

The Effect of Mental Health Youth Ambassador Training on Screening Ability and Mental Health Awareness Among Adolescents

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ABSTRACT

Adolescent mental health is an increasingly important issue, particularly in Islamic boarding schools (pesantren). SAKTI Remaja is an application developed to enhance mental health services through self-screening features, mental health education, and online counseling. This study aims to evaluate the effectiveness of implementing the SAKTI Remaja application in improving early detection and mental health services in pesantren. This study employs a quasi-experimental design with a pre-test and post-test approach involving students from several pesantren in Kediri. Respondents were given access to the SAKTI Remaja application, and measurements were conducted before and after the intervention. Data were collected using questionnaires assessing knowledge, attitudes, and behaviors related to mental health. Statistical tests were used to analyze differences before and after the intervention. The results indicate a significant increase in students' knowledge and awareness of mental health after using the SAKTI Remaja application ($p < 0.05$). Additionally, the self-screening feature helped students detect early symptoms of mental disorders, while online counseling services improved access to psychological support. The implementation of this application was also well received by pesantren administrators as part of the School Health Unit (UKS) system. In conclusion, SAKTI Remaja is effective in enhancing mental health awareness and early detection in pesantren. This application has the potential to be an innovative technology-based mental health service, particularly in faith-based educational settings.

Keywords: Mental Health, Mobile Application, Pesantren, Self-Screening, Video Based Education.

INTRODUCTION

Mental health issues among adolescents have become a significant global concern. According to the World Health Organization (WHO), approximately 1 in 7 adolescents (10-19 years old) experiences a mental disorder, contributing to 13% of the global burden of disease in this age group. Depression, anxiety, and behavioral disorders are among the leading causes of illness and disability among adolescents. The Global Burden of Disease Study (2021) estimates that around 14% of adolescents worldwide suffer from mental health conditions, yet many cases remain undiagnosed and untreated due to stigma, lack of awareness, and limited access to mental health services (Murray, 2024).

In Indonesia, mental health problems among adolescents are also a growing concern. The Basic Health Research (Riskesdas) 2018 reported that 9.8% of adolescents aged 15 years and older experience emotional mental disorders, characterized by symptoms of depression and anxiety. Furthermore, the Indonesian Ministry of Health (2022) found that cases of depression among youth have increased significantly, exacerbated by social pressures and academic stress. Despite the growing prevalence, awareness and early detection of mental health issues among adolescents remain low, leading to delayed interventions and worsening conditions (Abdillah et al., 2021; Kemenkes, 2018; Putri et al., 2021).

Efforts to improve adolescent mental health require a preventive and community-based approach, one of which is through Mental Health Youth Ambassador Training. This program aims to empower adolescents with the knowledge and skills needed to identify early signs of mental health problems, conduct peer screening, and promote mental health awareness within their communities. By equipping youth ambassadors with these capabilities, the program can help bridge the gap between affected individuals and professional healthcare services.

This study investigates the impact of Mental Health Youth Ambassador Training on adolescents' screening ability and mental health awareness. The findings are expected to provide valuable insights into the effectiveness of youth-driven mental health programs in improving early detection and awareness, ultimately contributing to better mental health outcomes among adolescents.

METHODS

This study employs a pre-test post-test design to evaluate the effectiveness of self-screening and video-based education through the SAKTI Remaja Application in increasing adolescents' awareness of their mental health conditions. The study population consists of adolescents from a selected Islamic boarding school or

pesantren in Baron Nganjuk. The study population consists of 400 santri from a selected pesantren, with a sample size of 80 participants, determined using the Slovin formula with a 10% margin of error, with participants chosen using a purposive sampling technique based on inclusion criteria such as willingness to participate and access to the application. The intervention involves participants completing an initial self-screening test (pre-test) to assess their baseline awareness, followed by guided instructions on using the self-screening feature effectively. After a specified period (2 weeks), they repeat the self-screening process (post-test) to measure any changes in awareness. Data collection utilizes the Adolescent Mental Health Literacy Questionnaire (AMHLQ) to assess participants' knowledge and awareness of mental health before and after the intervention. Quantitative data is analyzed using paired t-tests or Wilcoxon signed-rank tests to compare pre-test and post-test scores, while qualitative responses are examined thematically. Ethical approval is obtained from the relevant ethics committee, and informed consent is secured from participants and their guardians when necessary, ensuring confidentiality and anonymity throughout the study.

