The Effect of Emotion Regulation Training Through Free Expressive Art Therapy on Emerging Adults

Dery Kurniawan*, Vania Shavina Santri, Nuning Dewi Lestari, Ivana Nurul Fasha, Umi Latifah
Universitas Bina Bangsa, Indonesia
Email: dery.kurniawan@binabangsa.ac.id*

Keywords
emotion regulation, art therapy

Abstract

This study aimed to examine the effect of emotion regulation training using the Free Expressive Art Therapy approach on emotional regulation in young adults. The study employed an experimental design consisting of a control group and an experimental group. Emotional regulation was measured using the Emotion Regulation Questionnaire (ERQ), adapted into the IERQ4S, through pre-test and post-test assessments. The control group participated in a single session of Free Expressive Art Therapy training, while the experimental group received the same training followed by three days of self-guided practice. Data were analyzed using the N-gain test, a normality test, and an independent samples t-test. The normality test indicated that the data were normally distributed ($p > 0.05$). However, the results of the independent samples t-test showed a significance value of 0.244 ($p > 0.05$), indicating no statistically significant difference in emotional regulation between the control and experimental groups after the intervention. It can therefore be concluded that emotion regulation training using the Free Expressive Art Therapy approach did not have a significant effect on participants' emotional regulation. These findings may have been influenced by the relatively short duration of the intervention, participants' level of engagement, and the nature of emotional regulation itself, which requires a continuous developmental process.

INTRODUCTION

Early adulthood is a transitional period from adolescence to adulthood, during which individuals are expected to achieve emotional stability in order to carry out developmental tasks effectively (Davita, 2021). According to Santrock, early adulthood is a transitional stage marked by physical and cognitive changes. Individuals reach a more mature physiological condition, while their thinking becomes more complex, reflective, and adaptive. In line with this, Goleman, Salovey, Mayer, and Gardner emphasize early adulthood as a critical period for the development of emotional intelligence. Goleman further highlights that this stage forms a foundation for individuals to better understand and manage their emotions (Khairuzzakiah, Barus, & Syahputra, 2025).

Emotions play a central role in early adulthood, a period characterized by multiple demands and adaptation to new life situations. Goleman (2002) defines emotions as specific feelings and thoughts that reflect biological and psychological states and involve action tendencies (Walinono et al., 2024). Crow and Crow describe emotions as internal states of tension that function as mechanisms of adaptation to the environment to ensure well-being and safety (Habsy et al., 2024). Thus, emotions are essential in helping young adults navigate developmental changes and life demands.

Emotion regulation refers to the process by which individuals influence their emotional experiences, expressions, physiological responses, and emotion-eliciting situations in order to respond appropriately to environmental demands (Giyati & Wibowo, 2023). Gross and John (in Friniar et al., 2023) describe it as efforts to manage emotions as they arise, enabling individuals to remain calm and think rationally in challenging situations. Individuals with strong emotion regulation skills are better able to manage basic emotions effectively (Kogoya & Jannah, 2021). Emotion regulation also plays a central role in mental health and psychosocial adjustment (Lee & Lee, 2024).

Effective emotion regulation is associated with reduced anger, anxiety, and depression, as well as increased forgiveness (Widyari & Fitriani, 2023). Hanifah (2020) found that individuals with higher emotion regulation demonstrate more adaptive behavior, benefit themselves and others, and show better problem-solving abilities, leading to increased well-being.

Gross and Thompson (in Tipani et al., 2025) categorize emotion regulation strategies into antecedent-focused strategies, such as cognitive reappraisal, and response-focused strategies, such as expressive suppression. Reappraisal involves reinterpreting situations to modify emotional impact, while suppression refers to inhibiting emotional expressions after emotions arise. Emotion regulation, therefore, reflects the ability to recognize, manage, and express emotions appropriately in context (Friniar et al., 2023; Tipani et al., 2025).

Emotion regulation also involves self-control, adaptation, and the ability to respond to situations in a more adaptive manner (Fitriani et al., 2024). It contributes to the development of positive social relationships and helps individuals address problems without impulsive reactions (Arnesty & Pedhu, 2023). In adolescents and university students, this skill is particularly important due to heightened vulnerability to stress, mood fluctuations, and academic and social pressures (Meganingtyas & Mufitasari, 2022).

