



# The Effect of Self Hypnosis on Anxiety of Pregnant Women in the Third Trimester at TPMB Sahabat Ibu, Malang Regency

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**Abstract:** Pregnancy represents a profound physiological and psychological transition, often accompanied by significant discomfort, particularly during the third trimester. This discomfort, in turn, frequently triggers heightened levels of anxiety among expectant mothers. Pregnancy-related anxiety is a pervasive psychological condition, as highlighted by data from the WHO in 2015, which indicated that approximately 10% of pregnant women and 13% of postpartum women worldwide experience mental health disorders, including trauma and depression. Elevated anxiety during pregnancy poses considerable risks to both maternal and fetal health. This study aims to evaluate the effectiveness of self-hypnosis in reducing anxiety levels among third-trimester pregnant women. A pre-experimental design with a one-group pretest-posttest approach was applied, involving 40 pregnant women experiencing anxiety. Statistical analysis using the Wilcoxon signed-rank test revealed a significant reduction in anxiety levels following the self-hypnosis intervention ( $p = 0.000$ ;  $p < 0.05$ ). These findings highlight self-hypnosis as an effective, non-invasive, and accessible therapeutic approach for improving maternal psychological well-being, with potential benefits for both maternal and fetal health.

**Keywords:** Anxiety; Self-hypnosis; Pregnancy; Maternal health; Psychological well-being

## Introduction

Pregnancy is a profound physiological and psychological transition that brings significant changes in a woman's life. These transformations are influenced by multiple interacting factors, including biological, environmental, social, cultural, and economic aspects (Patiyah, Carolin, & Dinengsih, 2021). Among these challenges, anxiety is one of the most prevalent psychological conditions experienced by pregnant women, particularly in the third trimester. Anxiety during pregnancy is not merely an emotional response but a serious condition that can negatively impact both maternal and fetal health.

According to a World Health Organization (WHO) report (2019), approximately 10% of pregnant women and 13% of postpartum women worldwide suffer from mental disorders, including anxiety and depression. In Indonesia, the prevalence of anxiety among pregnant women is alarmingly high, reaching 71.9% (Albin et al., 2022). The Ministry of Health of the Republic of Indonesia (2008) reported that among 373 million pregnant women, 107 million (28.7%) experienced anxiety, which is a leading contributor to childbirth complications and the high maternal mortality rate. In 2019, the maternal mortality rate due to pregnancy-related complications was recorded at 1,712 cases (Setiawati et al., 2022).

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From a physiological perspective, hormonal fluctuations during pregnancy, particularly in the third trimester, exacerbate anxiety symptoms. Estrogen and progesterone levels increase dramatically—up to nine and twenty times higher than during the normal menstrual cycle, respectively—causing biochemical imbalances that trigger mood swings, decreased concentration, and heightened blood pressure (Hariyanto & Miftah, 2020). A study by Fazdria and Harahap (2016) revealed that among pregnant women, 4% experienced mild anxiety, 48% moderate anxiety, and 48% severe anxiety. In Malang City, the prevalence of anxiety increased from 43.1% in the first trimester to 67.8% in the third trimester. The primary sources of this anxiety include fear of labor complications, pain, failure to deliver naturally, and excessive bleeding risks (Alder et al., 2019; Hasim, 2019). If left unaddressed, pregnancy-related anxiety can lead to adverse outcomes such as suboptimal uterine contractions, increased risk of premature birth, and compromised maternal-fetal health.

Given the serious consequences of pregnancy-related anxiety, effective interventions are urgently needed. Various psychological therapies have been explored, with relaxation-based interventions emerging as a promising approach. Relaxation techniques work by modulating the autonomic nervous system, reducing sympathetic nervous activity while enhancing parasympathetic responses, ultimately fostering relaxation, lowering blood pressure, and improving overall well-being. One such innovative relaxation technique is **self-hypnosis**, a self-directed method combining concentration, visualization, and affirmation to induce a state of mental tranquility. Self-hypnosis has been shown to help individuals manage stress, reduce fear, and improve emotional stability, particularly during pregnancy and labor (Purwanto, 2021).

Despite the growing interest in self-hypnosis, empirical evidence supporting its effectiveness in reducing anxiety among pregnant women, especially in Indonesia, remains limited. This study aims to evaluate the impact of self-hypnosis on anxiety levels among third-trimester pregnant women at TPMB Sahabat Ibu, Malang Regency. By providing empirical evidence on the effectiveness of self-hypnosis, this research seeks to contribute to the development of psychological interventions that are practical, easy to implement, and beneficial in supporting maternal and fetal health.

