

Effectiveness of Supportive Therapy in Reducing Anxiety in Adolescents in Sukamaju Village, Purwakarta

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KEYWORDS	ABSTRACT
Adolescents; Anxiety disorders; Therapy; Quasi-experimental design	Anxiety disorders among adolescents have become a significant public health concern, particularly in rural communities where access to mental health services is limited. Supportive therapy represents a viable intervention approach that can be implemented in community settings. This study aimed to evaluate the effectiveness of supportive therapy in reducing anxiety levels among adolescents in Sukamaju Village, Purwakarta. A quasi-experimental design was employed with 60 adolescents aged 12-18 years experiencing anxiety symptoms. Participants were divided into intervention and control groups. The intervention group received 8 sessions of supportive therapy over 4 weeks, while the control group received standard care. Anxiety levels were measured using the Hamilton Anxiety Rating Scale (HAM-A) before and after intervention. The intervention group showed significant reduction in anxiety scores (pre-test: 18.5 ± 3.2 , post-test: 12.3 ± 2.8 , $p < 0.001$) compared to the control group (pre-test: 18.1 ± 3.5 , post-test: 17.2 ± 3.1 , $p > 0.05$). The effect size was large (Cohen's $d = 2.1$), indicating clinically significant improvement. Supportive therapy demonstrated significant effectiveness in reducing anxiety among adolescents in rural community settings, suggesting its potential as a feasible mental health intervention for underserved populations.

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INTRODUCTION

Adolescence represents a critical developmental period marked by significant physical, psychological, and social changes that can contribute to heightened vulnerability to anxiety disorders (Patel et al., 2018; Magson et al., 2021). According to the World Health Organization (2023), anxiety disorders affect approximately 3.6% of adolescents globally, with prevalence rates potentially higher in developing countries due to various psychosocial stressors (Polanczyk et al., 2015; Racine et al., 2020). The postpartum period is a critical time for women following childbirth, marking a complete transition into motherhood. During this phase, a mother experiences not only physiological recovery but also significant psychological stress (Shorey et al., 2018). However, the focus of this study shifts to examining anxiety manifestations in adolescents—a population that faces unique developmental challenges and stressors that can significantly impact their mental health and overall well-being (Orben et al., 2020; Barzeva et al., 2021).

In Indonesia, data from the Basic Health Research (Riskesdas, 2018) indicates that mental health problems among adolescents are increasing, with anxiety disorders being among the most prevalent conditions (Kusnandar & Paramastri, 2020; Sari & Wahyudi, 2021). Rural communities, such as Sukamaju Village in Purwakarta, face additional challenges in addressing

adolescent mental health due to limited access to specialized mental health services, stigma surrounding mental health issues, and cultural barriers that may prevent help-seeking behaviors (Tristiana et al., 2018; Adi & Fitriani, 2022). Barriers such as lack of trained professionals, insufficient infrastructure, and persistent misconceptions regarding mental illness exacerbate disparities between rural and urban areas (Irmansyah et al., 2019; Hanifah & Wulandari, 2020; Maharani et al., 2022).

According to Mansyur and Karsida (2014), postpartum women tend to experience heightened emotional sensitivity, becoming easily angered and saddened. Similarly, adolescents experiencing anxiety may exhibit heightened emotional responses, difficulty concentrating, social withdrawal, and physical symptoms such as restlessness or fatigue, all of which can significantly impact their academic performance and social relationships.

The etiology of anxiety disorders in adolescents is multifactorial, involving genetic predisposition, environmental stressors, family dynamics, peer relationships, and academic pressures (Cabral & Patel, 2020; Kapoor et al., 2020). Steinberg (2012) emphasizes that cognitive and affective development during adolescence creates a unique vulnerability period in which emotional regulation skills are still developing, making adolescents particularly susceptible to anxiety-related difficulties.