Early adulthood is a challenging transition period marked by continued personal development and potential conflict (Sya'diyah et al., 2022). At this stage, individuals are expected to integrate into adult society and assume independent roles (Fahyuni, 2019). Challenges include education, employment, family responsibilities, and financial pressures. Young adults are also expected to take on new social roles such as becoming spouses or parents and supporting their families (Dewi & Ambarwati, 2023). Fauzi and Selian (2025) found that emotion regulation in early adulthood typically begins with negative emotional states such as anxiety, confusion, and feeling overwhelmed, triggered by academic, familial, and social demands.

Given these challenges, the development of emotion regulation skills in early adulthood is essential. Roberton, Daffern, and Bucks (as cited in Dimas et al., 2023) note that higher emotion regulation is associated with more adaptive social behaviors such as cooperation, empathy, and helping others. Conversely, poor emotion regulation can lead to difficulties in emotional control and problem-solving. Therefore, strengthening emotion regulation skills is important for maintaining emotional stability and supporting adaptive decision-making in daily life (Lutfianawati et al., 2023).

This study used the Emotion Regulation Questionnaire (ERQ) developed by Gross and John (2003) to assess emotion regulation. The ERQ measures two dimensions: cognitive

reappraisal and expressive suppression. In this study, the instrument was culturally adapted into the IERQ4S to ensure contextual relevance for Indonesian participants.

Cognitive reappraisal refers to the ability to reinterpret situations to alter their emotional impact and is classified as an antecedent-focused strategy (Tipani et al., 2025). Expressive suppression refers to the inhibition of emotional expression after emotions arise and is categorized as a response-focused strategy (Tipani et al., 2025).

The ERQ in this study used a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). Scores were calculated by summing item responses, with higher scores indicating greater emotion regulation ability.

Emotion regulation can be understood as the ability to recognize, manage, and express emotions appropriately to achieve emotional balance and adaptive functioning (Giyati & Wibowo, 2023; Friniar et al., 2023; Tipani et al., 2025).

One effective approach to supporting emotion regulation is through art. Ki Hajar Dewantara defined art as human activity arising from inner feeling that embodies beauty, while Sujoko defined it as a skill for evoking aesthetic experience. Herbert Read, as cited in Prawira (2017, p. 13), defined art as the creation of pleasing forms that satisfy human aesthetic perception. The Kamus Besar Bahasa Indonesia defines art as skill or expertise in producing high-quality works.

Art represents the expression of human emotions through various media such as movement, sound, and visual elements. Visual art includes elements such as form, color, line, plane, and texture (Prawira, 2017). Denis Huisman, as cited in Sulistyo (2006), identified three functions of art: philosophical, psychological, and social value. Art thus serves as a medium of communication and social expression between individuals and society.

According to Syafi'i (2025), art functions as a medium for emotion regulation in early adulthood by enabling individuals to externalize and reinterpret emotional experiences. A study involving 200 university students found that 60% reported reduced stress and 65% experienced improved emotional well-being following art-based activities (Syafi'i, 2025).

Drawing activities also function as a medium for emotional expression and reflection. Riyanto and Handoko, as cited in Bazlina et al. (2023), describe drawing as a process of expressing ideas and imagination through visual media. In educational contexts, drawing combined with group activities can enhance emotional awareness and regulation.

Art therapy is a therapeutic approach that uses artistic media to help individuals manage emotional conflict, explore feelings, regulate behavior, and improve social functioning (Purwati et al., 2023). It is based on the assumption that every individual has the capacity for creative expression (Purwati et al., 2023). Çataldaş et al. (2024) found that art-based interventions positively influence emotion regulation, improve ego functioning, and strengthen interpersonal relationships.

