

DIGITAL-BASED GRATITUDE INTERVENTION IN ADOLESCENCE AT THE RUMAH PIATU MUSLIMIN FOUNDATION ORPHANAGE

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Abstract: *As a vulnerable group, adolescents living in orphanages tend to experience various psychological issues, such as difficult regulating emotions, a lack of self-acceptance, and low life satisfaction. It has been observed among foster children and adolescence at the Yayasan Rumah Piatu Muslimin Orphanage in Jakarta. The assessment results showed that obstacles to life satisfaction triggered negative emotions and anxiety about the future. Therefore, a digital gratitude intervention was developed to increase positive emotions and life satisfaction. This intervention involved two stages, with 10 children aged 12–17 participating. The first stage focused on gratitude education, while the second stage used a digital visual and reflective approach involving photography, writing, and verbal expression. Evaluations measured using the Skala Syukur, Positive and Negative Affect Schedule (PANAS), and the Satisfaction With Life Scale, conducted through pre-test and two post-tests, revealed an increase in positive emotions and life satisfaction, as well as a decrease in negative emotions, following the intervention. Participants emphasized the need for better time management and more engaging material to optimize program outcomes.*

Keywords: *Digital-Based Gratitude Intervention; Emotion; Orphanage.*

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INTRODUCTION

Orphanage-reared adolescents encounter considerable challenges on a daily basis. Adolescents residing in orphanages are often confronted with a multitude of challenges and adversities. These challenges are often compounded by their status as orphans, abandoned children, or those who have been separated from their families due to economic circumstances. Consequently, these adolescents must possess a high degree of resilience and fortitude in navigating the numerous stressful situations they encounter. This phenomenon is particularly salient among adolescents, who are undergoing a psychologically sensitive period characterized by heightened vulnerability to stress (Arsini et al., 2022; Nyiagani & Kristinawati, 2021).

A previous study by Haryanti et al. (2016) demonstrates a number of issues pertaining to the emotional and mental development of adolescents residing in orphanages, compared to children

of the same age in general. Adolescents residing in orphanages frequently manifest symptoms of anxiety, worry, pessimism, and even social withdrawal. From an emotional standpoint, they are also frequently observed to have a propensity towards instability and variability.

This finding is consistent with the results of a preliminary assessment conducted by students from the Faculty of Psychology at YARSI University. These students participated in an internship course at the Yayasan Rumah Piatu Muslimin (YRPM) orphanage in Central Jakarta during the previous academic year. In the setting of a social psychology internship course, students were assigned to assess nine children in the orphanage for approximately two months. The assessment results indicated that the majority of the children at the YRPM orphanage exhibited challenges, particularly with regard to the regulation of their emotions and their acceptance of their life and self.

Theoretically, emotional regulation is defined as the process of perceiving and comprehending emotions, in addition to their management (Brackett & Mayer in Arsini et.al., 2022). In this case, the children and adolescence at the YRPM orphanage appear to demonstrate deficiencies in their emotional regulation, with a tendency to conform to their moods and a reduced capacity to express their emotions in a suitable manner. This deficit in emotional regulation exerts an indirect influence on the decision-making capabilities of the youth residing at the YRPM orphanage.

In circumstances where they are required to make decisions, these children frequently resort to escape or run away, and express their emotions in a manner that is not conducive to the resolution of the problem. This tendency is along with a propensity to adopt a future orientation that evades the pursuit of higher education and professional occupation. This cognitive approach also exerts an influence on their motivation to learn.

These various problems may have an impact on the children and adolescents in those orphanages, related to the acceptance of their circumstances and their satisfaction with life. Life satisfaction can be defined as one's subjective and reflective assessment of the extent to which one's life is in line with one's expectations, values, and goals. This assessment is generally related to the fulfillment of personal needs, the presence of positive emotions, and a positive attitude towards life (López-Gómez et al., 2020). Low life satisfaction among children in orphanages is feared to cause problems such as emotional and behavioral instability, stress, social anxiety, and long-term impacts on their subjective well-being (Wendt et al., 2019), which can also be detrimental to the future of the children themselves, especially those who come from underprivileged families.