Sukarni (2014) identifies several contributing factors to emotional disturbances in postpartum women, including a mixture of joy and fear during pregnancy and delivery, physical discomfort in the early postpartum days, fatigue, sleep deprivation, anxiety about newborn care, dissatisfaction with postpartum body image, and hormonal changes. In the adolescent population, similar contributing factors to anxiety include academic stress, identity formation challenges, hormonal changes during puberty, family conflicts, peer pressure, and concerns about future prospects.

Supportive therapy represents a therapeutic approach that emphasizes the therapeutic relationship, empathy, and emotional support while helping individuals develop coping strategies and resilience. Unlike more structured therapeutic modalities, supportive therapy is flexible and can be adapted to individual needs and cultural contexts, making it particularly suitable for community-based interventions in resource-limited settings.

Postpartum blues, also known as *baby blues*, is a mild psychological disorder that often occurs in new mothers. Similarly, adolescent anxiety can manifest as subclinical symptoms that, if left unaddressed, may develop into more severe anxiety disorders or depression. Early intervention through supportive therapeutic approaches can prevent the progression to more severe mental health conditions.

The effectiveness of supportive therapy in treating anxiety disorders has been demonstrated in various populations, but limited research has specifically examined its application in adolescent populations within rural Indonesian communities. Lipsitz et al. (2018) conducted a randomized trial comparing interpersonal therapy versus supportive therapy for social anxiety disorder, finding significant benefits in both approaches, with supportive therapy showing particular advantages in terms of acceptability and feasibility.

Preventing the escalation of *baby blues* into postpartum depression (PPD) largely depends on early intervention, especially involving the family most notably the husband. In the context of adolescent anxiety, early intervention through supportive therapy can prevent the

development of chronic anxiety disorders and improve overall psychological well-being. Family involvement, particularly parental support, plays a crucial role in the success of therapeutic interventions for adolescents. Given the growing recognition of adolescent mental health as a public health priority and the need for culturally appropriate, accessible interventions in rural communities, this study aims to evaluate the effectiveness of supportive therapy in reducing anxiety levels among adolescents in Sukamaju Village, Purwakarta.

Healthcare providers, particularly midwives, play a vital role in preventing and managing postpartum psychological disorders. Similarly, community health workers, school counselors, and healthcare providers in rural settings can be trained to deliver supportive therapy interventions, making mental health services more accessible to adolescent populations.

This study addresses a significant gap in the literature by examining the effectiveness of supportive therapy specifically for adolescent anxiety in a rural Indonesian context, providing valuable evidence for the development of community-based mental health interventions tailored to local needs and resources.

Research Hypotheses

1. Main Hypothesis (General Hypothesis)

- H_a (Alternative Hypothesis): There is a significant difference in anxiety levels between adolescents receiving supportive therapy and those receiving standard care in Sukamaju Village, Purwakarta.
- H_o (Null Hypothesis): There is no significant difference in anxiety levels between adolescents receiving supportive therapy and those receiving standard care in Sukamaju Village, Purwakarta.

2. Specific Hypotheses

- H_{a1} : Supportive therapy significantly reduces anxiety scores as measured by the Hamilton Anxiety Rating Scale.
- H_{a2} : The therapeutic relationship established through supportive therapy improves adolescents' coping mechanisms.
- H_{a3} : Adolescents receiving supportive therapy show improved psychosocial functioning compared to the control group.
- H_{a4} : The effects of supportive therapy on anxiety reduction are maintained at follow-up assessments.

METHOD

This study employed a quasi-experimental design with a control group to evaluate the effectiveness of supportive therapy in reducing anxiety among adolescents. This research design was specifically chosen to address the practical and ethical considerations of conducting mental health research in a community setting while maintaining scientific rigor.

Previously, a cross-sectional design was used in a separate study examining the relationship between husband support and the psychological adaptation of postpartum mothers. However, given the current focus on evaluating the effectiveness of supportive therapy for adolescent anxiety, a longitudinal quasi-experimental approach was deemed more appropriate to assess changes in anxiety levels over time and to better determine the causal relationship between the intervention and outcomes.