METHOD

Emotion regulation training for early adults was designed using a participatory, reflective, and experiential learning approach. The primary intervention consisted of free expressive art through drawing, complemented by group discussions, experience sharing, self-reflection, and coping exercises. This approach enabled participants to understand emotion

regulation concepts while also providing space to express and manage emotions in more adaptive ways (El-Fikri et al., 2025; Murti & Ayriza, 2024).

The training began with a psychoeducational session covering basic concepts of emotions, emotion regulation, emotional triggers, physiological responses, and coping strategies. The material was delivered through interactive lectures, discussions, and question-and-answer sessions to encourage participant engagement and support understanding (Murti & Ayriza, 2024).

Following the psychoeducation session, participants engaged in free expressive art activities by representing their emotions through drawing. This activity provided a structured opportunity for self-reflection and emotional expression. The intervention emphasized the creative process rather than artistic quality as a means of supporting adaptive emotional regulation (Çataldaş et al., 2024; Aprilia, 2025).

The effectiveness of the training was evaluated using a two-group pretest–posttest design involving an experimental group and a control group. Both groups completed the pretest on the same day. The control group completed the posttest immediately after the training session, while the experimental group completed the posttest on the third day after independently engaging in three consecutive days of Free Expressive Art activities. This design was intended to assess changes in participants' emotion regulation abilities.

The process of cross-cultural adaptation followed the guidelines proposed by Beaton et al. (2000) and Sousa and Rojjanasrirat (2010) to ensure linguistic equivalence and cultural relevance of the instrument for the study population.

Data analysis was conducted after all research data had been collected. A quantitative descriptive statistical approach was used to examine the findings. This method was applied to evaluate changes in participants' emotion regulation following the Free Expressive Art intervention. Improvements in emotion regulation were assessed using the normalized gain (N-gain) score proposed by Hake (1998), as presented in the following equation.

$$g = \frac{sf - si}{100 - si}$$

g = gain
sf = *post-test*
si= *pre-test*
According to Husein et al. (2017), the calculated N-Gain scores were classified into predefined categories.

Table 1. N-Gain categories

No	Tingkat Presentase(%)	Kriteria
1	$g \geq 0.7$	Tinggi
2	$0.3 \geq g > 0.7$	Sedang
3	$g < 0.3$	Rendah

Subsequently, a normality test was performed to examine whether the data met the assumptions of normal distribution. To test the proposed hypothesis, an independent samples t-test was conducted.

RESULT AND DISCUSSION

The study began by assessing participants' emotion regulation levels using the Emotion Regulation Questionnaire (ERQ), which had been culturally adapted into the Indonesian version (IERQ4S). The pretest was administered to both the control and experimental groups to establish baseline levels of emotion regulation prior to the intervention.

Following the pretest, participants in the control group attended a single session of emotion regulation training using the Art Therapy: Free Expressive Art approach on the same day. In contrast, participants in the experimental group received the same initial training session and were subsequently instructed to independently complete Free Expressive Art activities for three consecutive days. Throughout the intervention, participants were encouraged to express their personal experiences, thoughts, and emotions through artistic creations based on predetermined themes.

Upon completion of the intervention, the control group completed the IERQ4S immediately as the posttest, whereas the experimental group completed the posttest three days later after finishing the three-day independent Art Therapy: Free Expressive Art activities. The different posttest schedules were intended to examine changes in emotion regulation following interventions with different durations of exposure. The pretest and posttest scores were used to evaluate participants' emotion regulation before and after the intervention. Descriptive statistics for the pretest and posttest scores of both the control and experimental groups are presented in the following table.

Table 2. Descriptive statistics for the pretest and posttest scores (CG & EG)

	CG Pre-test	**CG Post-test**	**EG Pre-test**	**EG Post-test**
Subjek	9	7	10	10
Mean	26.33	28.86	28.10	28.20
Std. Error of Mean	0.972	0.738	0.912	1.245
Std. Deviation	2.915	1.952	2.885	3.938
Minimum	21	25	24	22
Maximum	30	31	34	34

As presented in Table 2, emotion regulation scores changed from pretest to posttest in both the control and experimental groups. In the control group, pretest scores ranged from 21 to 30, with a mean score of 26.33. Following the intervention, posttest scores ranged from 25 to 31, with the mean increasing to 28.86. These findings indicate an improvement in emotion regulation among participants in the control group after the intervention.