The YRPM orphanage management has been making efforts to motivate their foster children to learn and improve their emotional regulation skills through several initiatives, such as providing

examples and training from external parties working with the orphanage. Nevertheless, these endeavors have thus far been quite unsuccessful in engendering long-term effects or impacts. Consequently, the implementation of a sustainable and effective intervention is imperative to address these issues. In the context of self-acceptance, the cultivation of a sense of gratitude is identified as a pivotal factor.

From an emotional perspective, gratitude is conceptualized as a positive emotional state characterized by feelings of thankfulness and appreciation in response to the acknowledgment of benevolent actions or behaviors. This sentiment of gratitude is directed not only towards a divine entity but also towards human beings for a specific object (Emmons & McCullough in Putra et al., 2019). Substantial research has identified a positive correlation between gratitude and life satisfaction, with evidence suggesting that this phenomenon is not exclusive to adults but extends to adolescents as well (Lam et al., 2025). Furthermore, a previous intervention conducted by the author found that gratitude training can increase positive emotions and reduce negative emotions (Putra et al., 2019).

Conversely, conventional training methodologies, such as one-time training, are perceived to be less efficacious in constructing enduring effects on participants. A more participatory approach that fully involves participants in behavioral change is required. A digital approach is considered suitable for youth nowadays, given their dependence on gadgets and the internet. Furthermore, some gratitude training models have been adapted to digital-based gratitude interventions, such as online gratitude journals, text messages of appreciation, or reflective activities on digital platforms and social media. Recent studies have indicated that digital-based gratitude interventions are consistently effective in increasing life satisfaction and positive emotions in various populations (Choi et al., 2025; Kirca et al., 2023). The effects tend to manifest more potently on the positive affect dimension and can persist for several weeks following the intervention (Fuller et al., 2025).

In addition to increasing positive emotions, digital-based gratitude interventions have also been shown to reduce negative emotions, including stress, anxiety, and depression. Several studies conducted on individuals exhibiting symptoms of moderate to severe psychological distress have demonstrated that the provision of gratitude training via smartphone applications over a period may result in a substantial reduction in symptoms related to depression, anxiety, and stress (Fuller et al., 2025; Hamka et al., 2023). The fundamental mechanism that underpins the gratitude intervention process is a shift in focus from negative experiences to an appreciation of the positive aspects of life. It, in turn, serves to reduce the intensity of maladaptive emotional responses.

The digital approach is also considered to have a number of advantages over conventional training methods. Digital interventions offer ease of access and flexibility because they can be operated whenever and wherever via personal devices, without the need for physical presence in

face-to-face sessions (Cunha et al., 2019; Walsh et al., 2022). Digital applications have been shown to offer automatic and regular reminders, which may help improve participant compliance and also overcome motivational barriers that often occur in traditional training (Fuller et al., 2025; Gold et al., 2023). Moreover, the digital format facilitates the incorporation of interactive content, including videos, audio, guided meditation, and gamification, thereby fostering participant engagement (Walsh et al., 2022). Those advantages render digital-based gratitude interventions more flexible, interactive, and potentially more impactful than conventional approaches.

Based on these issues, the author provides a solution in the form of a digital-based gratitude intervention to increase life satisfaction and enhance positive emotions among adolescents at the YRPM Orphanage. Furthermore, there has never been any digital-based gratitude training or such intervention in Indonesia, while digital approaches to gratitude intervention abroad are mostly conducted in the form of experimental research (Suneetha & Kunasetti, 2023). Meanwhile, the results of the author's previous gratitude intervention program also indicate the need to pay attention to the training methods applied, especially regarding emotion induction. The emotion induction stage in the conventional approach sometimes tends to stimulate negative emotions if not followed by appropriate psychological treatment. Therefore, in this training program, the author no longer uses conventional training methods.

