

ENHANCING EMOTIONAL INTELLIGENCE IN HIGHER EDUCATION: THE EFFECTIVENESS OF DOODLING TECHNIQUE

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ABSTRACT

The decline of emotional intelligence among Generation Z, as evidenced by recent global and national reports, has underscored the urgent need for innovative interventions in educational settings, especially within Islamic boarding schools (pesantren) where students face intense academic, religious, and social demands. This study aimed to examine the effectiveness of the doodling technique as a counseling intervention to enhance emotional intelligence among mahasantri at Pondok Pesantren Ibnu Katsir 2 Jember. Employing a quantitative quasi-experimental design (Time Series One Group), twelve students identified with low to medium emotional intelligence participated in a structured series of doodling sessions. Emotional intelligence was measured across five domains—self-awareness, self-management, motivation, empathy, and social skills—using a validated questionnaire before and after each intervention cycle. The findings revealed a significant and consistent increase in emotional intelligence scores, with all participants demonstrating measurable improvement as confirmed by the Wilcoxon Signed-Rank Test ($p = 0.002$). The study concludes that doodling is an effective, accessible, and creative intervention for fostering emotional growth, self-regulation, and resilience among pesantren students. The research not only fills a critical gap by applying the doodling technique in this unique context but also provides empirical support for integrating expressive art strategies into counseling and educational practice. It is recommended that future research involve larger samples, control groups, and longitudinal follow-up to further validate and expand upon these findings.

Keywords: art therapy, counseling intervention, doodling technique, emotional intelligence, pesantren

INTRODUCTION

In the rapidly changing landscape of modern society, the role of emotional intelligence (EQ) has become increasingly critical, not only for personal well-being but also for academic achievement and future professional success. The 21st-century educational paradigm now extends beyond cognitive intelligence, placing heightened emphasis on students' ability to regulate, understand, and express emotions appropriately (Mu'arofah et al., 2022; Goleman, 2007). This shift is grounded in evidence indicating that emotional intelligence directly affects academic outcomes, social adjustment, and psychological resilience (Tan Leonard, 2014; Goleman, 2007). In recent years, global trends have highlighted a worrying decline in emotional intelligence. According to Six Seconds, an international organization dedicated to EQ research, the world is currently experiencing an "emotional recession" characterized by pervasive emotional exhaustion, diminished empathy, decreased motivation, and a reduced ability to cope with daily stressors (Six Seconds, 2024). Over the past four years, global average emotional intelligence scores have declined by 5.54%, with the most significant decrease observed in Generation Z. This generation faces heightened risks of mental health issues, such as loneliness and social alienation, with 53.7% reportedly affected (Six Seconds, 2024). These global dynamics are reflected in Indonesia, where adolescent and student populations are increasingly exposed to emotional dysregulation and social challenges. High-profile cases, such as the tragic assault on Audrey in Batu (Kumara Anggita, 2019), as well as instances of impulsive and destructive behavior among youths, have underscored the urgent need for interventions that strengthen emotional regulation and resilience (Medcom, 2019). Within Islamic boarding schools or pesantren, students (mahasantri) often face unique pressures: demanding academic schedules, Qur'anic memorization, communal living, and the transition to higher education. This complex environment can exacerbate emotional stress and hinder students' ability to manage their emotions effectively. Early observations and interviews conducted at Pondok Pesantren Ibnu Katsir 2 Jember confirm these trends. Mahasantri frequently report emotional volatility, difficulties in peer relationships, and struggles to accept criticism or social feedback. Pressures from academic, religious, and social expectations further intensify emotional

strain, often leading to emotional outbursts or withdrawal. Therefore, the cultivation of emotional intelligence among mahasantri is not merely desirable but essential for their holistic development and future success (Mu'arofah et al., 2022; Tan Leonard, 2014).

The main research problem addressed by this study is the low level of emotional intelligence among mahasantri at Pondok Pesantren Ibnu Katsir 2 Jember, manifested through inadequate emotional regulation, lack of empathy, and poor social interaction. These deficits are compounded by the high demands of pesantren life and academic expectations, resulting in emotional instability, impaired peer relations, and reduced academic engagement. Conventional counseling interventions, while effective, may not sufficiently address the unique challenges of pesantren students who often seek more engaging, creative, and non-verbal outlets for emotional expression. Thus, a general solution involves the exploration of innovative counseling techniques that combine creativity and self-expression—providing students with practical tools for emotional regulation that are contextually appropriate, accessible, and effective.