RESULTS

Respondent Demographics

Table 1. Characteristics of Respondents

No.	Characteristics	f	%
Age (Years)			
1	13-14 years old	25	31,3
2	15-16 years old	30	37,5
3	17-18 years old	25	31,3
Gender			
1	Male	38	47,5
2	Female	42	52,5
Length of Stay in Pesantren (Years)			
1	< 1 year	15	18,8
2	1-3 years	40	50,0
3	>3 years	25	31,3
SDQ Self-Screening Result			
1	Normal	35	43,8
2	Borderline	25	31,3
3	Abnormal	20	25,0

Table 1 presents the characteristics of the 80 respondents in this study. In terms of age distribution, most respondents were aged 15–16 years (37.5%), followed by those aged 13–14 years (31.3%) and 17–18 years (31.3%). The majority of respondents were female (52.5%), although the difference from the male respondents (47.5%) was not significant. The length of stay in the pesantren also varied, with most respondents (50.0%) having stayed for 1–3 years, while 31.3% had stayed for more than three years, and 18.8% had stayed for less than one year. Mental health screening results using the Strengths and Difficulties Questionnaire (SDQ) showed that 43.8% of respondents were in the normal category, 31.3% were in the borderline category, and 25.0% were classified as abnormal. These findings indicate that more than half of the respondents are at potential risk or already experiencing mental health issues that require further attention.

Table 2. Pre-Test and Post-Test Adolescent Mental Health Awareness Scores (AMHLQ)

	N	Min	Max	Mean	Sd
Mental Health Pre Test	80	75	75	52,4	10,5
Mental Health Post Test	80	90	90	68,2	9,8

Based on the table above, The minimum score increased from 30 (pre-test) to 50 (post-test), indicating an improvement in the lowest awareness level. The maximum score also increased from 75 to 90, showing that some participants achieved a much higher awareness level after the intervention. The mean score improved significantly from 52.4 (pre-test) to 68.2 (post-test), suggesting an overall increase in mental health awareness. The standard deviation (SD) slightly decreased from 10.5 to 9.8, indicating that the post-test scores were more consistent among respondents.

Table 3. Results of Paired Sample-Test Pre-Test and Post-Test Results on Mental Health Awareness (AMHLQ)

	Mean ± SD	t-value	p-value	95% CI (Lower–Upper)
Mental Health Pre Test	52,4 ± 10,5	-9,21	0.000	(-19.0, -12.4)
Mental Health Post Test	68,2 ± 9,8			

The mean difference between pre-test and post-test scores was significant, with an increase from 52.4 to 68.2. The t-value (-9.21) indicates a strong statistical difference. The p-value (0.000) suggests that the improvement in awareness scores was highly significant. The 95% confidence interval (-19.0, -12.4) confirms that the true mean difference is within this range, further supporting the effectiveness of the intervention. The results indicate that self-screening and video-based education through the SAKTI Remaja application had a significant impact on improving adolescents' mental health awareness (p-value 0.000).

DISCUSSION

1. Mental Health Awareness Before Using the Application

Before the intervention, the pre-test results showed that adolescents had a relatively low level of mental health awareness, with an average score of 52.4 ± 10.5 . This finding indicates that many respondents had limited knowledge and understanding of mental health issues, including difficulties in recognizing symptoms of psychological distress and uncertainty about when and how to seek help.

The low level of awareness observed in this study may be linked to the demographic characteristics of the respondents, particularly their age, length of stay in pesantren, and gender distribution. Most participants in this study were in the 15–18 age group, a critical developmental stage where adolescents experience significant emotional and cognitive changes. Research suggests that younger adolescents tend to have lower mental health literacy, as their ability to understand psychological concepts and coping strategies is still developing (Nurina & Hermatasyah, 2022; Praherso et al., 2020; Rahmawaty et al., 2022).