METHOD

The intervention program utilizes the Action Research method. The training programme is comprised of three primary phases. First, participants are tasked with the identification of aspects for which they should feel grateful, and the subsequent elimination of negative thoughts. Second, participants engage in contemplation or reflection on the things for which they can or should feel grateful. Third, participants express their gratitude in specific ways. This intervention model is integrated with the concept of a digital-based gratitude intervention approach, which adapts the 'Three Good Things' method from Lai and O'Carroll (Lai & O'Carroll, 2017) and combines it with the concept of place-based gratitude intervention (Bunn et al., 2022).

The three stages of intervention were carried out over two days. The first stage of the intervention was a presentation about the concept of gratitude, covering knowledge about gratitude, the urgency of being grateful, the benefits of being grateful, and ways to be grateful. This material was delivered in the form of a presentation by one of the proposing team members on the first day. The second stage involved participants reflecting on things they could or should be grateful for and identifying those things. The reflection and identification sessions were divided into two different days. The reflection session was conducted on the first day of the intervention, where participants were asked to sit and bow their heads, close their eyes, and reflect on the things

that had made them happy, the things they had, and the people they felt they should be grateful to, which they then wrote down on the Positive Emotions Sheet.

Meanwhile, the identification session was conducted on the second day, entirely through digital media, and integrated with participants' expressions of their gratitude. The aspects of this identification were taken from the concept of 'Three Good Things', namely "Please think of today and write down three things in your life that you are grateful for", which was translated into Indonesian, with the word 'today' modified to 'this Orphanage' (Lai & O'Carroll, 2017). Participants took photos of specific locations in the orphanage that they were most grateful for. After that, participants were asked to select their favorite photo and write down the three things they were most grateful for related to those locations on a digital platform in the form of the *CANVA* application. In the next expression session, participants were asked to express their gratitude through video.

The evaluation was conducted using the impact assessment approach, using a pre-test and two post-tests. The instruments used in the measurement were the Gratitude Scale, PANAS (Positive and Negative Affect Scale) to measure positive and negative emotions, VAS (Visual Analog Scale) to measure affection, and the Satisfaction with Life Scale (SWLS) to measure life satisfaction (Putra et al., 2019). Before the first stage of the intervention, participants were first given those three questionnaires. Then, at the end of the first day of training and at the end of the second day of training, participants were given the same four scales again. After that, the differences in the average scores of gratitude, positive-negative emotions, and life satisfaction of the participants before and after the intervention will be analyzed to see if there is an increase in scores as a result of the intervention. In addition, monitoring will also be carried out, where participants are asked to provide feedback on the intervention program that has been given. An overview of the intervention flow can be seen in Figure 1.

