



## The Mediating Role of Midwifery Support in the Association Between Tokophobia and Elective Caesarean Requests Among Primigravida: A Cross-Sectional Study

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#### ABSTRACT

Fear of childbirth remains a significant psychological factor influencing delivery mode preferences among first-time pregnant women. This study aimed to examine the direct effect of tokophobia on non-medically indicated caesarean section (CS) requests among primigravidae and to assess the mediating role of midwifery support in this relationship. A cross-sectional design was employed involving 150 third-trimester primigravid women in Bandar Lampung City, selected through multi-stage cluster sampling across eight sub-districts. Tokophobia was measured using a culturally adapted version of the Wijma Delivery Expectancy Questionnaire Version A, while midwifery support was assessed using a researcher-developed instrument. Preferences for CS were collected through a nominal questionnaire. Data were analyzed using structural equation modeling with bootstrapping. The results showed that tokophobia significantly predicted both CS requests and the level of midwifery support. Furthermore, midwifery support significantly mediated the relationship between tokophobia and CS requests. Interestingly, the mediating effect was positive, indicating that supportive approaches lacking structured cognitive components may unintentionally reinforce CS preference among women experiencing fear of childbirth. These findings highlight tokophobia as a key psychological determinant of non-medically indicated CS demand in urban settings. In practice, integrating structured psychoeducational counseling and cognitive reframing techniques into routine antenatal care is crucial. Additionally, midwifery training programs should be strengthened to include evidence-based psychological intervention skills. Early screening for tokophobia, starting from the first trimester, is strongly recommended to help reduce unnecessary caesarean sections and improve maternal health outcomes.

**Keywords:** Caesarean Section, Midwifery Support, Tokophobia.

#### ABSTRAK

Ketakutan terhadap persalinan merupakan faktor psikologis penting yang memengaruhi preferensi metode persalinan pada wanita hamil pertama. Penelitian ini bertujuan untuk menganalisis pengaruh langsung tokofobia terhadap permintaan operasi caesar (CS) tanpa indikasi medis pada primigravida serta menilai peran mediasi dukungan kebidanan dalam hubungan tersebut. Desain penelitian yang digunakan adalah cross-sectional dengan melibatkan 150 wanita primigravida trimester ketiga di Kota Bandar Lampung yang dipilih melalui teknik multi-stage cluster sampling di delapan kecamatan. Tokofobia diukur menggunakan versi adaptasi budaya dari Wijma Delivery Expectancy Questionnaire Version A, sedangkan dukungan kebidanan diukur menggunakan instrumen yang dikembangkan oleh peneliti. Preferensi terhadap operasi caesar dikumpulkan melalui kuesioner nominal. Analisis data dilakukan menggunakan structural equation modeling dengan pendekatan bootstrapping. Hasil penelitian menunjukkan bahwa tokofobia secara signifikan memprediksi permintaan operasi caesar serta tingkat dukungan kebidanan. Selain itu, dukungan kebidanan terbukti secara signifikan memediasi hubungan antara tokofobia dan permintaan operasi caesar. Menariknya, efek mediasi tersebut bersifat positif, yang menunjukkan bahwa pendekatan dukungan yang tidak disertai komponen kognitif terstruktur dapat secara tidak langsung memperkuat preferensi terhadap operasi caesar pada wanita yang mengalami ketakutan terhadap persalinan. Temuan ini menegaskan bahwa tokofobia merupakan determinan psikologis utama terhadap permintaan operasi caesar tanpa indikasi medis di wilayah perkotaan. Secara praktis, integrasi konseling psikoedukasi terstruktur dan teknik restrukturisasi kognitif dalam pelayanan antenatal rutin sangat diperlukan. Selain itu, program pendidikan dan pelatihan kebidanan perlu diperkuat dengan keterampilan intervensi psikologis berbasis bukti. Skrining dini tokofobia sejak trimester pertama juga sangat direkomendasikan untuk menurunkan angka operasi caesar yang tidak diperlukan serta meningkatkan luaran kesehatan ibu.