In the experimental group, pretest scores ranged from 24 to 34, with a mean of 28.10. After participating in the Art Therapy: Free Expressive Art intervention, posttest scores ranged from 22 to 34, with a mean of 28.20. Although the increase in the mean score was relatively

small, the results suggest a slight improvement in participants' emotion regulation following the intervention.

Overall, the descriptive findings indicate that emotion regulation scores increased in both groups after the intervention. However, descriptive statistics alone cannot determine whether these changes were statistically significant. Therefore, further inferential analyses were conducted to evaluate the significance of the observed differences.

To further examine the extent of improvement in emotion regulation, normalized gain (N-Gain) scores were calculated for both the control and experimental groups based on participants' pretest and posttest scores. The results of the N-Gain analysis are presented in the following table.

Tabel 3. The results of N-Gain

Groups	Pre-test	Post-test	N-Gain
Control	26.33	28.86	0.18
Experimental	28.10	28.20	0.00

The N-Gain analysis showed that the control group obtained a score of 0.18, while the experimental group obtained a score of 0.00. According to the established classification criteria, both values fall within the low category. These findings indicate that the improvement in participants' emotion regulation following the intervention was relatively limited.

The low N-Gain scores suggest that the differences between the pretest and posttest emotion regulation scores in both groups were minimal. Therefore, although some improvement was observed, the posttest results did not demonstrate a substantial enhancement in participants' emotion regulation abilities.

To determine whether the data met the assumptions required for subsequent statistical analyses, a normality test was conducted. The results of the normality test are presented in the following table.

Table 4. Normality Test Shapiro-Wilk

Groups	Asymp. Sig. (2 Tailed)	Categories
Control	0.974	Normal
Experimental	0.773	Normal

The results of the normality test indicated a significance value of 0.974 for the control group and 0.773 for the experimental group. Since both values exceeded the significance threshold of 0.05 ($p > 0.05$), the data from both groups were considered to be normally distributed. These findings indicate that the assumption of normality was satisfied, allowing further analysis to be conducted using a parametric statistical test, namely the Independent Samples t-test.

After confirming the normal distribution of the data, an Independent Samples t-test was performed to determine whether there was a significant difference in emotion regulation between the control and experimental groups following the intervention. The results of the Independent Samples t-test are presented in the following table.

Table 5. Independent Samples T-Test score

Groups	Sig. (2-Tailed)
Control & Experimental	0.244

The results of the Independent Samples t-test revealed a significance value (Sig. 2-tailed) of 0.244. Since this value exceeded the significance level of 0.05 (0.244 > 0.05), the null hypothesis (H_0) was accepted, while the alternative hypothesis (H_1) was rejected. These findings indicate that there was no statistically significant difference in emotion regulation between the control group and the experimental group following the emotion regulation training using the Art Therapy: Free Expressive Art approach with different intervention durations.

The findings of this study indicate that the Art Therapy: Free Expressive Art intervention did not produce a statistically significant improvement in participants' emotion regulation. Although emotion regulation scores increased following the intervention, the changes did not differ significantly between the control and experimental groups. This result is supported by the Independent Samples *t*-test, which showed no significant difference between the two groups ($p = 0.244$, $p > 0.05$). In other words, extending the intervention for the experimental group through one training session followed by three days of independent practice did not yield greater improvements than the single-session intervention received by the control group. This finding is also reflected in the N-Gain scores, with the control group obtaining a score of 0.18 and the experimental group obtaining a score of 0.00, both of which fall within the low improvement category.

These findings differ from those reported by Çataldaş et al. (2024), who found that art-based interventions, including art therapy, significantly improved emotion regulation and psychological functioning. Several factors may explain this discrepancy. First, the intervention period in the present study was relatively short, which may have limited its effectiveness. Second, participants may have differed in their level of engagement throughout the intervention, particularly during the independent practice sessions. Furthermore, emotion regulation is a complex psychological ability that typically develops through continuous practice and repeated emotional experiences rather than through brief interventions.

