



The Application of Benson Relaxation Techniques as a Stress Management Strategy for Posyandu

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Article Information	ABSTRACT
Received : 22 January 2026 Revised : 23 May 2026 Accepted : 21 July 2026	<i>Stress among public health volunteers, such as Posyandu workers, can lead to a decline in service quality and community involvement. This study aims to investigate the effectiveness of the Benson relaxation technique in improving stress management among Posyandu workers. The method used in this study was a pre-experimental design with a pretest-posttest approach. The participants in this study were five active Posyandu officers. The intervention consisted of stress management lectures and practice of the Benson relaxation technique to control stress. The Benson relaxation technique was conducted for 20 minutes over three sessions. Data were collected using the Perceived Stress Scale (PSS-10) and analyzed descriptively and inferentially. The results showed a consistent decrease in the average stress score from 25.2 ± 1.9 (pretest) to 15.2 ± 1.9 (posttest). Participants reported increased calmness, emotional stability, better sleep quality, and greater confidence in carrying out public health tasks. The combination of physiological relaxation, spiritual affirmation, and social support contributed to the observed improvements. The conclusion drawn is that Benson relaxation education effectively reduces perceived stress and enhances psychological resilience among officers. This method is recommended as a nursing modality therapy that is accessible, low-cost, and sustainable for strengthening the mental health and performance of public health volunteers.</i>
Keywords: Benson relaxation, stress management, Posyandu cadres, non-pharmacological intervention, community health	
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Introduction

Stress is a multidimensional phenomenon involving an individual's physiological, cognitive, and affective responses to environmental demands that are perceived to exceed their adaptive capacity (Allegretta, Rovelli, & Balconi, 2024). Physiologically, stress triggers the activation of the hypothalamic-pituitary-adrenal axis and the sympathetic nervous system, leading to the release of glucocorticoids and catecholamines (a mechanism that, if chronic, can cause metabolic, cardiovascular, and neurocognitive dysfunction (Smith & Vale, 2019). From a psychosocial perspective, stress reflects a mismatch between task demands and personal or contextual resources to cope with them (Putro, Erwandi, & Kadir, 2021). This is where coping strategies, social support, and emotional regulation capacity become crucial. In the context of public health, particularly for posyandu cadres who are at the forefront of health services in the community, understanding stress is not only theoretical but also practical (Siregar, 2023). Unmanaged stress can reduce service quality, decrease cadre retention, and reduce the effectiveness of promotive and preventive interventions at the local level (Adam et al., 2023).

The prevalence of stress among community health volunteers, including posyandu cadres, shows a worrying trend in national and international studies: the proportion of individuals reporting subclinical to pathological levels of stress varies widely depending on the definition and measurement instrument, but consistently shows that the psychosocial burden on this population is not a marginal event (Prihanti et al., 2022). Methodological factors such as the use of self-report scales versus clinical interviews, reference periods, and the heterogeneity of community settings influence prevalence estimates (Hariaty, Elita, & Dilaluri, 2023). However, what is clear is the existence of significant stress among cadres, manifested as emotional exhaustion, decreased motivation, somatic complaints, and reduced quality of interaction with the community (Pratiwi, Muhlisin, et al., 2022). Because posyandu cadres often work in conditions of limited resources and without adequate financial compensation, the cumulative impact of work stress has systemic implications for the coverage and quality of basic health programs (Wachidah Yuniartika et al., 2022).

Several determinants of stress among posyandu cadres can be categorized into three major domains (Sovitriana, Trisnawati, Zakiyah, Elmanika P, & Muthia D, 2025). First, individual characteristics include age, level of education, physical health status, prior experience, coping capacity, and vulnerability to psychopathological conditions. Second, organizational and work environment factors encompass increased workload without adequate compensation or

administrative support, role ambiguity, role conflict, and limited availability of material resources. Third, sociocultural factors involve community expectations, social dynamics, and gender norms that may disproportionately burden female cadres. The interaction among these domains generates a complex risk profile. For instance, cadres with lower educational backgrounds who face high administrative demands and lack social support are more likely to experience chronic stress (Pratiwi, Hudiyawati, Muhlisin, Ratnawati, & Fitriani, 2022). Furthermore, the inherently ambivalent nature of voluntary work—positioned between altruistic motivation and external performance expectations—may intensify psychological strain when not supported by sufficient training, recognition, or reward systems.