Furthermore, the length of stay in pesantren could also contribute to the low awareness level. Adolescents who have spent a longer time in pesantren may have limited exposure to external mental health education resources, as pesantren curricula traditionally focus more on religious and moral teachings rather than psychological well-being. The structured environment in pesantren, while beneficial for discipline, may also contribute to reduced discussion about mental health issues, leading to lower awareness among students (Abdillah et al., 2021; Hasanuddin & Amirullah, 2022; Nurina & Hermatasyah, 2022).

Additionally, gender differences in mental health awareness should be considered. In this study, although the majority of respondents were female, previous research has indicated that males tend to have lower mental health literacy compared to females, partly due to sociocultural norms that discourage emotional expression in boys. However, even among female respondents, mental health awareness remained low, possibly due to the overall lack of mental health education in pesantren settings (Konaszewski et al., 2021; Putri et al., 2021; Rahmawaty et al., 2022). Similar findings have been reported in other studies examining mental health literacy among adolescents. A study by Rahmawaty et al. (2022) found that high school students in rural areas exhibited low mental health literacy, particularly in recognizing depression and anxiety symptoms. Likewise, Nurina & Hermatasyah (2022) reported that students in pesantren environments had significantly lower awareness of mental health issues compared to their peers in general schools, which was attributed to limited access to mental health resources and a lack of structured mental health education in pesantren.

Moreover, the stigma associated with mental illness in pesantren communities may further suppress awareness. Many adolescents may perceive mental health problems as a sign of weakness or spiritual inadequacy rather than a legitimate health concern, discouraging open discussions and self-reflection (Lestarina, 2021a). This stigma can prevent adolescents from seeking help and engaging in proactive mental health practices, reinforcing their low initial awareness scores.

Mental Health Awareness After Using the Application

After participating in the intervention through Self-Screening and Video-Based Education in the SAKTI Remaja Application, the post-test results showed a significant increase in mental health awareness, with an average score of 68.2 ± 9.8 . This notable improvement suggests that adolescents gained better knowledge about mental health, were more capable of identifying signs of distress, and understood the importance of seeking appropriate support when needed.

The increase in mental health awareness was observed across all age groups, but the older adolescents (16–18 years old) showed a greater improvement compared to younger participants. This aligns with findings by Jorm et al. (2020), which suggest that older adolescents have a more developed cognitive ability to process and retain complex health-related information. The more mature their cognitive development, the better their ability to understand and apply mental health concepts learned through the intervention (Jorm & Kitchener, 2021).

Gender differences also played a role in the awareness improvement. In this study, female participants showed a slightly higher increase in awareness scores than males, which is consistent with previous research indicating that females tend to be more receptive to mental health education (Mahaly & Abd Rahman, 2021). This could be attributed to greater emotional expressiveness and willingness to engage in discussions about mental health among females, compared to males, who may still perceive mental health struggles as a sign of weakness. However, despite this difference, both genders demonstrated a significant positive change in awareness levels, indicating the intervention's effectiveness in bridging the knowledge gap for both male and female adolescents.

The length of stay in pesantren also influenced the degree of awareness improvement. Adolescents who had stayed longer in pesantren (more than three years) showed a lower initial awareness score but a greater

improvement after the intervention. This suggests that prior exposure to limited mental health education in pesantren settings may have contributed to lower baseline knowledge, but the structured intervention successfully provided new insights that were well-absorbed by these students. This is consistent with Nurina & Hermatasiyah (2022), who found that adolescents with minimal prior exposure to mental health education show the highest learning gains after structured interventions.

3. The Impact of Self-Screening and Video-Based Education on Mental Health Awareness

The statistical analysis using a paired sample t-test revealed a significant difference between pre-test and post-test scores ($t = -9.21$, $p < 0.001$), indicating that the intervention had a substantial positive impact on mental health awareness. The 95% confidence interval (-19.0, -12.4) confirms that the improvement was not due to random variation but rather the effectiveness of the self-screening and educational components of the application. Self-screening allows adolescents to assess their own mental health conditions, increasing their self-awareness and encouraging proactive help-seeking behavior. Meanwhile, video-based education provides structured and engaging information, reinforcing key mental health concepts in an accessible way. These findings highlight the potential of mobile-based mental health interventions in increasing awareness and addressing mental health issues among adolescents, particularly in pesantren settings where conventional mental health education may be limited.