Another possible explanation is that the intervention alone was insufficient to address the complex emotional challenges commonly experienced during early adulthood. Individuals at this developmental stage frequently encounter multiple stressors, including academic demands, family expectations, and interpersonal conflicts, all of which may influence their capacity to regulate emotions. This interpretation is consistent with the findings of Fauzi and Selian (2025), who argued that early adults often face considerable pressures arising from academic responsibilities, family expectations, and social relationships.

Based on these findings, future studies should consider implementing longer intervention periods, such as two to four weeks, with more frequent face-to-face sessions and closer monitoring of participants' adherence to independent practice. Increasing the sample size may also improve the statistical power of the analysis. In addition, future research should control for or measure potential confounding variables, including academic stress, social support, and major life events, as these factors may substantially influence emotion regulation outcomes. Exploring other variables that are more relevant to the developmental characteristics of early

adulthood may also provide a more comprehensive understanding of the effectiveness of art therapy.

Overall, the present study found no significant difference between the control and experimental groups. The additional duration and intensity of the intervention provided to the experimental group were not sufficient to produce a differential effect on emotion regulation, suggesting that the intervention dosage employed in this study was inadequate to generate meaningful differences between the two groups.

CONCLUSION

Based on the results of the data analysis, extending the duration of the Free Expressive Art Therapy intervention did not produce a statistically significant difference in emotion regulation between the control and experimental groups. This finding was supported by the independent samples t-test, which yielded a Sig. (2-tailed) value of 0.244 ($p > 0.05$). The results were further confirmed by an N-gain score of 0.00 in the experimental group, indicating no measurable improvement in emotion regulation following the intervention.

The absence of a significant effect may be explained by a combination of internal and external factors. Internally, the effectiveness of art-based intervention may be influenced by individual characteristics, psychological readiness, and participants' capacity for self-reflection during expressive activities. Externally, factors such as academic workload, variability in social support, and limited supervision during the three-day independent intervention period may have acted as confounding variables, thereby reducing the observable impact of the program.

From a practical perspective, these findings may inform future research by encouraging improvements in intervention design, such as tighter control of confounding variables or longer intervention durations. For educational institutions, structured art-based emotion regulation programs may still serve as a promising complementary strategy to support and maintain university students' mental well-being when implemented with sufficient intensity and systematic supervision.

REFERENCE

Aprilia, M. I. (2025). *Implementasi art therapy untuk regulasi emosi pada warga binaan di Lapas Kelas II A Purwokerto*. *Jurnal Pengabdian Masyarakat Bangsa, 3*(9), 1184–1191.

Arnesty, A. E., & Pedhu, Y. (2023). Analisis korelasi antara regulasi emosi dan perilaku memaafkan remaja panti asuhan. *Jurnal Psiko Edukasi, 21*(2), 141–150.

Bazlina, A. R., Hermayani, N. P., & Padelah, Y. (2023). The effect of drawing activities to emotional regulation of college students. *Journal of Psychology Today, 1*(3), 186–192.

Çataldaş, S. K., Kutlu, F. Y., & Eren, N. (2024). The effects of online art therapy on ego functions, emotion regulation, and interpersonal relationship styles in neurotic personality organization. *Archives of Psychiatric Nursing, 48*, 74–84.

Dimas, A. P., Siswanti, D. N., & Ansar, W. (2023). Hubungan kelekatan orang dewasa dengan regulasi emosi pada masa dewasa awal. *PESHUM: Jurnal Pendidikan, Sosial dan Humaniora, 2*(6), 1133–1140.

El-Fikri, D. N. S., Maulina, A. S., Anindita, D., Rahmania, A., & Aini, D. K. (2025). Pelatihan psikoedukasi art therapy dengan menggambar dan relaksasi butterfly hug untuk

mengurangi kecemasan akademik dan mengelola regulasi emosi pada mahasiswa baru Fakultas Psikologi dan Kesehatan UIN Walisongo Semarang. *Observasi: Jurnal Publikasi Ilmu Psikologi, 3*(1), 72–92.