The rationale for implementing interventions among posyandu cadres can be viewed from ethical, practical, and strategic public health perspectives. Ethically, the state and healthcare system bear responsibility for safeguarding the well-being of individuals who voluntarily contribute their time and energy to primary health programs (Siregar, 2023). From a practical standpoint, improving cadres' well-being is associated with enhanced service quality, higher satisfaction among service recipients, and greater program sustainability, all of which are critical for achieving community health targets (Yuniartika et al., 2023).

In response to these challenges, there is a need to develop and adapt simple, cost-effective, and evidence-based non-pharmacological interventions that are suitable for the local context of posyandu cadres. Relaxation techniques, particularly Benson relaxation, represent mind–body interventions that elicit the relaxation response through controlled breathing and the repetition of neutral or meaningful words or phrases (Septiana et al., 2021). This response is hypothesized to involve decreased sympathetic nervous system activity, re-regulation of the hypothalamic–pituitary–adrenal (HPA) axis, and modulation of neurovascular networks associated with emotional regulation and attention (Rahman & Febristi, 2021).

Empirically, Benson relaxation has been reported to reduce subjective stress indicators, anxiety symptoms, and several physiological parameters such as blood pressure and respiratory rate in various clinical and non-clinical populations (Setyorini & Hartiningsih, 2024). The advantages of this method for the context of posyandu cadres are the simplicity of training, minimal equipment requirements, and ease of integration into community work routines.

Education on the application of Benson relaxation for posyandu cadres offers a comprehensive solution: in addition to providing individual coping techniques to reduce

physiological arousal and stress symptoms, an educational program designed with andragogy principles can increase self-efficacy, strengthen social support among cadres through group practice sessions, and encourage the adoption of long-term preventive behaviors. In an ideal intervention design, this education is combined with organizational components, such as role clarification, workload management, and reward mechanisms (Skivington et al., 2021). Thus, the approach taken is multilevel. Therefore, this study aims to evaluate the effectiveness of Benson relaxation education on stress management among posyandu cadres, with the hope of producing evidence that can be adopted in community capacity building programs and directed towards policies to improve the quality of human resources in primary care.

Method

This study employed a pre-experimental one-group pretest–posttest design to evaluate the effect of Benson relaxation education on stress management among Posyandu cadres. The study involved five female Posyandu Puspa Sari cadres from Jetis Village, Baki District, Sukoharjo Regency, Central Java, Indonesia, selected using total sampling based on predefined inclusion criteria. The intervention consisted of a 60-minute educational session on stress management and Benson relaxation, followed by guided relaxation practice and monitoring through a WhatsApp group conducted three times at three-day intervals. Data were collected at three time points (pretest, first evaluation, and posttest) using the Indonesian version of the Perceived Stress Scale (PSS-10), a validated instrument with high reliability (Cronbach's $\alpha = 0.82$), and supported by a behavioral observation sheet to assess participant engagement and adherence to relaxation practice. Descriptive statistics were used to summarize respondent characteristics, while inferential statistical analysis was conducted to examine changes in stress scores across measurement periods. Ethical principles were maintained through informed consent procedures, confidentiality protection, and voluntary participation.

Research Results

This study involved five Puspa Sari Posyandu cadres aged between 32 and 51 years (mean $\pm$ SD = 40.0 ± 7.6 years). Each cadre was evaluated three times at three-day intervals, including the first monitoring (pretest) before education, the second monitoring (evaluation I) after two training sessions, and the third monitoring (posttest) after all education sessions and Benson relaxation practices were completed. Overall, the results showed a consistent decrease in stress

scores over time. The average PSS-10 score decreased from 25.2 ± 1.9 in the first monitoring to 20.4 ± 2.1 in the second monitoring and reached 15.2 ± 1.9 in the third monitoring. These findings indicate that the Benson relaxation education intervention had a positive effect on reducing the subjective stress levels of posyandu cadres.