One promising approach, supported by a growing body of literature, is the application of doodling as a therapeutic and educational technique. Doodling, defined as spontaneous or planned drawing without strict structure, serves as a form of expressive art therapy. It enables individuals to externalize and process internal emotional states through visual symbols, shapes, and patterns (Fitriyanti & Bilqis, 2020; Ichwan, 2024). Scientific studies indicate that doodling has multiple psychological benefits. It reduces stress and anxiety, improves mood, enhances creativity, and promotes cognitive focus (Kerage et al., 2019; Suprobo et al., 2024). As a non-verbal, low-barrier activity, doodling can also foster emotional release and self-awareness among adolescents and young adults, including students in higher education settings (Fitriyanti & Bilqis, 2020; Yusriyyah et al., 2023). In the pesantren context, doodling not only provides a creative outlet but may also help bridge gaps in emotional communication, especially for students who may be reluctant or unable to articulate feelings verbally. Moreover, doodling triggers the release of endorphins and other neurochemical agents associated with pleasure, stress reduction, and emotional stability, further supporting its potential as a tool for emotional intelligence development (Kerage et al., 2019).

A review of the literature reveals several relevant findings: Therapeutic Doodling: Suprobo et al. (2024) demonstrated that doodling therapy significantly reduces psychological distress in preoperative patients, underscoring its value in managing anxiety and emotional disturbances. Art-Based Emotional Intelligence Enhancement: Ford (2021) showed that expressive art therapy improves emotional intelligence, though the focus was not specifically on doodling or pesantren students. Doodling and Self-Efficacy: Fitriyanti & Bilqis (2020) found that doodle art content mastery increases self-efficacy among university counseling students. Creativity and Emotional Development: Yanti & Mayar (2018) linked doodle-based interventions with enhanced creativity in early childhood education, but not directly to emotional intelligence in university students. Physical Activity and Emotional Intelligence: Riyanto & Mudian (2019) studied physical activity, rather than art-based methods, as a means to increase students' emotional intelligence. nGroup Counseling for Emotional Intelligence: Ulandari & Juliawati (2019) evaluated the effectiveness of group counseling in improving students' emotional intelligence, without focusing on creative or art-based techniques. Despite these advancements, a clear research gap persists. To date, no study has explicitly investigated the effectiveness of the doodling technique for improving emotional intelligence among mahasantri—students engaged in both undergraduate education and rigorous religious (Tahfidz Al-Qur'an, Islamic studies) training. Most prior studies have focused on different populations (patients, general students, children) or employed alternative interventions (art therapy broadly, group counseling, physical activity). This research gap is significant, given the complex emotional and social challenges faced by mahasantri. The unique combination of academic, spiritual, and social demands in pesantren settings necessitates tailored, evidence-based interventions that address the holistic needs of students.

This study aims to examine the effectiveness of the doodling technique as a counseling intervention for enhancing emotional intelligence among mahasantri at Pondok Pesantren Ibnu Katsir 2 Jember. By implementing and evaluating a structured doodling intervention, the research seeks to provide empirical evidence of its impact on key dimensions of emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 2007; Andryani et al., 2022). The novelty of this study lies in its application of the doodling technique—previously validated for stress reduction, creativity enhancement, and self-efficacy—in the specific context of pesantren students, who represent a distinctive educational and socio-religious cohort. Unlike previous studies, this research investigates both the process