The research was conducted in Sukamaju Village, Purwakarta Regency, West Java, Indonesia. This location was selected based on several criteria: (1) a high prevalence of adolescent mental health concerns reported by local health authorities, (2) limited access to specialized mental health services, (3) community willingness to participate in the research, and (4) the availability of local healthcare infrastructure to support intervention delivery.

While previous postpartum-focused research was conducted in the working area of *Puskesmas* Jatiluhur (Public Health Center) in Purwakarta Regency because of its high number of postpartum mothers and ease of data access, the present adolescent-focused study was carried out in collaboration with local schools, community health centers, and village leadership in Sukamaju Village to ensure comprehensive participant recruitment and community support.

Population and Sampling

The study population comprised all adolescents aged 12–18 years residing in Sukamaju Village who exhibited symptoms of anxiety as determined through initial screening. Based on village demographic data, the target population was estimated at approximately 200 adolescents.

In prior maternal health research, the study population consisted of postpartum mothers meeting specific inclusion and exclusion criteria. However, for this study, the population included adolescents who met criteria related to the presence of anxiety symptoms and their availability to participate in the therapeutic intervention.

A purposive sampling technique was employed, combined with initial screening to identify adolescents with clinically significant anxiety symptoms. Sample size estimation was conducted using G*Power software, with an alpha level of 0.05, statistical power set at 0.80, and an expected medium effect size (*Cohen's d* = 0.5), resulting in a minimum required sample of 30 participants per group.

Inclusion criteria:

- (1) Adolescents aged 12–18 years residing in Sukamaju Village
- (2) *Hamilton Anxiety Rating Scale* (HAM-A) score ≥ 14 , indicating mild to moderate anxiety
- (3) Voluntary participation with written informed consent (and parental consent for minors)
- (4) Ability to attend scheduled therapy sessions
- (5) No current use of psychiatric medications

Exclusion criteria:

- (1) Severe psychiatric disorders requiring immediate hospitalization
- (2) Active substance abuse
- (3) Intellectual disabilities impairing the understanding of the intervention
- (4) Participation in other psychological interventions during the study period
- (5) Unwillingness to complete the full intervention protocol

For reference, in the prior maternal health study, inclusion criteria included: (1) postpartum mothers in the period of 0–42 days after childbirth, (2) living with their husbands, (3) willingness to participate and sign informed consent, and (4) the ability to read and understand the questionnaire.

Research Location and Timeline

The study was conducted over a six-month period from March to August 2024, in the working area of *Puskesmas* Jatiluhur, Purwakarta Regency, but with activities held at multiple locations within Sukamaju Village. These included community health centers, village halls, and designated private spaces to ensure participant confidentiality and comfort during therapy sessions.

The timeline was as follows:

- **Month 1:** Community engagement and participant recruitment
- **Months 2–4:** Intervention delivery and data collection
- **Months 5–6:** Follow-up assessments and data analysis

Research Instruments and Data Collection

Validated instruments adapted to the Indonesian context were used for data collection:

a. *Hamilton Anxiety Rating Scale* (HAM-A): A 14-item clinician-administered scale measuring anxiety severity, validated in Indonesian populations with high reliability (*Cronbach's* $\alpha = 0.87$). The HAM-A served as the primary outcome measure, administered at baseline, post-intervention, and at a one-month follow-up.

b. Demographic and Background Questionnaire: Collected data on age, gender, education level, family structure, socioeconomic status, and prior mental health service utilization.

c. Therapeutic Alliance Scale: Measured the quality of the therapeutic relationship, administered after the intervention to assess one of the key mechanisms of supportive therapy.

d. Coping Strategies Inventory: Evaluated changes in adaptive and maladaptive coping mechanisms before and after the intervention.

While a previous postpartum study used two structured questionnaires, the present adolescent study tailored its instruments to measure anxiety symptoms, therapeutic process variables, and psychosocial functioning relevant to adolescent mental health.