## Method

This study adopted a pre-experimental design with a one group pretest-posttest approach implemented in a cross-sectional time frame. This design was designed to

evaluate changes in anxiety levels in pregnant women undergoing self-hypnosis intervention by comparing anxiety conditions before and after the intervention was implemented. In this design, no control group or randomization procedure was used, considering that the main focus of the study was to observe the direct effects of self-hypnosis on anxiety levels of subjects in a single group. This approach allows for more focused measurement of the impact of changes in variables in a more controlled context, although the absence of a comparison group can provide contrasting data. Data analysis was performed using the SPSS. antibacterial activity results using the One Way ANOVA. A p-value <0.05 was used to describe statistical significance.

## Result and Discussion

### *Result of Single Black Garlic Fermentation*

**Table 1.** Frequency Distribution of Respondent Characteristics

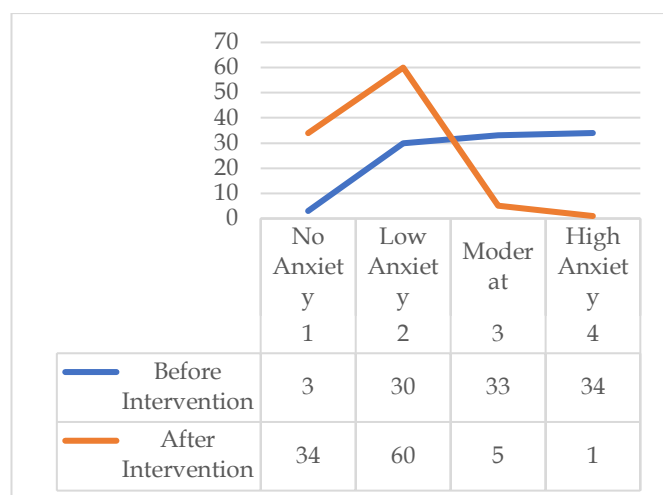
	Variable	Frequency	Percentage (%)
Age	20-35 Years	35	83
	> 35 Years	4	17
Occupation	Working	8	26
	Not Working	32	74
Education	Low	5	16
	Medium	25	50
	High	10	33
Parity	Primigravida	20	50
	Multigravida	20	50

The majority of respondents in this study were in the ideal reproductive age range, namely 20–35 years, as many as 35 people (83.3%), reflecting the dominance of age groups with relatively lower potential pregnancy risks. In terms of employment, most respondents were housewives or unemployed, as many as 32 people (73.3%), indicating that domestic roles were dominant in this population. The characteristics of respondents' education showed that 25 people (49.8%) had secondary education, reflecting sufficient access to education to support understanding of interventions. Meanwhile, parity analysis showed a balanced distribution between respondents with multigravida and primigravida parity, each as many as 20 people (50%), which can provide a picture of anxiety in pregnancy based on previous childbirth experiences.

**Table 2.** Statistical Test Results of the Effect of Self-Hypnosis on Anxiety Levels

Variable	Mean Pre test	Mean Post Test	Mean	P Value
Anxiety Level	24.3 (±5.2)	15.7 (±4.8)	8.6	0.000

The reduction in anxiety scores by 8.6 is not only statistically significant but also clinically relevant. High anxiety levels in pregnant women can increase the risk of adverse outcomes, such as premature delivery or mental health issues. Therefore, the observed decrease suggests that self-hypnosis is an effective and practical intervention.



**Figure 1.** Anxiety Levels Before And After Intervention

This study shows a significant change in individuals' anxiety levels before and after the intervention. Before the intervention, most participants experienced moderate to high anxiety, with 33 people in the moderate anxiety category and 34 in the high anxiety category. However, after the intervention, there was a sharp decrease, with 60 people experiencing low anxiety and only 1 person still experiencing high anxiety. This indicates that the intervention was highly effective in reducing anxiety levels, with many participants who were previously highly anxious or moderately anxious now falling into the no anxiety or low anxiety categories, demonstrating the intervention's success in improving psychological well-being.

### Discussion

The results of this study substantially indicate that the application of self-hypnosis techniques has a significant effect in reducing anxiety levels in pregnant women in the third trimester. Bivariate analysis showed a p-value of 0.000, clearly smaller than the significance level that has been set, which is 0.05. This finding statistically strengthens the proposed hypothesis, stating that self-hypnosis has a positive impact on reducing anxiety in pregnant women. Thus, the results of this study not only provide in-depth empirical evidence regarding the effectiveness of self-hypnosis techniques, but also confirm the relevance of this psychological intervention in the context of maternal health, especially in dealing with anxiety that often

accompanies the third trimester of pregnancy (Setiawati & Qomari, 2022; Gjerstad et al., 2018).