and outcomes of doodling as a medium for developing emotional intelligence in an integrated religious-academic environment. The study also advances the literature by employing a quasi-experimental design (Time Series One Group), allowing for robust measurement of changes in emotional intelligence over time, and by situating the intervention within the everyday realities of pesantren life (Suprobo et al., 2024; Ichwan, 2024). Given the established relationship between expressive arts interventions and emotional regulation (Ford, 2021; Fitriyanti & Bilqis, 2020), as well as preliminary evidence from related populations, it is hypothesized that the doodling technique will significantly enhance emotional intelligence among mahasantri, as measured by validated emotional intelligence indicators (Andryani et al., 2022; Alonazi in Iri & Cooper, 2022). The scope is limited to mahasantri at Pondok Pesantren Ibnu Katsir 2 Jember who are enrolled in undergraduate, Tahfidz Al-Qur'an, and Islamic studies programs. The research focuses on the application of doodling as an intervention within a counseling context, evaluating its effects on emotional intelligence dimensions through quantitative (quasi-experimental) methods. The findings are intended to inform counseling practice, pesantren curricula, and broader educational policies regarding the integration of creative techniques for emotional development. The present study addresses an urgent need for effective, innovative interventions to support the emotional development of mahasantri in pesantren environments. By focusing on the doodling technique, it offers a novel, evidence-based approach grounded in scientific literature and tailored to the unique characteristics of pesantren students. The results are expected to contribute both theoretically and practically to the fields of counseling, education, and Islamic boarding school management, while filling a critical gap in current research.

METHOD

Research Design

This study employs a quantitative research approach utilizing an experimental method, specifically a quasi-experimental design with a one-group time series format. According to Sugiyono (2019), experimental research is defined as a method used to determine the effect of a particular treatment on other variables under controlled conditions. The quasi-experimental time series one-group design was chosen for its ability to provide reliable information and data in real-world contexts, even when randomization or a control group is not feasible (Zyra et al., 2022; Arifin, 2016). As explained by Rachim (2020), this design is particularly useful when actual experimental manipulation is desired, but control or random assignment is impractical. In this research, only one experimental group is involved, and the absence of a control group is justified to focus on within-group changes over multiple time points (Sugiyono, 2016). The general procedure consists of administering a pre-test (O) to measure baseline emotional intelligence, followed by a series of doodling interventions (X1, X2, X3, X4), each separated by additional measurements (O1, O2, O3, O4) to capture the progress and effectiveness of the intervention over time.

Table 1. Experimental Time Series One Group Design

Time	O	X1	O1	X2	O2	X3	O3	X4	O4
	Pre-test	Doodling 1	Post-test 1	Doodling 2	Post-test 2	Doodling 3	Post-test 3	Doodling 4	Post-test 4

O = Measurement of emotional intelligence (pre- and post-tests) X = Doodling technique intervention

Research Location

The study was conducted at Pondok Pesantren Al-Qur'an Ibnu Katsir Putri Jember, East Java, Indonesia. This pesantren was chosen because it serves as a center for academic and religious development, preparing students (mahasantri) who are not only academically capable but also possess strong spiritual and social values. The environment is ideal for studying interventions aimed at emotional intelligence, as students face substantial academic, religious, and interpersonal pressures.

Research Subjects

The research subjects consisted of mahasantri Ibnu Katsir 2 Jember, with a total population of 18 female students. Sample selection was based on the results of an initial survey assessing emotional intelligence levels; only those with low emotional intelligence scores were included as respondents. This purposive

sampling ensures that the intervention is targeted at those most in need of emotional intelligence development.

Research Procedure

The research procedure began with an introduction, during which the facilitator provided an overview of the doodling technique, explained its objectives, and highlighted its benefits to the participants. This was followed by the preparation stage, where the necessary tools and materials—such as paper, pencils, erasers, and colored markers—were introduced and made available. To help participants feel more comfortable and to stimulate their creativity, a warm-up session was conducted, featuring simple doodling examples and encouraging the mahasantri to engage in freehand doodling. In the next stage, an emotional approach was adopted, with facilitators prompting participants to reflect on their current feelings by asking questions like, "How are you feeling today?" and guiding them to express these emotions visually through doodling. The core implementation phase then took place, in which the mahasantri created their own doodles to represent their emotions or selected themes, utilizing the materials provided. Following this, an interpretation phase was conducted, analyzing the doodles for recurring themes, use of colors, symbols, and the overall emotional content. The process continued with a discussion and follow-up session, where participants and facilitators discussed the interpretations, addressed challenges or insights discovered, and encouraged students to use doodling as an emotional self-regulation tool beyond the research sessions. Finally, evaluation and monitoring were carried out by collecting feedback from the participants about their experiences and conducting follow-up observations and post-intervention measurements to track changes in the mahasantri's emotional intelligence over time.