Table 1. Respondent Characteristics and PSS Score Monitoring Results

Respondent Initials	Age (Years)	First Monitoring		Second Monitoring		Third Monitoring	
		Subjective Response	PSS	Subjective Response	PSS	Subjective Response	PSS
Ny. S	34	Admitted to often feeling tense and nervous when facing posyandu tasks. Feeling easily panicked when data recording errors occurred.	24	Beginning to feel more relaxed and able to control breathing when feeling anxious. Mentioned that relaxation exercises made the body feel lighter.	19	Experiencing stable inner peace. Stated being more patient, focused, and able to think clearly in stressful situations.	14
Ny. Y	43	Complaining of fatigue, difficulty sleeping, and often feeling overwhelmed by household responsibilities and community health center duties.	26	Stating that they began to feel calmer after practicing breathing exercises and short prayers. Sleeping more soundly than before.	22	Feeling more patient, smiling more easily, and not getting angry as quickly. Expressing feelings of "greater peace" after regularly practicing relaxation techniques.	16
Ny. D	51	Initially skeptical about the benefits of exercise.	28	Felt a decrease in physical tension and	23	Reported increased focus, emotional stability, and	18

Ny. T	40	Admitted to often feeling dizzy and tense in the neck when workload increased.	25	began to enjoy exercise. Said "my head feels lighter."	20	better time management skills. Felt more prepared to face posyandu activities.	15
		Reported feeling stressed when posyandu activities did not run smoothly. Often felt irritable towards colleagues.		Experienced feelings of calmness and began to be able to control emotions when situations did not go as expected.		Reported significant changes: more patient, thinking positively, and often remembering relaxation exercises when facing problems at home.	
Ny. R	32	Admitted to often feeling inferior and afraid of making mistakes in carrying out their role as cadres because they were still new.	23	Began to feel confident and enjoy relaxation training sessions. Mentioned that breathing exercises helped calm their minds.	18	Stated that they were more optimistic, confident, and brave in speaking in front of residents. Felt "calmer in facing responsibilities".	13
(Mean ± SD)	40,0 ± 7.6	25.2 ± 1.9		20.4 ± 2.1		15.2 ± 1.9	

In the first monitoring, all respondents reported emotional and physical stress. Mrs. S (34 years old) and Mrs. T (40 years old) stated that they were easily nervous, panicked, and quick to anger when faced with unexpected situations at the health center. Ms. Y (43 years old) complained of emotional exhaustion and sleep disturbances, while Ms. D (51 years old) experienced psychosomatic stress in the form of headaches and neck tension. Ms. R (32 years old) showed social-emotional stress, namely feelings of inferiority and fear of making mistakes because she was still new to her role as a cadre.

Entering the second monitoring, all respondents began to report positive physiological and emotional changes. The average stress score decreased from the moderate stress category to a lower level (20.4 ± 2.1). Respondents described feeling lighter, breathing more regularly, and feeling calm after doing Benson relaxation. Some cadres, such as Mrs. Y and Mrs. D, mentioned improved sleep quality and reduced physical complaints, while Mrs. R stated that she had begun to feel confident and calm when dealing with residents.

In the third monitoring (day 7), all respondents showed a significant improvement in emotional stability and self-control, accompanied by a clinically meaningful decrease in PSS scores (mean 15.2 ± 1.9). Mrs. S and Mrs. T reported being able to control their emotions and think more clearly in stressful situations. Ms. Y stated that she was now more patient and felt “at peace,” while Ms. D stated that she was more focused.

Discussion

The primary objective of this study was to evaluate the effect of Benson relaxation education on stress management among Posyandu cadres. The findings demonstrated a consistent reduction in stress levels, as indicated by the decrease in the mean Perceived Stress Scale (PSS-10) score from 25.2 ± 1.9 at baseline to 15.2 ± 1.9 after the intervention. These results suggest that Benson relaxation education may be an effective non-pharmacological approach for improving stress management among community health volunteers. In addition to the quantitative reduction in stress scores, participants reported improved emotional stability, self-control, and confidence in performing their community health responsibilities, indicating that the intervention contributed not only to physiological relaxation but also to psychosocial well-being (Sovitriana et al., 2025).