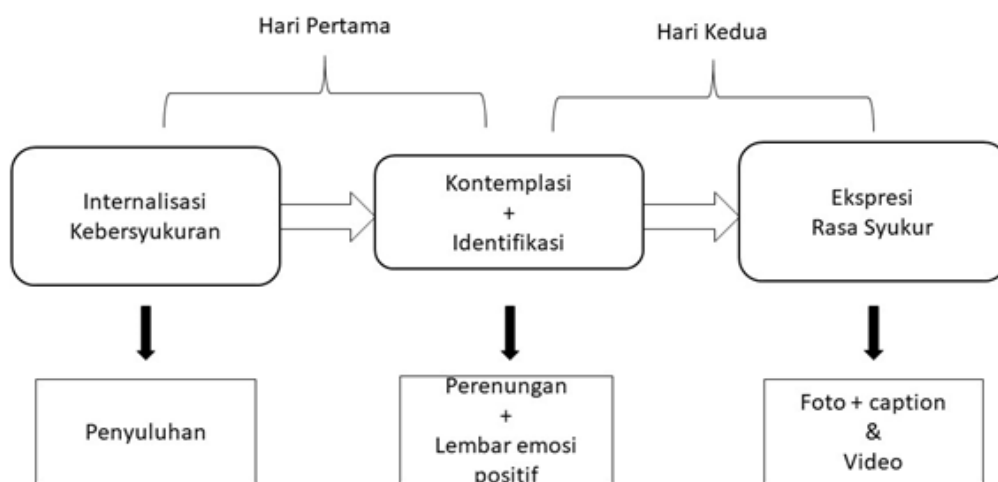


Figure 1. Gratitude Intervention Flow

RESULTS AND DISCUSSION

The first day of the intervention program was conducted on July 29, 2025, at the Rumah Piatu Muslimin Foundation (YRPM) orphanage house in the afternoon. There were 17 participants on the first day of training, consisting of 12 female adolescents and 5 male adolescents, whose aged between 11 and 17 years old. Two participants who are still 11 years old were not included in the data analysis process. Before the intervention began, participants were first given the pre-test. The pre-test used 4 measurement instruments, the Gratitude Scale, SWLS, PANAS, and VAS.

The first session began with an educative presentation on gratitude, given by one of the team members who had conducted extensive research on gratitude (Listiyandini et al., 2015). The content of this gratitude material was an explanation of the meaning of gratitude, the urgency of being grateful, gratitude as a form of positive emotion, and ways to increase gratitude. After the education, the intervention continued with a session of reflection and expression of gratitude. In the reflection session, participants were asked to bow their heads and close their eyes, then think about and imagine the things they were grateful for in their lives and for how they lived in the orphanage. After reflecting for several minutes, participants were asked to fill out a positive emotion sheet containing five statements about things that made them feel better than others, feel happy, and want to express gratitude. The first day of the intervention ended with the first post-test, using the same questionnaire as the pre-test.



Figure 2. Participants Take a Photo of Their Orphanage

The second day of the intervention was held on the afternoon of August 13, 2025, at the same location, with 10 participants consisting of 5 boys and 5 girls. These ten people had also participated in the first day of the intervention. On the second day, a digital-based intervention was carried out. The first digital intervention was to ask participants to take photos of the places they

were most grateful for in the orphanage. Some participants took photos using their own cell phones, while the intervention team lent others cell phones. Each participant could take between 3-5 photos. After taking the photos, participants were asked to choose one photo they liked the most and upload it to the *CANVA* platform on the laptop provided by the intervention team. After that, in accordance with the ‘Three Good Things’ concept (Gold et al., 2023), participants were asked to write down in that *CANVA* three things they were most grateful for from the location in the photo they had chosen.

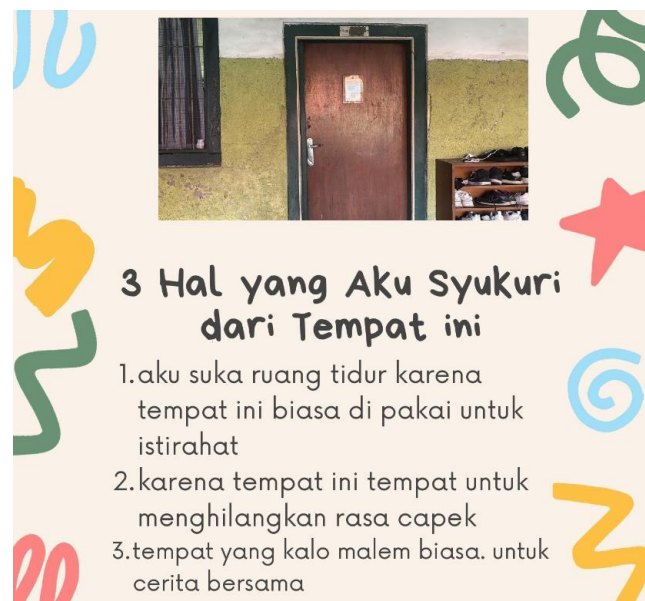


Figure 3. Example of The Participant’s Photo and Gratitude Caption

In the second digital intervention session, still using the ‘Three Good Things’ concept, participants were asked to express three things they were grateful for about living in the orphanage in the form of a video, which was recorded by smartphone with the help of the intervention team. At the end of the entire intervention process, participants were given a second post-test, using the same questionnaire as in the pre-test and post-test on the first day. As part of maintaining ethical standards, all photos, *CANVA* writings, and videos taken from participants were guaranteed confidentiality and were only used for the intervention team's data analysis purposes.