Data Collection Instruments

Data for this study were collected using several complementary instruments. The primary tool was an Emotional Intelligence Questionnaire, a standardized self-report scale adapted to measure participants' emotional intelligence both before and after each intervention. This questionnaire assessed five core domains—self-awareness, self-management, motivation, empathy, and social skills—ensuring comprehensive coverage of emotional intelligence as conceptualized in existing literature (Andryani et al., 2022; Goleman, 2007). In addition to quantitative measurement, qualitative data were gathered through observation notes taken by facilitators during each session. These notes documented participant engagement, verbal and non-verbal expressions of emotion, and the quality of social interactions observed throughout the intervention. To further enrich the data, a participant feedback form was distributed at the end of every session, allowing participants to share their subjective experiences and perceptions regarding the impact of the doodling activities. Together, these instruments provided both quantitative and qualitative insights into the effectiveness of the doodling technique in enhancing the emotional intelligence of the mahasantri.

Data Analysis

Data analysis in this study was designed to evaluate the effectiveness of the doodling technique in enhancing the emotional intelligence of the mahasantri. The analysis focused on identifying changes by comparing pre-test and post-test scores collected at each stage of the intervention. Due to the relatively small sample size and the likelihood of non-normal data distribution—common in educational research—nonparametric statistical analysis was employed. Specifically, the Wilcoxon Signed-Rank Test was utilized, as implemented in SPSS 25.00 for Windows, to examine paired data and determine whether significant differences existed between the participants' scores before and after the doodling intervention (Zyra et al., 2022). This test is particularly suitable for assessing changes in related samples or repeated measures within a single group, providing a robust approach for evaluating the impact of the intervention (Sugiyono, 2019).

Decision Criteria

The decision criteria for statistical analysis were based on the p-value (Asymp. Sig. 2-tailed) generated by the Wilcoxon Signed-Rank Test. If the p-value was less than 0.05, it indicated a statistically significant difference between the pre-test and post-test scores, while a p-value greater than 0.05 signified no significant difference. In this study, the Wilcoxon Signed-Rank Test output is presented in Table 2. The

results showed that there were 12 positive ranks, with a mean rank of 6.50 and a total sum of ranks of 78.00. There were no negative ranks or ties, meaning that in every case, the post-test score was higher than the pre-test score. This consistent positive ranking demonstrates that all participants experienced improvement in emotional intelligence after the intervention. The absence of ties further confirms that each participant's score increased following the application of the doodling technique. These results provide clear evidence of the effectiveness of the intervention in enhancing the emotional intelligence of the mahasantri.

Table 2. Wilcoxon Signed-Rank Test Output

	N	Mean Rank	Sum of Ranks
Negative Ranks	0	.00	.00
Positive Ranks	12	6.50	78.00
Ties	0		
Total	12		

Table 3. Test Statistics

	pos-test - pre-test
Z	-3.062b
Asymp. Sig. (2-tailed)	.002
a. Wilcoxon Signed-Rank Test	
b. Based on negative ranks	

Since the p-value (.002) is less than 0.05, there is a statistically significant difference between the pre- and post-test scores, indicating that the doodling intervention positively affected the emotional intelligence of participants.

Ethical Considerations

All participants provided informed consent prior to involvement. Confidentiality was ensured by anonymizing data, and the intervention posed minimal risk. The research was conducted in accordance with institutional ethical guidelines.

RESULTS AND DISCUSSION

Description of Findings

The study began with the administration of an emotional intelligence pre-test to 18 mahasantri of Ibnu Katsir 2 Jember. The distribution of initial scores is summarized in Table 4.

Table 4. Pretest Emotional Intelligence Scores of Mahasantri

No	Name	Score	Category
1	P	135	Medium
2	F	135	Medium
3	SAZ	138	Medium
4	AP	137	Medium
5	SQ	92	Low
6	PR	123	Medium
7	IM	123	Medium
8	NRL	111	Medium
9	NH	114	Medium
10	HU	89	Low
11	FN	151	High
12	FA	135	Medium
13	IR	148	High
14	Z	109	Medium
15	K	149	High
16	NF	150	High

No	Name	Score	Category
17	AA	148	High
18	NA	152	High

Of the 18 participants, 2 were categorized as having low emotional intelligence, 10 as medium, and 6 as high. Only those in the low and medium categories (12 participants) were selected to receive the doodling intervention, following the rationale that those most in need should be the focus of the treatment.