The observed reduction in stress can be interpreted through the Transactional Model of Stress and Coping proposed by Lazarus and Folkman, which explains that stress is influenced by an individual's cognitive appraisal of environmental demands and available coping resources (Pratiwi et al., 2023). Through education and repeated relaxation practice, participants may have developed more adaptive coping strategies, enabling them to perceive stressful situations as more manageable (Prihanti et al., 2022). The findings are also consistent with Benson's Relaxation Response Theory, which proposes that repetitive words, focused attention, and passive attitudes toward distracting thoughts can activate the parasympathetic nervous system and counteract the physiological effects of stress (Sari et al., 2022). The gradual decline in PSS

scores across monitoring sessions supports the notion that regular practice enhances the body's relaxation response and contributes to sustained stress reduction.

The results of this study are consistent with previous research reporting the effectiveness of Benson relaxation in reducing stress, anxiety, and psychological distress in various populations. Studies by Rahmawati et al. (2021), Ismail et al. (2020), and Setyorini and Hartiningsih (2024) found that relaxation techniques incorporating spiritual elements significantly improved psychological well-being and reduced stress levels. Similarly, Abu Maloh et al. (2024) reported that Benson relaxation decreases physiological stress responses through modulation of autonomic nervous system activity. The present findings therefore reinforce existing evidence that Benson relaxation can serve as an accessible and culturally acceptable stress-management strategy.

One important contribution of this study is its focus on Posyandu cadres, a community-based volunteer group that has received relatively limited attention in stress-management intervention research (Obbarius, Fischer, Liegl, Obbarius, & Rose, 2021). Most previous studies have focused on patients, students, or healthcare professionals, whereas Posyandu cadres face unique challenges related to community service responsibilities, administrative demands, and social expectations. Furthermore, integrating educational sessions, guided practice, and follow-up monitoring through a WhatsApp group represents a practical community-based implementation model that may enhance participant engagement and adherence. This approach contributes to the growing evidence supporting digital-assisted community health interventions in primary healthcare settings (Prihanti et al., 2022).

Although the intervention demonstrated positive outcomes, several considerations should be acknowledged. The reduction in stress levels may not be solely attributable to the physiological effects of Benson relaxation (Hikmah, Sudarso, Yosdimyati, & Camelia, 2024). Social support among participants during training sessions, increased attention from researchers, and the opportunity to discuss daily challenges within the monitoring group may also have contributed to improved psychological well-being (Dalle & Tobroni, 2025). These factors likely acted as additional coping resources, consistent with the Stress-Buffering Model proposed by Cohen and Wills, which suggests that social support can mitigate the negative impact of stressors.

From a practical perspective, the findings suggest that Benson relaxation education can be incorporated into routine Posyandu cadre development programs as a low-cost, easy-to-implement, and non-pharmacological strategy for stress management (Khairunnisa, Dewi, & Utami, 2023). Improved stress management among cadres may contribute to better service quality, enhanced interpersonal relationships, and greater sustainability of community health programs. Theoretically, the study supports the integration of physiological, psychological, social, and spiritual dimensions in community-based stress-management interventions, highlighting the multidimensional nature of coping processes.

Several limitations should be considered when interpreting the findings. First, the study involved a very small sample size consisting of only five participants, limiting the generalizability of the results. Second, the absence of a control group prevents the establishment of a definitive causal relationship between the intervention and the observed reduction in stress. Third, the relatively short monitoring period did not allow assessment of the long-term sustainability of the intervention effects. Finally, the use of self-reported stress measures may be subject to response bias and social desirability effects.

Future studies should involve larger and more diverse samples, employ randomized controlled trial designs, and include longer follow-up periods to evaluate the sustainability of stress reduction over time. Future research may also compare Benson relaxation with other stress-management approaches, such as mindfulness-based interventions, progressive muscle relaxation, or peer-support programs. Additionally, incorporating objective physiological indicators, such as heart rate variability, blood pressure, or cortisol levels, would provide a more comprehensive understanding of the mechanisms underlying the effectiveness of Benson relaxation in community health settings.

Conclusion

Education on the application of Benson relaxation has been proven effective in significantly reducing stress levels among Posyandu cadres through mechanisms of increased physiological relaxation, emotional stability, and strengthening of spiritual and social aspects. This intervention not only reduced Perceived Stress Scale (PSS) scores but also increased self-efficacy, inner peace, and cadres' ability to manage psychological pressure while carrying out community tasks. The implementation of Benson relaxation techniques is recommended as an

easy, inexpensive, and sustainable non-pharmacological stress management strategy for public health cadres.

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