**Kata Kunci:** Operasi Caesar, Dukungan Kebidanan, Tokofobia.

## INTRODUCTION

Indonesia continues to record caesarean section (CS) rates that exceed the 10–15% threshold established by the World Health Organization (WHO), with national data from Riskesdas 2018 documenting a prevalence of 17.6% nationally and 12.7% in Lampung Province (Kementerian Kesehatan Republik Indonesia, 2018). Urban centers such as Bandar Lampung City are estimated to surpass even this provincial figure, mirroring trends observed across other densely populated Indonesian cities. Of particular concern within this trajectory is the growing proportion of CS deliveries classified as Caesarean Delivery on Maternal Request (CDMR), wherein surgical birth is pursued in the complete absence of medical indication. This pattern carries significant implications for maternal and neonatal health systems, as non-medically indicated CS exposes both mother and infant to avoidable surgical risks while placing substantial strain on healthcare resources and national obstetric policy frameworks.

A central psychological driver underlying CDMR is tokophobia, defined as a pathological and debilitating fear of labor and childbirth that substantially distorts a woman's perception of vaginal delivery and propels her toward CS as a perceived avenue of safety (Wijma, Wijma, & Zar, 1998). Unlike generalized prenatal anxiety, tokophobia is characterized by its clinical severity and its direct behavioral consequence: the active avoidance of vaginal birth. Women experiencing tokophobia frequently construct disproportionately threatening cognitive representations of labor, perceiving it as an uncontrollable and life-endangering event. This fear-driven decisional pattern is particularly pronounced among primigravidae, who lack any prior birth experience to moderate or calibrate their threat appraisals. Without experiential reference points, first-time pregnant women are uniquely susceptible to distorted childbirth narratives amplified through social media, peer accounts, and unfiltered digital health content, conditions especially prevalent in urban Indonesian settings (Rosenstock, 1974; Vlaeyen & Linton, 2000).

Despite growing global recognition of tokophobia as a determinant of CS preference, the substantial majority of existing empirical investigations originate from Northern European contexts, operating within healthcare infrastructures and cultural frameworks that diverge considerably from those characterizing Indonesian maternity care (Wijma, Wijma, & Zar, 1998). Evidence specifically examining tokophobia prevalence and its association with non-medically indicated CS requests among primigravidae within Indonesian urban settings remains critically scarce. This gap is compounded by insufficient scholarly attention to the role that midwifery support, as a modifiable and structurally embedded variable within antenatal care, may play in mediating the pathway from tokophobia to CS preference. Midwives occupy the most sustained and accessible point of psychological contact for pregnant women in Indonesia, particularly within community health center settings, yet their potential to influence fear-driven birth preferences through structured supportive intervention remains empirically underexplored (House, 1981; Souto et al., 2022). This study therefore aimed to analyze the direct relationship between tokophobia and non-medically indicated CS requests among primigravidae in Bandar Lampung City, while empirically examining midwifery support as a mediating variable within this association. Mediation analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with bootstrapping procedures (Baron & Kenny, 1986; Fritz & MacKinnon, 2007; Hair, & Alamer, 2022; Kaur, & Kaur, 2023), alongside the culturally adapted Wijma Delivery Expectancy Questionnaire (W-DEQ) Version A and the researcher-developed Midwifery Support Scale (MSS). The findings are intended to inform evidence-based psychoeducational interventions within Indonesian antenatal care services and strengthen the strategic role of midwives in reducing preventable CS rates nationally.

## RESEARCH METHODS

This study adopted a cross-sectional analytical design to examine the concurrent relationships among tokophobia, midwifery support, and non-medically indicated caesarean section (CS) requests among primigravid women. A mediational analysis framework was embedded within this design, positioning midwifery support as the intermediary variable between tokophobia as the independent construct and CS preference without medical indication as the dependent outcome. Cross-sectional designs are well-suited for identifying associative patterns across large samples within constrained timeframes; however, a fundamental methodological

consideration must be explicitly acknowledged. Because all variables were measured at a single point in time, temporal precedence among constructs cannot be empirically verified, and causal directionality therefore remains inferential rather than conclusively established. This limitation is particularly relevant to mediation interpretation, and future investigations employing prospective longitudinal or experimental designs are necessary to substantiate the causal claims implied by the structural model.