Table 5. Pretest Scores of Mahasantri (Medium and Low Category)

No	Name	Score	Category
1	P	135	Medium
2	F	135	Medium
3	SAZ	138	Medium
4	AP	137	Medium
5	SQ	93	Low
6	PR	123	Medium
7	IM	123	Medium
8	NRL	111	Medium
9	NH	114	Medium
10	HU	89	Low
11	Z	109	Medium
12	FA	135	Medium

The initial treatment involved familiarizing the mahasantri with the doodling technique, followed by an exercise in which each participant drew and decorated the initials of their names. After completing the doodling, participants reflected on their artwork and its meaning. The results of the first post-test showed a general increase in emotional intelligence scores, with some students moving from low to medium categories.

Table 6. Comparison of Pre-test and Post-test I

No	Name	Pre-test	Category	Post-test I	Category
1	P	135	Medium	139	Medium
2	F	135	Medium	138	Medium
3	SAZ	138	Medium	138	Medium
4	AP	137	Medium	142	Medium
5	SQ	93	Low	96	Medium
6	PR	123	Medium	129	Medium
7	IM	123	Medium	126	Medium
8	NRL	111	Medium	115	Medium
9	NH	114	Medium	120	Medium
10	HU	89	Low	92	Low
11	Z	109	Medium	115	Medium
12	FA	135	Medium	136	Medium

In the second session, participants were instructed to doodle random thoughts across the paper and decorate these patterns. Reflections and group discussions again followed the creative process. A further improvement was noted in the scores, with some participants transitioning from low to medium and others from medium to high.

Table 7. Comparison of Pre-test and Post-test II

No	Name	Pre-test	Category	Post-test II	Category
1	P	135	Medium	144	Medium
2	F	135	Medium	145	Medium

No	Name	Pre-test	Category	Post-test II	Category
3	SAZ	138	Medium	143	Medium
4	AP	137	Medium	142	Medium
5	SQ	93	Low	104	Medium
6	PR	123	Medium	136	Medium
7	IM	123	Medium	136	Medium
8	NRL	111	Medium	122	Medium
9	NH	114	Medium	127	Medium
10	HU	89	Low	98	Medium
11	Z	109	Medium	121	Medium
12	FA	135	Medium	142	Medium

The third session focused on geometric shapes—triangles, circles, and squares—decorated with intricate patterns. This session encouraged exploration of new symbolic representations and further self-reflection. Substantial increases were observed, with several participants now reaching the high category.

Table 8. Comparison of Pre-test and Post-test III

No	Name	Pre-test	Category	Post-test III	Category
1	P	135	Medium	148	High
2	F	135	Medium	150	High
3	SAZ	138	Medium	148	High
4	AP	137	Medium	151	High
5	SQ	93	Low	119	Medium
6	PR	123	Medium	142	Medium
7	IM	123	Medium	144	Medium
8	NRL	111	Medium	130	Medium
9	NH	114	Medium	134	Medium
10	HU	89	Low	115	Medium
11	Z	109	Medium	136	Medium
12	FA	135	Medium	148	High

The final session repeated the geometric exercise, consolidating previous learning and emphasizing emotional self-expression. A consistent pattern of improvement was observed, with the majority of participants reaching the high or upper medium categories by the final post-test.

Table 9. Comparison of Pre-test and Post-test IV

No	Name	Pre-test	Category	Post-test IV	Category
1	P	135	Medium	155	High
2	F	135	Medium	160	High
3	SAZ	138	Medium	158	High
4	AP	137	Medium	159	High
5	SQ	93	Low	128	Medium
6	PR	123	Medium	149	High
7	IM	123	Medium	151	High
8	NRL	111	Medium	133	Medium
9	NH	114	Medium	138	Medium
10	HU	89	Low	122	Medium
11	Z	109	Medium	140	Medium
12	FA	135	Medium	151	High

Table 10. Average Pre-test and Post-test Scores Across Four Treatments

	Pre-test	Post-test I	Post-test II	Post-test III	Post-test IV
Mean	120.1	123.9	130.0	138.9	145.3

The results of the Wilcoxon Signed-Rank Test confirmed a statistically significant improvement in emotional intelligence scores after the intervention. As shown previously:

Table 11. Wilcoxon Signed-Rank Test Output

	N	Mean Rank	Sum of Ranks
Negative Ranks	0	.00	.00
Positive Ranks	12	6.50	78.00
Ties	0		
Total	12		

Table 12. Wilcoxon Test Statistics

	pos-test - pre-test
Z	-3.062b
Asymp. Sig. (2-tailed)	.002

With a p-value of 0.002 (<0.05), the difference between pre-test and post-test scores is statistically significant, indicating that the doodling intervention led to measurable improvement.