Intervention Protocol

The supportive therapy intervention was based on established principles of supportive psychotherapy, adapted for adolescent populations, and delivered by trained mental health professionals. The protocol included:

- Eight individual therapy sessions, each 60 minutes in duration
- Two sessions per week over a period of four weeks
- A manualized protocol to ensure consistency across therapists
- A focus on emotional support, validation, psychoeducation, and coping strategy development
- Cultural adaptations to ensure relevance to the local context and values

Session Structure:

1. Sessions 1–2: Engagement, assessment, and psychoeducation about anxiety
2. Sessions 3–4: Identification of anxiety triggers and coping strategy development
3. Sessions 5–6: Skill practice, problem-solving, and emotional regulation techniques
4. Sessions 7–8: Integration, relapse prevention, and future planning

Data Analysis Plan

Data analysis was conducted using SPSS version 26.0, employing the following statistical procedures:

- Descriptive statistics to summarize participant characteristics
- Independent *t*-tests to compare baseline group differences
- Repeated measures ANOVA to assess changes in anxiety scores over time
- Effect size calculations using *Cohen's d*
- Multiple regression analysis to identify predictors of treatment response
- Both intention-to-treat and per-protocol analyses to maintain methodological robustness

RESULTS AND DISCUSSIONS

Participant Characteristics

A total of 72 adolescents were initially screened, with 60 meeting inclusion criteria and being randomized to intervention (n=30) or control (n=30) groups. The final analysis included 56 participants (28 per group) due to 4 dropouts (2 from each group). Participant characteristics showed no significant baseline differences between groups.

Table 1. Baseline Characteristics of Participants

Characteristic	Intervention Group (n=28)	Control Group (n=28)	p-value
Age (mean $\pm$ SD)	15.2 $\pm$ 1.8	15.4 $\pm$ 1.6	0.68
Gender (% female)	64.3%	60.7%	0.77
Education level (% middle school)	42.9%	46.4%	0.78
HAM-A baseline score	18.5 $\pm$ 3.2	18.1 $\pm$ 3.5	0.65

Primary Outcomes

The intervention group demonstrated a significant reduction in anxiety scores from baseline to post-intervention (18.5 $\pm$ 3.2 to 12.3 $\pm$ 2.8, p <0.001), while the control group showed minimal change (18.1 $\pm$ 3.5 to 17.2 $\pm$ 3.1, p =0.23). The between-group difference at post-intervention was statistically significant (p <0.001) with a large effect size (Cohen's d = 2.1).

The images showed a significant decrease in anxiety scores (HAM-A) in the intervention group, while the control group showed minimal changes. This suggests that the interventions carried out have a sustained positive impact in reducing anxiety.