Data collection was carried out over four months across registered antenatal care (ANC) facilities in Bandar Lampung City, encompassing independent midwifery practices and community health centers. Eight sub-districts were randomly selected from 20 available sub-districts citywide. The target population comprised all primigravid women receiving antenatal examinations at eligible facilities. Inclusion criteria required participants to meet the following conditions: confirmed primigravida status, gestational age of  $\geq 28$  weeks, singleton pregnancy, absence of any documented medical indication for CS in clinical records, and voluntary willingness to participate. Participants were excluded if they carried a prior psychiatric diagnosis, presented with medically complicated pregnancies necessitating planned CS, or were unable to comprehend the study instruments due to language barriers.

Sample size was determined using the mediated effect detection formula recommended for mediation models, incorporating a statistical power of 0.80, a significance level of  $\alpha = 0.05$ , and a moderate assumed effect size ( $\beta = 0.39$ ), yielding a minimum recruitment target of 150 participants. This figure satisfactorily exceeded the minimum threshold for mediation detection and aligned with established rule-of-thumb recommendations for Structural Equation Modeling (SEM) analyses. Sampling proceeded through multi-stage cluster sampling: eight sub-districts were randomly selected, followed by purposive selection of one community health center and two to three independent midwifery practices per sub-district, with participants subsequently enrolled through consecutive sampling until each site quota was fulfilled.

Three instruments were employed for data collection. Tokophobia was assessed using the Wijma Delivery Expectancy Questionnaire (W-DEQ) Version A, a validated 33-item instrument using a six-point Likert scale with scores ranging from 0 to 165, where  $\geq 85$  designates clinical-level tokophobia. Prior to deployment, the instrument was rigorously culturally adapted into Bahasa Indonesia through forward translation, expert committee review, back-translation, and pilot testing with 30 primigravid women, confirming its contextual appropriateness. The W-DEQ Version A is widely recognized as the gold standard for measuring childbirth fear across diverse cultural settings (Ramalingappa, Gowda, & Srinivasamurthy, 2022). Midwifery support was measured using the researcher-developed Midwifery Support Scale (MSS), grounded in four theoretically derived subdimensions of social support: emotional, informational, instrumental, and appraisal support. The MSS underwent Content Validity Index (CVI) validation achieving  $\geq 0.80$ , followed by Confirmatory Factor Analysis (CFA) to confirm its structural integrity. Evidence supports that structured midwife-led psychoeducational interventions meaningfully attenuate childbirth fear (Souto et al., 2022). CS preference without medical indication was captured through a researcher-developed nominal questionnaire yielding a binary response. All instruments demonstrated acceptable internal consistency, with Cronbach's alpha  $\geq 0.70$  and intraclass correlation coefficients (ICC)  $\geq 0.70$ .

To provide clarity on how each variable was operationally defined and measured, the three research variables are described below in terms of their respective instruments, measurement scales, and categorical classifications. Tokophobia was measured at the interval level using the W-DEQ Version A, categorized as low ( $< 37$ ), medium (37–65), high (66–84), or clinical ( $\geq 85$ ). Midwifery support was similarly measured at the interval level using the MSS, classified as less adequate ( $< 60$ ), adequate (60–79), or good ( $\geq 80$ ). CS preference was captured at the nominal level, coded as 0 (no CS request) or 1 (CS request). These operational specifications are described above for reference.

Data were analyzed sequentially. Descriptive statistics reported frequencies, percentages, means, standard deviations, and ranges. Bivariate analysis employed Chi-Square tests, independent samples t-tests, and Pearson's correlation at a significance threshold of  $p < 0.05$ . Mediation analysis followed the Baron & Kenny (1986) framework augmented by 5,000-resample bootstrapping with 95% bias-corrected confidence intervals, with indirect effects deemed

significant when confidence intervals excluded zero. Structural model evaluation was performed using SmartPLS, applying fit indices of  $\chi^2/df \leq 3.0$ , CFI  $\geq 0.90$ , TLI  $\geq 0.90$ , RMSEA  $\leq 0.08$ , and SRMR  $\leq 0.08$ . This study received ethical approval from the Health Research Ethics Committee of Politeknik TEDC Bandung (Protocol: 31PKE-030325, 3 March 2025), with all participants providing written informed consent prior to data collection.