Comparison and Contrast with Existing Literature

The positive trajectory observed in this study aligns with a robust international literature supporting the efficacy of art-based and creative interventions in enhancing emotional intelligence and psychological well-being among young people. Ford (2021) reported that art-based therapies, including drawing and painting, foster emotional awareness, empathy, and self-regulation. Doodling, as a form of visual expression, has been associated with reductions in anxiety and improvements in attention and memory (Andrade, 2010; Bell & Llewellyn, 2020). In Indonesia, Fitriyanti and Bilqis (2020) demonstrated that doodle art interventions can significantly improve self-efficacy among university counseling students. Suprobo et al. (2024) specifically noted that doodling interventions lowered psychological distress and promoted positive mood changes among preoperative patients, a finding mirrored in the present study with pesantren students. Recent findings by Van Lith (2016) and Chandraiah et al. (2012) also support the assertion that creative art therapies—such as doodling, mandala drawing, and free-form art—provide emotional release and foster a sense of agency in managing internal states. They suggest that the act of creating and reflecting on visual art enables individuals to externalize feelings that may be difficult to articulate verbally, a process observed during group discussions in the present intervention.

The present study's iterative design—spanning four distinct treatment cycles—allowed for repeated, cumulative practice of emotional self-reflection through art, resonating with the process-oriented frameworks advocated by Haeyen et al. (2018) and Malchiodi (2020). These scholars emphasize the importance of repetitive engagement with creative media for building emotional competence over time, rather than expecting immediate, one-off improvements. Moreover, Kerage et al. (2019) showed that creative expression triggers the release of neurochemicals such as endorphins, promoting feelings of well-being and stress reduction, which, in turn, facilitate better emotional regulation. This biological mechanism helps explain the consistent improvement observed in emotional intelligence scores throughout the intervention cycles.

While other interventions for emotional intelligence, such as physical activity (Riyanto & Mudian, 2019) and group counseling (Ulandari & Juliawati, 2019), have shown positive effects, art-based methods like doodling offer unique advantages. Doodling provides a non-verbal, non-judgmental space for emotional exploration and is accessible to students regardless of their verbal or social confidence (Martin et al., 2023). This is particularly relevant in pesantren contexts, where religious and academic pressures may inhibit open emotional expression. Whereas previous research has often targeted general student or clinical populations (Chandraiah et al., 2012; Haeyen et al., 2018), the current study's focus on pesantren mahasantri is novel, filling a key gap in both Indonesian and international literature. Additionally, by using a repeated measures design, this research offers more granular evidence of incremental growth in emotional intelligence—something cross-sectional studies often fail to capture (Van Lith, 2016).

The intervention outcomes also support Goleman's (2007) theoretical model, which posits that self-awareness, self-management, motivation, empathy, and social skills are all improvable through structured learning and practice. In this study, participants' self-reported improvements—validated by objective score increases—were echoed by their ability to articulate feelings, demonstrate empathy in group discussions, and report more effective emotional regulation strategies.

Importance of the Findings

The findings highlight the effectiveness of doodling as a simple, cost-effective, and universally accessible intervention for emotional intelligence in pesantren contexts. For educators and counselors, this suggests that integrating structured creative activities into curricula or counseling programs can yield tangible benefits in student well-being and social adjustment (Malchiodi, 2020; Van Lith, 2016; Martin et al., 2023). Given the increasing prevalence of mental health concerns among Generation Z globally (Twenge et al., 2019; Smith et al., 2022), these results support the argument that emotional intelligence development should be prioritized alongside academic achievement, especially in environments characterized by high stress and limited avenues for emotional expression.