Subsequent to the conclusion of all intervention processes, a data analysis was conducted. The data analysis encompassed the scores from the Gratitude, SWLS, PANAS, and VAS scales obtained from the pre-test, first post-test, and second post-test, employing the *JASP* and Microsoft Excel software. An analysis of variance (*ANOVA*) was conducted to measure the variances in the participants' levels of gratitude, life satisfaction, and emotions prior to and following the

intervention. The results of the one-way ANOVA test showed that there were no statistically significant differences in the levels of gratitude, life satisfaction, and affection among the participants before and after the intervention ($p > 0.05$).

Table 1. Data Analysis Results

Categories	N	Score Means			sig.
		Pre-test	1 st Post-test	2 nd Post-test	
Gratitude	10	134.47	133.67	133.1	0.948
Life-satisfaction	10	21.73	21.47	22.8	0.793
Positive emotions	10	29.13	28.47	29.7	0.906
Negative emotions	10	32.53	30.67	30.3	0.906

Consequently, data analysis then continues to be conducted by examining the alterations in the mean scores of the four scales provided between the pre-test, post-test, and second post-test. The findings indicated a significant increase in the average life satisfaction score of the participants, from 21.73 to 22.8. Previous studies have shown that gratitude is positively associated with life satisfaction and mental well-being in adolescents. Gratitude has been demonstrated to exert a positive influence on mood, with a reduction in stress, anxiety, and depression (Chauhan et al., 2025; Oriol et al., 2021). It, in turn, has been shown to enhance life satisfaction.

Furthermore, gratitude has been found to act as a mediator for the influence of various positive factors that contribute to life satisfaction and resilience in adolescents (Lam et al., 2025). Likewise, gratitude has an ability to enhance subjective well-being, a fundamental component of life satisfaction (Bono et al., 2023; Chauhan et al., 2025; Fuller et al., 2025; Oriol et al., 2021). This enhancement is achieved through a reduction in anxiety and depression, and an increase in hope.