## RESULTS

**Table 1.** Demographic Characteristics of Respondents (n=150).

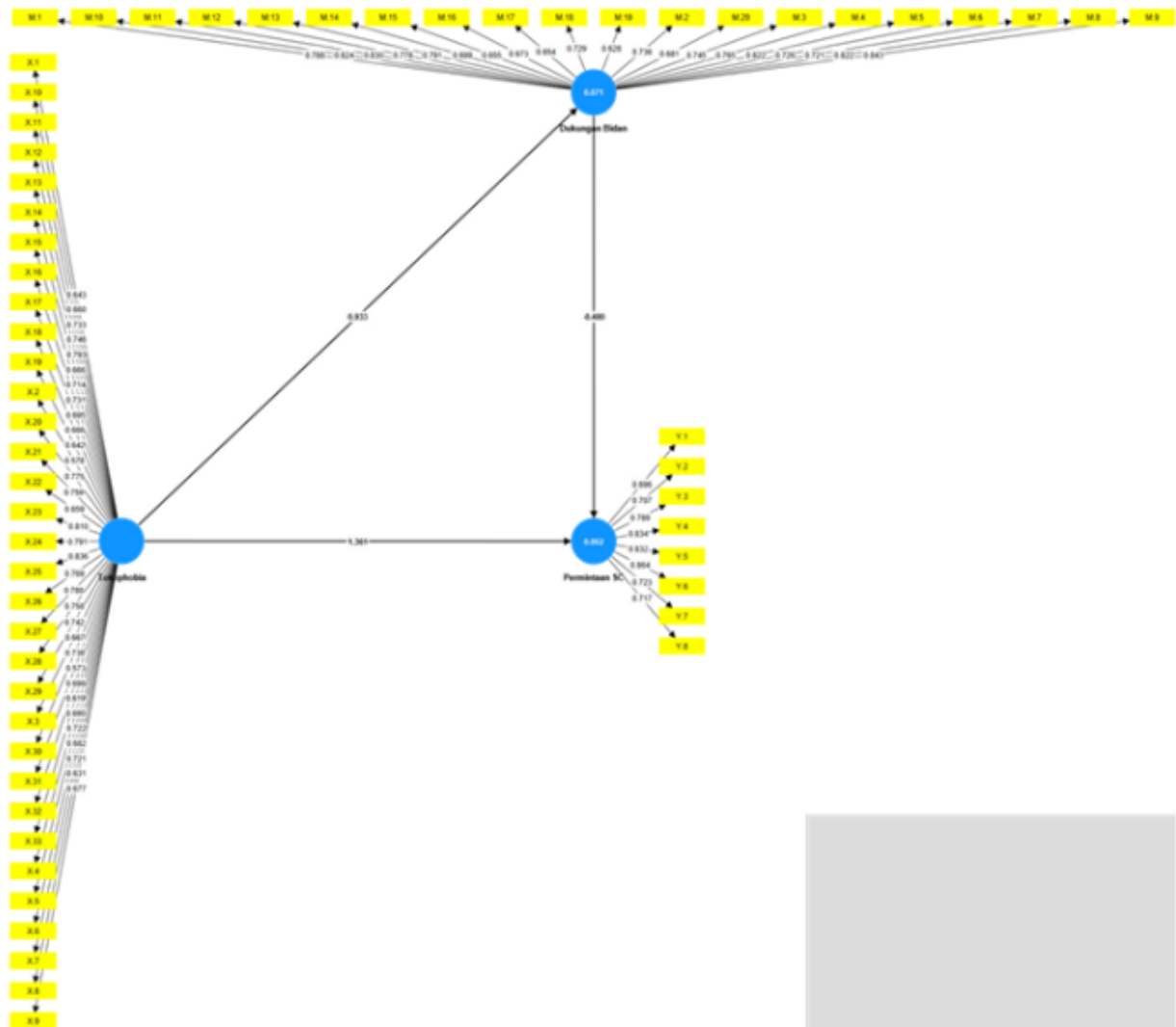
Characteristics	Categories	Frequency (n)	Percentage (%)	Mean $\pm$ SD
Age (years)	<20	7	4.7	
	20–25	62	41.3	
	26–30	58	38.7	
	31–35	22	14.7	
	>35	1	0.7	24.8 $\pm$ 4.2
Education	Elementary School	8	5.3	
	Junior High School	14	9.3	
	Senior High School	76	50.7	
	College/University	52	34.7	
Occupation	Unemployed/Housewife	68	45.3	
	Self-employed	22	14.7	
	Private Employee	42	28.0	
	Civil Servant	16	10.7	
	Others	2	1.3	
Economic Status	Below MSE (<IDR 2,500,000)	51	34.0	
	At or Above MSE ( $\geq$ IDR 2,500,000)	99	66.0	
Gestational Age	28–32 weeks	49	32.7	
	33–36 weeks	60	40.0	
	37–40 weeks	41	27.3	33.4 $\pm$ 3.1
ANC Venue	Community Health Center	72	48.0	
	Independent Midwifery Practice	66	44.0	
	Hospital	10	6.7	
	Clinic	2	1.3	
History of Trauma	Present	26	17.3	
	Absent	124	82.7	