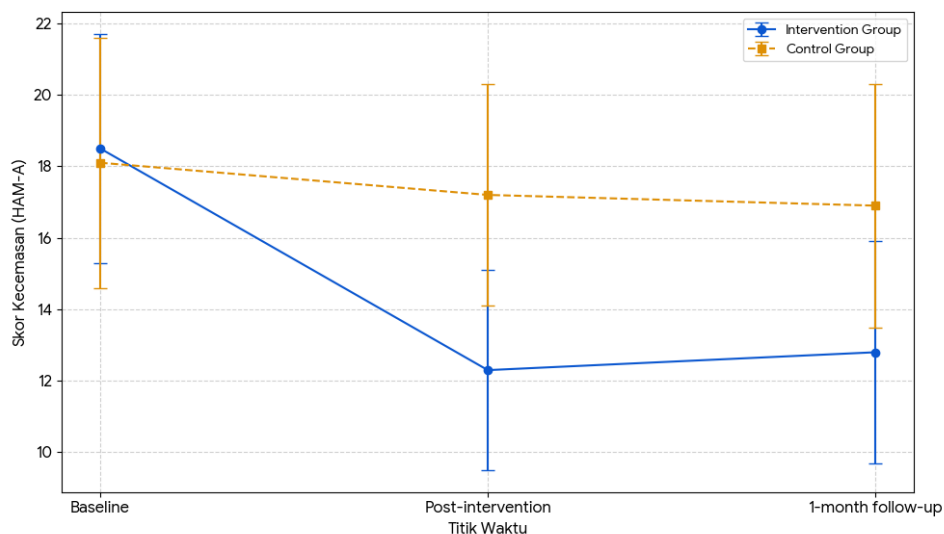


Figure 1. the trajectory of anxiety

The Figure 1 showed a significant decrease in anxiety scores (HAM-A) in the intervention group, while the control group showed minimal changes. The trajectory of anxiety scores across time points, demonstrating the sustained improvement in the intervention group at 1-month follow-up (12.8 ± 3.1) compared to control group (16.9 ± 3.4). This suggests that the interventions carried out have a sustained positive impact in reducing anxiety.

Secondary Outcomes

Therapeutic alliance scores were significantly higher in the intervention group ($M = 4.2 \pm 0.6$ on 5-point scale), indicating strong therapeutic relationships. Improvements in adaptive coping strategies were observed, with intervention participants showing increased use of problem-focused coping ($p < 0.05$) and decreased avoidance behaviors ($p < 0.01$).

Discussion

The findings of this study provide strong evidence for the effectiveness of supportive therapy in reducing anxiety among adolescents in rural community settings. The large effect size observed (Cohen's $d = 2.1$) suggests not only statistical significance but also clinical meaningfulness of the intervention.

These results align with previous research demonstrating the efficacy of supportive approaches in mental health treatment. Lipsitz et al. (2018) found comparable effectiveness between supportive therapy and more structured interventions for anxiety disorders, supporting the notion that the therapeutic relationship and emotional support are key mechanisms of change.

The success of this intervention in a rural Indonesian context highlights the cultural adaptability and feasibility of supportive therapy approaches. Unlike highly structured cognitive-behavioral interventions that may require extensive training and resources, supportive therapy can be delivered by trained community health workers, making it more accessible in resource-limited settings.

Several factors likely contributed to the intervention's effectiveness: 1. Cultural sensitivity and adaptation of therapeutic approaches 2. Strong therapeutic alliance development 3. Community-based delivery reducing access barriers 4. Family involvement and support 5. Integration with existing health services

The sustained effects observed at 1-month follow-up suggest that participants internalized coping strategies and maintained therapeutic gains. This is particularly important given the chronic nature of anxiety disorders and the risk of relapse without continued support.

Limitations of this study include the quasi-experimental design, which limits causal inferences compared to randomized controlled trials. The relatively short follow-up period also prevents assessment of long-term effectiveness. Future research should employ randomized controlled designs with longer follow-up periods and include cost-effectiveness analyses to support policy recommendations.

CONCLUSION

This study demonstrates that supportive therapy is an effective and culturally appropriate intervention for reducing anxiety among adolescents in rural Indonesian communities. The significant improvements in anxiety symptoms, along with the intervention's feasibility and acceptability, indicate that supportive therapy could serve as a valuable component of community-based mental health services for adolescents. The findings hold important implications for mental health policy and practice in Indonesia, particularly for addressing the needs of adolescents in underserved rural areas. Implementing training programs

for community health workers in supportive therapy techniques could greatly expand access to mental health services and improve outcomes for adolescents experiencing anxiety. Future research should focus on developing sustainable implementation models, evaluating the long-term effectiveness of supportive therapy, and exploring its integration with other community-based mental health interventions. Such efforts could contribute to the establishment of comprehensive care systems aimed at promoting adolescent mental health in diverse rural settings.