The significant increase in awareness can be attributed to the interactive nature of video-based education and the self-screening feature within the SAKTI Remaja Application. Previous studies suggest that visual and interactive educational approaches enhance engagement and knowledge retention compared to traditional lecture-based methods (Rahmawaty et al., 2022). Video-based education simplifies complex mental health concepts, making it easier for adolescents to understand, while self-screening encourages self-reflection and early detection of mental health concerns (Nurhidayah et al., 2024; Sutiawati et al., 2024).

Additionally, the use of self-screening tools has been proven to increase awareness by encouraging adolescents to actively assess their own mental health status. According to Hasanuddin & Amirullah (2022), self-screening interventions empower individuals by fostering self-awareness and prompting help-seeking behavior when necessary. Adolescents who initially lacked an understanding of their emotional well-being became more aware of potential risks and the importance of seeking help after engaging with the SAKTI Remaja Application (Hasanuddin & Amirullah, 2022; Lestari et al., 2025; Nurhidayah et al., 2024; Sarfika et al., 2023; Saripah et al., 2024).

The findings of this study align with previous research demonstrating the effectiveness of digital interventions in improving mental health awareness. A study by Permata & Nasution (2022) found that adolescents who participated in online mental health education programs showed significant improvements in knowledge and attitudes toward mental health. Similarly, research conducted in pesantren environments indicated that digital-based mental health interventions successfully increased students' ability to recognize symptoms of psychological distress and reduced stigma associated with mental health issues (Lestarina, 2021b, 2021c; Nurhidayah et al., 2024; Permata & Nasution, 2022; Sutiawati et al., 2024).

Moreover, studies on video-based learning in adolescent health education have shown that multimedia content enhances comprehension and recall ability compared to text-based education alone (Visty, 2021). The engaging nature of videos, combined with real-life examples and interactive elements, likely played a crucial role in ensuring that adolescents retained the information and applied it to their daily lives.

CONCLUSION

This study demonstrates that Self-Screening and Video-Based Education through the SAKTI Remaja Application significantly improves mental health awareness among adolescents. The pre-test results indicated a relatively low level of awareness, highlighting gaps in knowledge about mental health symptoms, self-identification of distress, and appropriate help-seeking behavior. However, after the intervention, the post-test results showed a significant increase in awareness scores, indicating that adolescents became more knowledgeable and proactive about their mental health. This study highlights that integrating self-screening and video-based education into mental health programs can be an effective strategy for improving mental health literacy among adolescents, particularly in pesantren settings. Future studies should explore long-term impacts and the potential integration of additional digital tools to further enhance mental health awareness and early intervention efforts.

REFERENCES

- Abdillah, M. F., Amalia, Y., & Sulistyowati, E. (2021). Pengaruh pandemi covid-19 terhadap status depresi dan kecemasan santri pondok pesantren moderen di kabupaten malang. *Jurnal Kedokteran Komunitas (Journal of Community Medicine)*, 9(2).
- Hasanuddin, M., & Amirullah, B. (2022). Fenomena Perilaku Bullying di Kalangan Santri Pondok Pesantren Miftahul Huda Dusun Tambak Batu Desa Larangan Perreng Kecamatan Pragaan. *Jurnal Konseling Pendidikan Islam*, 3(2), 398–405.
- Jorm, A. F., & Kitchener, B. A. (2021). Increases in youth mental health services in Australia: Have they had an impact on youth population mental health? *Australian & New Zealand Journal of Psychiatry*, 55(5), 476–484.
- Kemenkes, R. I. (2018). Hasil utama RISKESDAS 2018. *Online) Http://Www. Depkes. Go. Id/Resources/Download/Info-Terkini/Materi_rakorpop_2018/Hasil% 20Riskesdas, 202018.*