Table 1 shows that the largest proportion of respondents fell within the 20–25 year age bracket (41.3%), with a mean age of 24.8  $\pm$  4.2 years, reflecting the physiologically optimal reproductive window. Senior high school graduates constituted the dominant educational category (50.7%), while the majority were housewives (45.3%) with household incomes at or exceeding the minimum standard of earnings (66.0%). The most prevalent gestational age range was 33–36 weeks (40.0%), yielding a mean of 33.4  $\pm$  3.1 weeks. Community health centers served as the primary ANC venue for 48.0% of participants, and the substantial majority reported no prior history of trauma (82.7%). Prior to structural path analysis, a rigorous evaluation of the measurement model was conducted to verify the validity and reliability of all research instruments.

**Table 2.** Outer Loading, AVE, and Reliability Test Results.

Variable	AVE	Composite Reliability	Cronbach's Alpha
Midwifery Support	0.560	0.962	0.958
CS Request	0.597	0.922	0.902
Tokophobia	0.506	0.971	0.969

Table 2 shows that all indicators across the three constructs produced outer loading values exceeding the 0.60 threshold, ranging from 0.573 to 0.864 for tokophobia, 0.628 to 0.843 for midwifery support, and 0.696 to 0.864 for CS requests. The Average Variance Extracted (AVE) for all constructs surpassed the 0.50 minimum, confirming adequate convergent validity. Both composite reliability and Cronbach's alpha values exceeded 0.70 across all constructs, substantiating the internal consistency and reliability of the instruments. Discriminant validity was confirmed through the Fornell-Lacker Criterion, wherein the square root of each construct's AVE exceeded its inter-construct correlations, demonstrating that each latent variable possesses greater explanatory power over its own indicators than over those of other constructs within the model. Figure 1 presents the outer model results from the PLS-SEM analysis, demonstrating that all indicators are strongly connected to their respective latent constructs with high loading factor values on each indicator's path.