Before the intervention, all respondents (100%) reported experiencing anxiety at various levels. After the self-hypnosis intervention, there was a significant decrease in anxiety, where as many as 10 respondents (33%) were reported to no longer experience anxiety. These results reflect that self-hypnosis plays an important role in helping pregnant women deal with anxiety related to the pregnancy and childbirth process (Hindun & Novita, 2021; Farada, 2011).

The findings in this study are consistent with those presented by Hindun et al. (2021), who showed that self-hypnosis techniques can significantly reduce anxiety levels in pregnant women. Similarly, studies by Farada (2011) in Bondowoso Regency and Siregar (2021) also reported significant differences in anxiety levels before and after the self-hypnosis intervention. These findings further strengthen the empirical evidence suggesting that self-hypnosis can be an effective psychological intervention for reducing anxiety among pregnant women. This evidence supports the idea that such interventions can be widely implemented in various settings, particularly in regions with high anxiety levels among pregnant women (Hindun & Novita, 2021; Farada, 2011).

Furthermore, self-hypnosis aligns with the theory of relaxation techniques, which emphasize controlling stress responses through various physiological and psychological mechanisms. According to Gjerstad et al. (2018), self-hypnosis activates the parasympathetic nervous system, which helps reduce the physiological responses associated with stress, such as elevated heart rate and blood pressure. This supports the observation that self-hypnosis not only alleviates anxiety but also improves overall maternal health by reducing physical stress markers that can negatively impact both the mother and fetus (Gjerstad et al., 2018).

From a physiological perspective, anxiety experienced by pregnant women is often due to the activation of the Hypothalamic-Pituitary-Adrenal (HPA) axis system. Stressors trigger the release of hormones such as cortisol and adrenaline, which lead to various psychological and physical symptoms, including tension, insomnia, and emotional disturbances (Kohen et al., 2020). Self-hypnosis functions as a mechanism to regulate the body's stress response through hormonal management, promoting relaxation, and balancing emotional states. This aligns with findings by Kohen et al. (2020), who demonstrated that relaxation techniques, including self-hypnosis, can significantly lower cortisol levels in individuals experiencing high stress (Kohen et al., 2020).

Various factors contribute to the level of anxiety experienced by pregnant women, including demographic, social, and health aspects. One significant determinant is age, with studies showing that pregnancies in women under 20 or over 35 years old tend to increase the risk of anxiety due to both physiological changes and heightened concerns about pregnancy and childbirth (Rinata et al., 2019). Additionally, maternal education levels play an essential role in anxiety management. Mothers with higher education levels tend to develop more informed coping strategies, as noted by Setiawati & Qomari (2022). These women may have a more rational approach to managing stressors, including the anxiety that often arises during pregnancy (Setiawati & Qomari, 2022).

In addition to age and education, factors such as occupation, parity (whether a woman is pregnant for the first time or has previous children), family support, and overall health status influence the dynamics of anxiety in pregnant women (Sulistyawati, 2019). For instance, mothers with family support systems are more likely to experience lower levels of anxiety, as emotional support can buffer the stress of pregnancy-related challenges (Astuti & Rumiyati, 2021). These factors, combined with other elements like socio-economic status and access to healthcare, paint a comprehensive picture of how pregnant women experience and manage anxiety (Sulistyawati, 2019; Astuti & Rumiyati, 2021).

Self-hypnosis, as a relaxation technique based on self-suggestion through concentration and imagination, is particularly effective in creating emotional calm. This approach not only helps reduce tension and increase relaxation but also addresses the psychological aspects of pregnancy anxiety. In this context, self-hypnosis creates a balance between the mind, body, and soul, facilitating a holistic approach to maternal health (Purwanto, 2013). By addressing both the emotional and physical components of anxiety, self-hypnosis stands out as a comprehensive intervention for improving the well-being of pregnant women during the critical third trimester (Purwanto, 2013).

## Conclusion

This study provides strong evidence that self-hypnosis is an effective intervention for reducing anxiety levels among third-trimester pregnant women. The statistical results indicate a significant reduction in anxiety following the self-hypnosis intervention, confirming its role as a beneficial psychological technique in maternal care. By modulating stress responses and promoting relaxation, self-hypnosis helps pregnant women achieve better emotional well-being, which is crucial for both maternal and fetal health.

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## Author Contributions

T F contributed in conceptualizing the research idea, developing the product. S. W., contributed in analyzing data and writing the article. A. D. N., contributed in writing, reviewing, and editing the article. A., contributed in collecting data.

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## Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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