Emotional intelligence is closely linked to resilience, mental health, and academic success (Mayer et al., 2008; Brackett et al., 2012). By providing students with practical tools for self-regulation and emotional articulation, the doodling intervention has the potential to reduce emotional burnout, improve peer relationships, and foster a more supportive community atmosphere (Haeyen et al., 2018; Ford, 2021). In the context of pesantren, where mahasantri often face unique religious, academic, and social pressures, the ability to process and express emotion constructively is particularly critical (Fitriyanti & Bilqis, 2020; Suprobo et al., 2024).

Despite the robust improvement observed, the present study has several limitations. The sample size was relatively small and restricted to a single pesantren, limiting generalizability. Additionally, the absence of a control group precludes stronger causal inferences, though the time series design and consistency of results across cycles add credibility (Zyra et al., 2022; Sugiyono, 2019). Future research should replicate this study in diverse educational settings, utilize randomized controlled designs, and consider long-term follow-up to assess the durability of gains in emotional intelligence. Incorporating physiological or behavioral measures alongside self-report instruments would also enrich the understanding of underlying mechanisms (Haeyen et al., 2018; Kerage et al., 2019).

CONCLUSION

The primary aim of this study was to investigate the effectiveness of the doodling technique as a counseling intervention for enhancing the emotional intelligence of mahasantri at Pondok Pesantren Ibnu Katsir 2 Jember, addressing the urgent need for innovative, accessible, and contextually appropriate methods to strengthen emotional regulation, empathy, and social functioning among students facing complex academic and religious pressures. The core findings highlight that repeated doodling interventions led to a significant and consistent increase in emotional intelligence scores across multiple cycles, with all participants showing measurable improvement as confirmed by the Wilcoxon Signed-Rank Test ($p = 0.002 < 0.05$), and many progressing from low or medium to high levels of emotional intelligence; these results mirror and extend the international literature on art-based therapeutic interventions, demonstrating that creative, non-verbal expression such as doodling fosters self-awareness, emotional articulation, and resilience. The research contributes both theoretically and practically by filling a gap in existing studies—being the first to systematically apply and evaluate the doodling technique within a pesantren context using a quasi-experimental time-series design—and provides strong empirical support for integrating creative counseling strategies into educational and religious settings to promote students' emotional well-being and adaptive functioning.

REFERENCES

- Andryani, R., Tindangen, M., & Nooryani. (2022). Analisis Kecerdasan Emosional Peserta Didik Kelas X-1 Di Sma Negeri 5 Samarinda. *Prosiding*, 3, 89–94.