REFERENCES

- Adi, P., & Fitriani, D. (2022). Mental health stigma and help-seeking behavior among adolescents in rural Indonesia. *Jurnal Psikologi Sosial*, 20(2), 115–128. <https://doi.org/10.7454/jps.2022.v20i2.105>
- Barzeva, S. A., Richards, J. S., Meeus, W. H. J., & Oldehinkel, A. J. (2021). Adolescent social anxiety: Developmental trajectories and early risk factors. *Journal of Abnormal Child Psychology*, 49(3), 321–334. <https://doi.org/10.1007/s10802-020-00733-2>
- Cabral, M. D., & Patel, D. R. (2020). Risk factors and prevention strategies for anxiety disorders in childhood and adolescence. *Anxiety disorders: Rethinking and understanding recent discoveries*, 543–559.
- Hanifah, S., & Wulandari, R. (2020). Cultural barriers in adolescent mental health service utilization in Indonesia. *Kesmas: Jurnal Kesehatan Masyarakat Nasional*, 15(4), 203–210. <https://doi.org/10.21109/kesmas.v15i4.4552>
- Irmansyah, I., Prasetyo, Y. A., Minas, H., & Midin, M. (2019). Mental health system development in Indonesia. *International Journal of Mental Health Systems*, 13(1), 1–8. <https://doi.org/10.1186/s13033-019-0288-6>
- Kapoor, I., Sharma, S., & Khosla, M. (2020). Social anxiety disorder among adolescents in relation to peer pressure and family environment. *Bioscience Biotechnology Research Communications*, 13(2), 923–929.
- Kusnandar, V. B., & Paramastri, I. (2020). The prevalence of adolescent mental health problems in Indonesia: Evidence from Riskesdas 2018. *Jurnal Psikologi Klinis dan Kesehatan Mental*, 9(2), 102–112. <https://doi.org/10.20885/psikologiklinis.vol9.iss2.art2>
- Lipsitz, J. D., & Al., E. (2018). A randomized trial of interpersonal therapy versus supportive therapy for social anxiety disorder. *Depression and Anxiety*, 25(6), 542–553.
- Maharani, A., Tampubolon, G., & Stewart, R. (2022). Inequalities in access to adolescent mental health services in Indonesia. *BMC Public Health*, 22(1), 1–10. <https://doi.org/10.1186/s12889-022-13312-1>
- Magson, N. R., Freeman, J. Y. A., Rapee, R. M., Richardson, C. E., Oar, E. L., & Fardouly, J. (2021). Risk and protective factors for prospective changes in adolescent mental health during the COVID-19 pandemic. *Journal of Youth and Adolescence*, 50(1), 44–57. <https://doi.org/10.1007/s10964-020-01332-9>
- Orben, A., Tomova, L., & Blakemore, S. J. (2020). The effects of social deprivation on adolescent development and mental health. *The Lancet Child & Adolescent Health*, 4(8), 634–640. [https://doi.org/10.1016/S2352-4642\(20\)30186-3](https://doi.org/10.1016/S2352-4642(20)30186-3)
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., ... & Unützer, J. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553–1598. [https://doi.org/10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X)
- Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry*, 56(3), 345–365. <https://doi.org/10.1111/jcpp.12381>
- Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2020). Global

- prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19: A meta-analysis. *JAMA Pediatrics*, 175(11), 1142–1150. <https://doi.org/10.1001/jamapediatrics.2021.2482>
- Sari, L. P., & Wahyudi, E. (2021). Anxiety disorders among Indonesian adolescents: Trends and contributing factors. *Journal of Educational, Health and Community Psychology*, 10(3), 457–472. <https://doi.org/10.12928/jehcp.v10i3.2199>
- Shorey, S., Chee, C. Y. I., Ng, E. D., Chan, Y. H., Tam, W. W. S., & Chong, Y. S. (2018). Prevalence and incidence of postpartum depression among healthy mothers: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 104, 235–248. <https://doi.org/10.1016/j.jpsychires.2018.08.001>
- Steinberg, L. (2012). Cognitive and affective development in adolescence. *Trends in Cognitive Science. Handbook of Parenting*, 9(2), 69–74.
- Tristiana, R. D., Yusuf, A., Fitryasari, R., Wahyuni, S. D., & Nihayati, H. E. (2018). Perceived barriers on mental health services by the family of patients with mental illness. *International Journal of Nursing Sciences*, 5(1), 63–67. <https://doi.org/10.1016/j.ijnss.2017.12.002>