, S., & Manasa, R. V. (2018). A descriptive study on behavioral and emotional problems in orphans and other vulnerable children staying in institutional homes. *Indian Journal of Psychological Medicine*, 40(2), 161–168. https://doi.org/10.4103/ijpsym.ijpsym_316_17

Khanna, P., & Singh, K. (2016). Effect of gratitude educational intervention on well-being indicators among North Indian adolescents. *Contemporary School Psychology*, 20(4), 305–314. <https://doi.org/10.1007/s40688-016-0087-9>

Khanna, P., & Singh, K. (2019). Do all positive psychology exercises work for everyone? Replication of Seligman et al.'s (2005) interventions among adolescents. *Psychological Studies*, 64, 1–10.

Klibert, J., Rochani, H., Samawi, H., Leleux-LaBarge, K., & Ryan, R. (2019). The impact of an integrated gratitude intervention on positive affect and coping resources. *International Journal of Applied Positive Psychology*, 3, 23–41.

Making Caring Common. (2024, August 15). *How to develop gratitude through conversations*. Making Caring Common. <https://mcc.gse.harvard.edu/resources-for-families/gratitude-through-conversations>

McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: a conceptual and empirical topography. *Journal of personality and social psychology*, 82(1), 112–127. <https://doi.org/10.1037//0022-3514.82.1.112>

McCullough, M. E., Tsang, J. A., & Emmons, R. A. (2004). Gratitude in intermediate affective terrain: links of grateful moods to individual differences and daily emotional experience. *Journal of personality and social psychology*, 86(2), 295–309. <https://doi.org/10.1037/0022-3514.86.2.295>

Miller, D. N. (2011). Positive affect. In S. Goldstein & J. A. Naglieri (Eds.), *Encyclopedia of child behavior and development*. Springer. https://doi.org/10.1007/978-0-387-79061-9_2193

Nelson, J. A., de Lucca Freitas, L. B., O'Brien, M., Calkins, S. D., Leerkes, E. M., & Marcovitch, S. (2013). Preschool-aged children's understanding of

gratitude: relations with emotion and mental state knowledge. *The British journal of developmental psychology*, 31(Pt 1), 42–56. <https://doi.org/10.1111/j.2044-835X.2012.02077.x>

Palani, B. T., & Jayasurya, K. (2023). Study on relationship between gratitude, optimism and personal growth initiative among adolescents and young adults. *International Journal of Indian Psychology*, 11(4), 1578–1587. <https://doi.org/10.25215/1104.142>

Rickman, C. (2013, November 10). *Walking into well-being: The power of the gratitude walk*. HuffPost UK. https://www.huffingtonpost.co.uk/cheryl-rickman/walking-and-wellbeing_b_3902687.html

Sahad, S. M., Mohamad, Z., & Shukri, M. M. (2017). Differences of mental health among orphan and non-orphan adolescents. *International Journal of Academic Research in Psychology*, 4(1). <https://doi.org/10.46886/ijarp/v4-i1/3492>

Sciences, N. A. of, Engineering, and Medicine; Health and Medicine Division; Division of Behavioral and Social Sciences and Education; Board on Children, Youth, & Families; Committee on the Neurobiological and Socio-behavioral Science of Adolescent Development and Its Applications. (2019, May 16). *Adolescent Development*. The Promise of Adolescence: Realizing Opportunity for All Youth. <https://www.ncbi.nlm.nih.gov/books/NBK545476/>

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14.

Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American psychologist*, 60(5), 410.

Sharma, G. (2021). Relationship of gratitude and emotional intelligence with happiness among adolescents. *International Journal of Indian Psychology*, 9(2), 1468–1485. <https://doi.org/10.25215/0902.151>

Shulman, N., & Pan, H. (2023, May 16). *Friendship flower gratitude craft*. Hachette Book Group. <https://www.hachettebookgroup.com/store/friendship-flower-gratitude-craft/>

Singh, K., Junnarkar, M., & Jaswal, S. (2017). Validating the Flourishing Scale and the Scale of

Positive and Negative Experience in India. *Mental Health, Religion & Culture*, 19(9), 943–954. <https://doi.org/10.1080/13674676.2016.1229289>

Stringer, D. M. (2013). Negative affect. In M. D. Gellman & J. R. Turner (Eds.), *Encyclopedia of behavioral medicine*. Springer. https://doi.org/10.1007/978-1-4419-1005-9_606

Toepfer, S. M., Cichy, K., & Peters, P. (2011). Letters of gratitude: Further evidence for author benefits. *Journal of Happiness Studies*, 13(1), 187–201. <https://doi.org/10.1007/s10902-011-9257-7>

Watkins, P. C., Woodward, K., Stone, T., & Kolts, R. L. (2003). Gratitude and happiness: Development of a measure of gratitude, and relationships with subjective well-being. *Social Behavior and Personality: An International Journal*, 31(5), 431–451.