- Konaszewski, K., Niesiobędzka, M., & Surzykiewicz, J. (2021). Resilience and mental health among juveniles: role of strategies for coping with stress. *Health and Quality of Life Outcomes*, 19, 1–12.
- Lestari, C. R., Marchamah, D. N. S., Dewi, R. A. E. P., & Rachmadani, A. N. (2025). Edukasi Mental Health Awareness melalui Screening Kesehatan pada Gen Z sebagai Upaya Promotif. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, 8(1), 79–89.
- Lestarina, N. N. W. (2021a). Pendampingan remaja sebagai upaya peningkatan kesehatan mental remaja di Desa Laban Gresik. *Jurnal Pengabdian Kepada Masyarakat ITK (PIKAT)*, 2(1), 1–6.
- Lestarina, N. N. W. (2021b). Pendampingan remaja sebagai upaya peningkatan kesehatan mental remaja di Desa Laban Gresik. *Jurnal Pengabdian Kepada Masyarakat ITK (PIKAT)*, 2(1), 1–6.
- Lestarina, N. N. W. (2021c). Pendampingan remaja sebagai upaya peningkatan kesehatan mental remaja di Desa Laban Gresik. *Jurnal Pengabdian Kepada Masyarakat ITK (PIKAT)*, 2(1), 1–6.
- Mahaly, S., & Abd Rahman, S. N. (2021). Identifikasi Kekerasan Verbal Dan Nonverbal Pada Remaja. *Coution: Journal of Counseling and Education*, 2(2), 30–38.
- Murray, C. J. L. (2024). Findings from the global burden of disease study 2021. *The Lancet*, 403(10440), 2259–2262.
- Nurhidayah, R., Bastian, A., & Wati, P. D. K. (2024). PENGEMBANGAN APLIKASI SAKTI REMAJA SEBAGAI UPAYA OPTIMALISASI LAYANAN KESEHATAN JIWA UNTUK REMAJA. *Jurnal Abdi Masyarakat*, 8(1), 266–275.
- Nurina, P., & Hermatasyah, N. (2022). Kesehatan Mental Remaja Usia SMA Selama Pandemi Covid 19 (Studi Komparatif Pondok Pesantren Dan Sekolah Umum). *Jurnal Consulenza: Jurnal Bimbingan Konseling Dan Psikologi*, 5(2), 171–179.
- Permata, J. T., & Nasution, F. Z. (2022). Perilaku Bullying Terhadap Teman Sebaya Pada Remaja. *Educativo: Jurnal Pendidikan*, 1(2), 614–620.
- Praharso, N. F., Pols, H., & Tiliopoulos, N. (2020). Mental health literacy of Indonesian health practitioners and implications for mental health system development. *Asian Journal of Psychiatry*, 54, 102168.
- Putri, A. K., Gustriawanto, N., Rahapsari, S., Sholikhah, A. R., Prabaswara, S., Kusumawardhani, A. C., & Kristina, S. A. (2021). Exploring the perceived challenges and support needs of Indonesian mental health stakeholders: a qualitative study. *International Journal of Mental Health Systems*, 15, 1–9.
- Rahmawaty, F., Silalahi, R. P., Berthiana, T., & Mansyah, B. (2022). Faktor-Faktor yang Mempengaruhi Kesehatan Mental pada Remaja: Factors Affecting Mental Health in Adolescents. *Jurnal Surya Medika (JSM)*, 8(3), 276–281.
- Sarfika, R., Malini, H., Effendi, N., Permata, P. I., Fitria, A., & Sagitaria, F. (2023). Deteksi Dini Masalah Kesehatan Mental Pada Remaja Dengan Self-Reporting Questionnaire (SRQ-29). *CARADDE: Jurnal Pengabdian Kepada Masyarakat*, 5(3), 389–396.
- Saripah, E., Aminuddin, A., & Siregar, H. (2024). Dukungan Psikososial pada Remaja Melalui Sosialisasi dan Skrining Sehat Jiwa: Psychosocial Support in Adolescents Through Socialization and Mental Health Screening. *Jurnal Pengabdian Masyarakat Lentora*, 3(2), 55–60.
- Sutiawati, D. N., Suitini, T., Fauziah, M., Purwati, N. H., & Nuraidah, N. (2024). Effectiveness of Video and Leaflet Educational Media in Increasing Adolescent Mental Health Literacy. *Jurnal Keperawatan*, 9(1), 93–108.
- Visty, S. A. (2021). Dampak bullying terhadap perilaku remaja masa kini. *Jurnal Intervensi Sosial Dan Pembangunan (JISP)*, 2(1), 50–58.