Fahyuni, E. F. (2019). *Buku ajar psikologi perkembangan*. Umsida Press.

Fauzi, N. C., & Selian, S. N. (2025). Regulasi emosi pada individu dewasa awal yang mengalami quarter-life crisis. *Kognisi: Jurnal Manajemen Pendidikan dan Konseling, 2*(1), 9–21.

Fitriani, E., Nurasyah, Johannes, & Putri, R. F. (2024). Emotion regulation in psychology in students. *International Journal of Educational Research Excellence (IJERE), 3*(1), 307–312.

Friniar, F., & Gismin, S. S. (2023). Pengaruh regulasi emosi terhadap penerimaan diri wanita dewasa awal yang mengalami body shaming. *Jurnal Psikologi Karakter, 3*(1), 21–27.

Giyati, A. N., & Wibowo, C. (2023). Hubungan antara self-compassion dan regulasi emosi dengan stres pada dewasa awal. *PSIKODIMENSIA, 22*(1), 83–95.

Habsy, B. A., Zahra, K. F. A., Sholikah, E. B., & Salma, T. (2024). Memahami konsep emosi dan konsep diri siswa dan pengaruhnya terhadap pembelajaran. *Jurnal Penelitian Guru Indonesia, 4*(2), 623–641.

Hanifah, A. N. (2020). *Regulasi emosi dalam mencapai kebahagiaan perempuan yang menikah muda di Desa Banyusoco Kecamatan Playen Kabupaten Gunungkidul* (Doctoral dissertation, Fakultas Dakwah dan Komunikasi).

Husein, S., Herayanti, L., & Gunawan, G. (2017). Pengaruh penggunaan multimedia interaktif terhadap penguasaan konsep dan keterampilan berpikir kritis siswa pada materi suhu dan kalor. *Jurnal Pendidikan Fisika dan Teknologi, 1*(3), 221–225.

Kogoya, M. P. V., & Jannah, M. (2021). Pengaruh regulasi emosi terhadap prokrastinasi akademik pada mahasiswa di masa pandemi COVID-19. *Character: Jurnal Penelitian Psikologi, 8*(9), 14–23.

Lee, H., & Lee, G. K. (2024). The preliminary efficacy of emotion regulation skills training for autistic young adults: A pilot study. *Autism in Adulthood*.

Lubis, N. A. (2021). Seni dan pendidikan. *Sabilarrasyad: Jurnal Pendidikan dan Ilmu Pendidikan, 6*(1), 21–35.

Lutfianawati, D., Putri, A. M., Junaidi, Wijayanti, T., Vina, K. O., & Sari, J. R. (2023). Pelatihan regulasi emosi pada mahasiswa baru. *Jurnal Kreativitas Pengabdian kepada Masyarakat (PKM), 6*(9), 3609–3622.

Meganingtyas, Y., & Mufitasari, D. (2022). Regulasi emosi dan penyesuaian mahasiswa baru saat pandemi: Pentingkah dukungan emosional orang tua? *Gadjah Mada Journal of Psychology, 8*(2), 178–202.

Murti, M. A. T., & Ayriza, Y. (2024). *Regulasi emosi sebagai prediktor kebahagiaan pada individu dewasa awal.*

Purwati, N. N. M., Ardini, P. P., & Juniarti, Y. (2023). Pengaruh plasticine art therapy terhadap kemampuan regulasi emosi anak usia 5–6 tahun. *Student Journal of Early Childhood Education, 3*(2), 149–162.

Sya'diyah, H., Hanggarani, N. R., & Ariyanti, A. F. (2022). Kesulitan regulasi emosi pada dewasa awal dengan moderate depression. *Mediapsi, 8*(1), 16–27.

Tipani, I., Cahaya, U., & Iskandardinata, K. (2025). Regulasi emosi anak pertama dari keluarga disfungsional pada masa dewasa awal. *Journal of Life Span Development, 2*(5).

Widyadari, R., & Fitriani, Y. (2023). Regulasi emosi ditinjau berdasarkan jenis kelamin pada siswa SMP. *Journal on Education, 6*(1), 7225–7233.