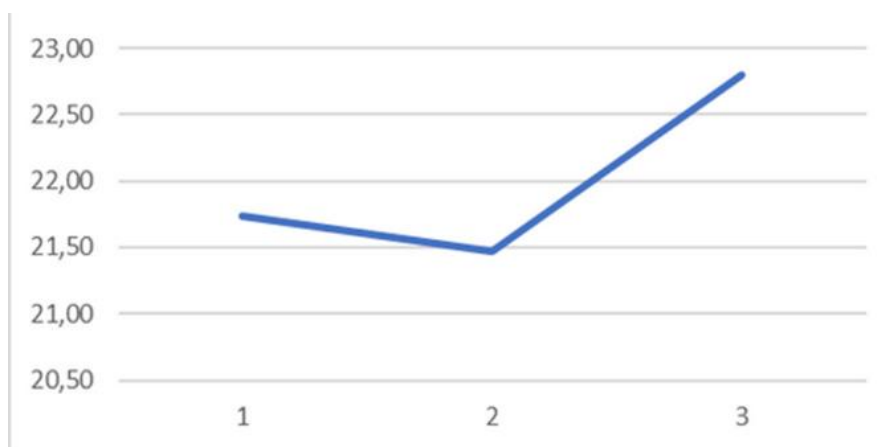


Figure 4. Increasing Life Satisfaction

Digital-based interventions tend to be easily accessible to adolescents, especially those from orphanages or low socioeconomic backgrounds, as these interventions are effective and may be accessed without much cost (Fuller et al., 2025). Consequently, these interventions have the capacity to enhance resilience and subjective well-being in the face of challenging environmental circumstances, thereby facilitating the development of structured and repetitive gratitude practices. It enables the manifestation of more profound effects and a more extensive impact (Bono et al., 2023; Fuller et al., 2025; Saboor et al., 2024; Walsh et al., 2023). Furthermore, gratitude also has a function as a protective factor for adolescents grappling with specific psychological challenges arising from the digital realm. It has been shown that these adolescents evince a high level of gratitude, which enables them to maintain life satisfaction despite high levels of victimization in the digital environment, like social media (Oriol et al., 2021). The utilization of digital technologies in the context of gratitude training has the potential to facilitate more effective adaptation in adolescents when confronted with the pervasive challenges of the digital landscape, which is often characterized by adverse influences.

Then, for positive emotions, there was an increase in the average score of participants from 29.13 to 29.7. It is in contrast to negative emotions, which decrease in average scores from 32.53 to 30.3. These results show that the intervention provided was successful in increasing participants' life satisfaction and positive emotions, as well as reducing their negative emotions. This result is similar to the number of previous digital gratitude interventions that have been found to increase positive emotions and reduce negative emotions and stress in young people (Datu et al., 2022; Fuller et al., 2025; Saboor et al., 2024; Srivastava & Ghosh, 2023; Walsh et al., 2022).



Figure 5. Increasing Positive Emotion and Decreasing Negative Emotion

Digital tasks such as writing down feelings of gratitude and expressing them in the digital world may encourage teenagers to scan their days for good and positive things, rather than focusing on their problems. This feeling can increase gratitude and positive affect, and reduce negative emotions as well, compared to controlled tasks (Datu et al., 2022; Walsh et al., 2023). Writing or

expressing gratitude online reassures adolescents to reinterpret the events they experience as opportunities, help, or blessings, rather than burdens. Focusing on experiences of gratitude has been shown to improve cognitive reappraisal abilities to reduce responses to negative stimuli (Boggio et al., 2020). Furthermore, sending thank-you messages via text or apps can increase feelings of connectedness and reduce loneliness, which can lead to perceptions of social support that correlate with increased positive emotions (Walsh et al., 2022).

For the gratitude aspect of the participants, there was a decrease in scores from 134.47 to 133.1. This decrease was more likely because the material on gratitude education was only given on the first day, and on that day, many participants were tired due to the training being conducted in the late evening. This assumption is supported by two other findings: a decrease in participants' life satisfaction and positive emotions in the second post-test; the feedback provided by participants in the monitoring sheet, which showed that most participants requested that the next intervention be carried out in the morning instead of the afternoon.

On the other hand, this decline in gratitude scores also implies a number of limitations of this intervention program. The relatively short training period of only two days may have made participants more critical in realizing the lack of gratitude in their lives, so that the self-report scores generated from the gratitude questionnaire actually declined temporarily (Lehr et al., 2024). In addition, adolescents with certain gratitude traits may be less suited to or even less receptive to the gratitude material provided, resulting in weak or random effects (Oltean et al., 2022).

CONCLUSION

The results of the intervention indicate an increase in life satisfaction and positive emotions, accompanied by a decrease in negative emotions. The use of digital platforms and methods such as *Three Good Things* helped participants shift their focus from the burdens of life and negative exposure to the digital world to an appreciation of the positive things in their living environment. Although the statistical test results did not show a significant difference, the trend in the average score change indicated that this approach was quite effective in providing affective stimuli related to adaptive gratitude for adolescents. There are several limitations in the implementation of this program, particularly the relatively short duration of the intervention, which is also a drawback, as this time limitation may trigger temporary critical awareness of the lack of gratitude in participants. As a suggestion for further research or community service, it is recommended that the intervention be carried out in the morning or afternoon to ensure the psychological and physical readiness of the participants. Thus, overall, this digital-based gratitude intervention shows potential in improving the psychological condition of adolescents living in orphanages. Concurrently, the

integration of digital technology needs to be maintained and developed further, given its ability to offer flexibility and high appeal to the current generation of adolescents.

GRATEFUL NOTE

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