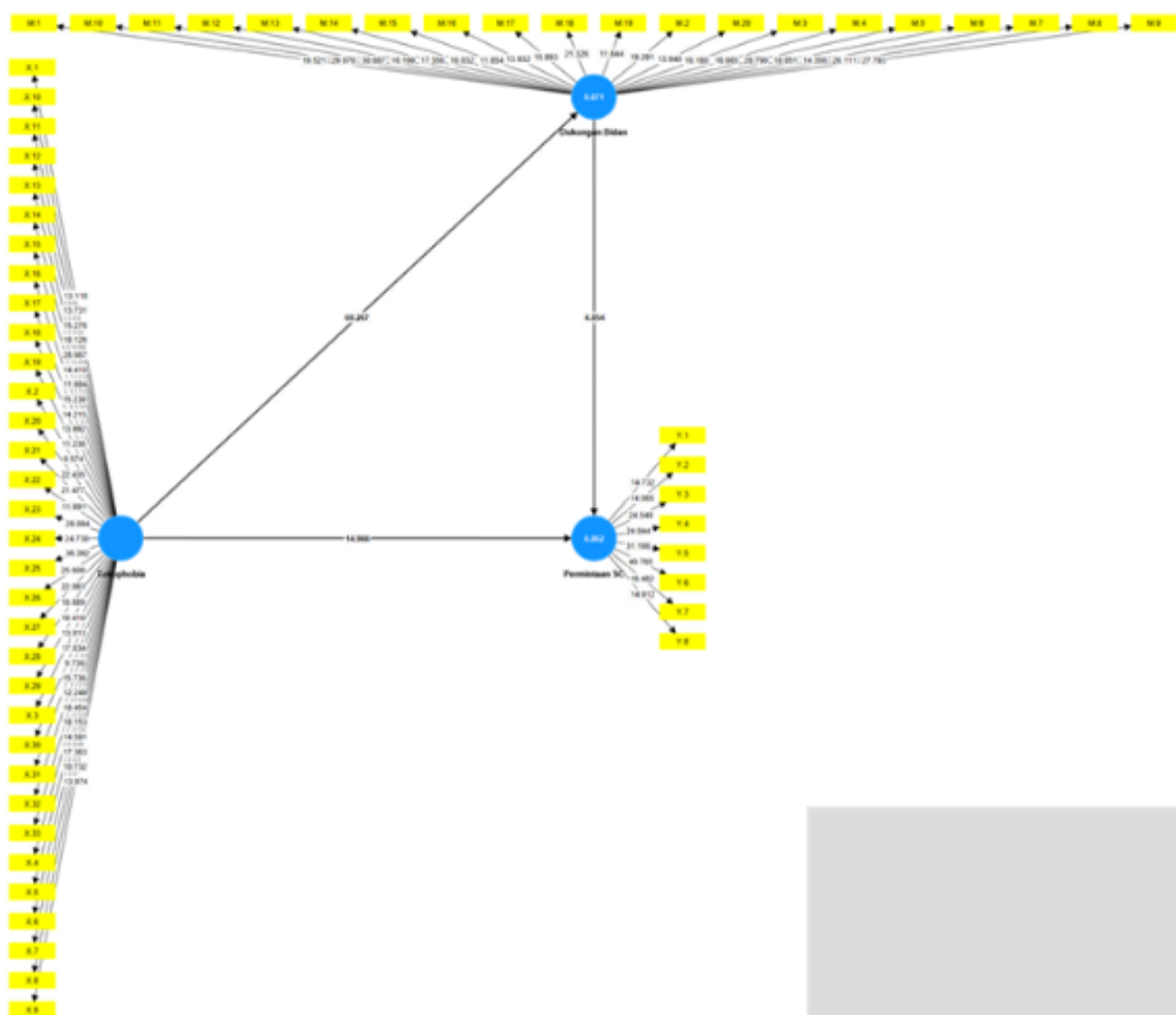
**Figure 1.** Outer Model.

Figure 1 above shows that all indicators are strongly connected to their respective latent constructs, which are characterized by a high *loading factor* value on each indicator's path to its latent variable.

**Table 3.** Determination Coefficient ( $R^2$ ) and F-Square Test Results.

Paths/Variables	$R^2$	$R^2$ Adjusted	F-Square
Tokophobia → Midwifery Support	0.871	0.870	6.734
Tokophobia → CS Request	0.862	0.860	1.733
Midwifery Support → CS Request	—	—	0.216

Table 3 shows that tokophobia explains 87% of the variance in midwifery support ( $R^2$  adjusted = 0.870) and 86% of the variance in CS requests ( $R^2$  adjusted = 0.860), with the largest effect size recorded on the tokophobia → midwifery support path ( $F^2 = 6.734$ ). The adjusted  $R^2$  for midwifery support (0.870) indicates that approximately 87% of its variance is accounted for by tokophobia, while the adjusted  $R^2$  for CS requests (0.860) reflects that 86% of the variability in CS preferences is collectively explained by tokophobia and midwifery support. Although these values are indicative of strong model explanatory power, it is necessary to interpret them with appropriate caution.  $R^2$  values of this magnitude are uncommon in health behavioral research and warrant careful consideration of potential methodological explanations. Specifically, the possibility of overfitting arising from the relatively high ratio of model complexity to sample size cannot be entirely dismissed. Additionally, the substantial conceptual overlap between tokophobia and midwifery support as correlated predictors may have introduced a degree of artificial inflation into these coefficients. These observations do not invalidate the findings, but they do underscore the importance of replication across independent samples and the need for future research employing larger and more heterogeneous populations to confirm the robustness of this model structure. Here is Figure 2 which shows the results of *the inner model* along with *the T-statistics* values for each structural path:



**Figure 2.** Inner Model

Figure 2 visually shows the magnitude of the path coefficient in each of the structural relationships between the latent variables in the model. The entire track showed a *T-statistical value* that far exceeded the critical value of 1.96. Hypothesis testing was conducted through two complementary approaches: direct effect analysis and indirect effect analysis for mediation.

**Table 4.** Direct and Indirect Hypothesis Test Results.

Relationship Pathway	Original Sample ( $\beta$ )	T-Statistics	P-Values	Remarks
Tokophobia → CS Request	1.361	14.966	0.000	Significant ✓
Tokophobia → Midwifery Support	0.933	69.267	0.000	Significant ✓
Midwifery Support → CS Request	0.480	4.854	0.000	Significant ✓
Tokophobia → Midwifery Support → CS Request	0.448	4.709	0.000	Significant ✓

Table 4 shows that all four hypothesized pathways were statistically significant at  $p < 0.001$ . All four research hypotheses were supported at the  $p < 0.001$  significance level. Tokophobia demonstrated a positive and statistically significant direct effect on CS requests ( $\beta = 1.361$ ;  $t = 14.966$ ;  $p = 0.000$ ), on midwifery support ( $\beta = 0.933$ ;  $t = 69.267$ ;  $p = 0.000$ ), and midwifery support exerted a significant positive influence on CS requests ( $\beta = 0.480$ ;  $t = 4.854$ ;  $p = 0.000$ ). The indirect pathway from tokophobia through midwifery support to CS requests was equally significant ( $\beta = 0.448$ ;  $t = 4.709$ ;  $p = 0.000$ ), confirming the mediating role of midwifery support within this structural model.

It is important to note that the path coefficient of  $\beta = 1.361$  for the tokophobia-to-CS request pathway exceeds the conventional upper boundary of 1.0 observed in standardized PLS-SEM models. While PLS-SEM operating with formative or composite measurement specifications can produce path coefficients exceeding this threshold under certain conditions particularly when constructs demonstrate substantially different scale variances this value nonetheless warrants transparent acknowledgment. A plausible contributing factor is the considerable scale disparity between the W-DEQ interval scoring range (0–165) and the binary nominal measurement of CS preference, which may amplify the magnitude of the estimated coefficient. Furthermore, the high inter-construct correlation between tokophobia and midwifery support ( $\beta = 0.933$ ) raises the possibility of multicollinearity influencing path coefficient stability. Future investigations are encouraged to implement variance inflation factor (VIF) diagnostics and consider model re-specification strategies to further validate these structural estimates.

## DISCUSSION

The demographic profile of the 150 primigravid women participating in this study provides essential contextual grounding for interpreting the structural findings. The predominance of respondents aged 20–25 years (41.3%), with a mean age of  $24.8 \pm 4.2$  years, reflects the core reproductive cohort attending antenatal care in urban Bandar Lampung. While this age range is physiologically associated with favorable obstetric outcomes, it simultaneously represents a population characterized by psychological inexperience with childbirth, rendering first-time pregnant women disproportionately susceptible to fear amplification. The prevalence of senior high school graduates (50.7%) and housewives (45.3%) with incomes meeting or exceeding the minimum standard of earnings (66.0%) suggests moderate socioeconomic stability combined with significant exposure to health information through digital platforms. Prior evidence indicates that women with higher educational attainment engage more critically with health narratives yet paradoxically demonstrate greater susceptibility to information-induced childbirth anxiety, a dynamic that may intensify CS-seeking tendencies in this demographic (Rashidi et al., 2025).

The concentration of respondents within the 33–36 week gestational range (40.0%) is particularly noteworthy, as this phase marks the psychological juncture at which previously abstract fears become acutely proximal. That 48.0% of participants accessed care through community health centers underscores the strategic position of primary care midwives as the principal psychological contact point for this population, while the 17.3% prevalence of prior traumatic history warrants clinical attention given its established role as a precipitant of both primary and secondary tokophobia (Gerges et al., 2024).