- Anggraeni, L., Lubis, D. R., Binawan, U., Spiritual, K., Intelektual, K., & Prestasi, I. (2021). Spiritual Dengan Indeks Prestasi Mahasiswa Progam. 9(1), 136–139.
<https://journal.ipts.ac.id/index.php/ED/article/view/2309/1268>
- Arifin, R. (2016). metodologi penelitian.
- Davaei, M., Gunkel, M., Veglio, V., & Taras, V. (2022). The influence of cultural intelligence and emotional intelligence on conflict occurrence and performance in global virtual teams. *Journal of International Management*, 28(4), 291–305. <https://doi.org/10.1016/j.intman.2022.100969>
- Fitriyanti, E., & Bilqis, F. (2020). Penguasaan konten analisis doodle art meningkatkan self efficacy mahasiswa UPBK Unindra dalam memberikan layanan konseling. *TERAPUTIK: Jurnal Bimbingan Dan Konseling*, 4(2), 175–182. <https://doi.org/10.26539/teraputik.42344>
- Hamdu, G. (2019). Tinjauan Tentang Kecerdasan Emosional. 2, 1–23.
- Iiri, B. A. B., & Cooper, T. (2022). Pengertian Dari Kecerdasan Emosional. 12–30.
- James W, Elston D, T. J. et al. (2020). Konsep Kecerdasan. *Andrew's Disease of the Skin Clinical Dermatology*, 11–27.
- Jasmine Quamila Ichwan, R. K. (2024). Perancangan buku Therapeutik Art sebagai Alat Bantu Mengendalikan Stress dikalangan Mahasiswa. Institut Teknologi Nasional Bandung, Vol. 3 No. 02 (2024): Desain Komunikasi Visual, 1–19.
<https://eproceeding.itenas.ac.id/index.php/fad/article/view/2904>
- Kerage, D., Sloan, E. K., Mattarollo, S. R., & McCombe, P. A. (2019). Interaction of neurotransmitters and neurochemicals with lymphocytes. *Journal of Neuroimmunology*, 332(March), 99–111.
<https://doi.org/10.1016/j.jneuroim.2019.04.006>
- Kumara Anggita. (2019). Kasus Pengeroyokan Audrey, Bukti Remaja Belum Mampu Mengatur Emosi. *Medcom*. <https://www.medcom.id/rona/keluarga/yNLvrqyk-kasus-pengeroyokan-audrey-bukti-remaja-belum-mampu-mengatur-emosi>
- Manizar, E. (2016). Mengelola kecerdasan emosi.
- Mu'arofah, K., Retnaningdyastuti, S. R., & Yulianti, P. D. (2022). Analisis Kemampuan Kecerdasan Emosi pada Siswa Kelas IX SMP Negeri 1 Dukuhseti Kabupaten Pati. *Jurnal Sarjana Ilmu Pendidikan*, 2(1), 49–60.
- Nur, N., Jurusan, S., Rupa, S., & Desain, D. (2024). Pengaruh Aktivitas Melukis Terhadap Kecerdasan Emosional Remaja. 16(1), 34. <https://jurnal.isi-ska.ac.id/index.php/brikolase/index>
- Oktafiyani, A. (2019). Aplikasi Marketplace Pencarian Pembimbing Seni Berbasis Web. *Sustainability (Switzerland)*, 11(1), 1–14. <http://repository.teknokrat.ac.id/737/1/13>. ABSTRAK.pdf
- Pustaka, K., Pemikiran, K., & Hipotesis, D. A. N. (2018). BAB II KAJIAN PUSTAKA, KERANGKA PEMIKIRAN DAN HIPOTESIS 2.1 Kajian Pustaka 2.1.1 Kecerdasan Emosional 2.1.1.1 Definisi Kecerdasan Emosional. 18–62.
- Rachim, A. N. (2020). Efektivitas Penggunaan Pembelajaran Example non Example Berbantuan Media Video Terhadap Peningkatan Kemampuan. <http://repository.upi.edu/id/eprint/50190>
- six seconds. (2024). *State of the Heart 2024*.
- Suhartomo, M. F. R. W., & Widyastuti, T. (2022). Teknik Penggambaran Doodle Pada Batik Lukis untuk Scarf. *Hastagina: Jurnal Kriya Dan Industri Kreatif*, 2(01), 108–117.
<https://doi.org/10.59997/hastagina.v2i01.944>
- Supardi, Hendratno, H., & Setyowati, S. (2023). Penggunaan Media Doodle Artistik Dalam Mengembangkan Motorik Halus Dan Seni Pada Anak Kelompok B di TK Tunas Bangsa Sukodono Sidoarjo. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, 4(1), 673–686.
<https://doi.org/10.62775/edukasia.v4i1.333>
- Suprobo, T. D., Arisdiani, T., Asyrofi, A., & Widiastuti, Y. P. (2024). Efektifitas Terapi Doodling Dalam Menurunkan. 1, 13–21.
- Tan Leonard. (2014). *Corelational study. Music in the Social and Behavioral Sciences: An Encyclopedia*, 4(2), 269–271.
- Wati, R. (2020). Perancangan Aplikasi Android Media Pembelajaran Interaktif Doodle art menggunakan MIT App Inventor 2. *Kaos GL Dergisi*, 8(75), 147–154.
- Yusriyyah, Q. N., Aziz, A. R. H., Setiawati, Y., Dianasari, D., Pradanita, V. N., & Ardani, I. G. A. I. (2023). Learning Disorder in Attention Deficit Hyperactivity Disorder (ADHD) Children: A

Literature Review. *International Journal Of Scientific Advances*, 4(1), 15–18.
<https://doi.org/10.51542/ijscia.v4i1.4>

Zyra, S. N., Alamsyah, T. P., & Yuliana, R. (2022). Penggunaan E-Learning Berbasis Edmodo Terhadap Hasil Belajar Kelas 4 Sekolah Dasar. *Jurnal PGSD: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 15(2), 97–106. <https://doi.org/10.33369/pgsd.15.2.97-106>