Situated within an integrated theoretical framework drawing upon the Fear-Avoidance Model (Vlaeyen & Linton, 2000), the Health Belief Model (Rosenstock, 1974), and Social Support Theory (House, 1981), the findings of this study collectively demonstrate that tokophobia operates as the dominant psychological determinant of non-medically indicated CS requests

among primigravidae in Bandar Lampung City. These three theoretical lenses are not competing but complementary: fear avoidance explains the behavioral mechanism through which childbirth fear translates into CS-seeking, the Health Belief Model explains the cognitive distortions that sustain and amplify that fear, and Social Support Theory contextualizes how midwifery interaction either moderates or reinforces the fear-to-behavior pathway. Integrating these frameworks produces a coherent explanatory architecture within which all structural findings can be interpreted.

The direct effect of tokophobia on CS requests was confirmed strongly significant ( $\beta = 1.361$ ;  $t = 14.966$ ;  $p < 0.001$ ), with the structural model explaining 86% of variance in CS preference ( $R^2$  adjusted = 0.860). Consistent with the Fear-Avoidance Model, anticipatory fear of labor pain activated a behavioral avoidance mechanism manifesting as CS preference, wherein escalating fear intensity produced a proportionally stronger compulsion to eliminate the aversive stimulus through surgical delivery independent of medical necessity. This finding aligns with qualitative evidence from Gavvala, Pandey, & Samal (2025), who identified tokophobia as the most dominant psychosocial driver of CS preferences among primigravid women in India, and with epidemiological data from Jumatin, Herman, & Pane (2022) confirming that maternal demand rather than clinical indication accounts for a substantial proportion of Indonesian CS deliveries. Through the Health Belief Model lens, this pattern reflects inflated perceptions of susceptibility and severity regarding vaginal delivery, amplified by urban social narratives framing CS as a modern and controllable alternative, a phenomenon further substantiated by Rashidi, et al. (2025), who identified pain catastrophizing and low childbirth self-efficacy as independent predictors of non-medical CS demand.

Two statistically anomalous features of the structural results require transparent and rigorous engagement. First, the path coefficient of  $\beta = 1.361$  exceeds the conventional upper boundary of 1.0 in standardized PLS-SEM outputs. This anomaly is most plausibly explained by the substantial scale disparity between the W-DEQ Version A interval scoring range (0–165) and the binary nominal operationalization of CS preference, which can amplify estimated path magnitudes in composite-based structural models where measurement scales differ fundamentally in range and variance. Compared with studies using continuous outcome measures, this scale mismatch is a methodologically recognized source of coefficient inflation in PLS-SEM frameworks. Second, the  $R^2$  values of 0.860–0.871 are exceptionally elevated relative to benchmarks typically observed in health behavioral research, where  $R^2$  values of 0.20–0.40 are more conventional. While these values indicate strong model explanatory power, the high inter-construct correlation between tokophobia and midwifery support ( $\beta = 0.933$ ) raises legitimate concerns regarding multicollinearity, which may artificially inflate determination coefficients. The possibility of model overfitting, arising from the relatively high ratio of model complexity to sample size, cannot be dismissed. Future studies must implement variance inflation factor (VIF) diagnostics systematically, consider model re-specification strategies including the separation of correlated predictors, and replicate findings across larger and more heterogeneous Indonesian urban populations before causal conclusions are drawn.

The mediating role of midwifery support in the tokophobia–CS request relationship was confirmed statistically significant ( $\beta = 0.448$ ;  $t = 4.709$ ;  $p < 0.001$ ). Critically, this mediation is classified as partial rather than full mediation, given that the direct effect of tokophobia on CS requests remained significant after the mediator was introduced into the model ( $\beta = 1.361$ ;  $p < 0.001$ ). This distinction carries important theoretical and practical implications. Partial mediation indicates that midwifery support accounts for a meaningful but incomplete portion of the pathway through which tokophobia influences CS preference, confirming that additional unmeasured variables, such as partner social support, childbirth self-efficacy, health literacy, and birth preparation program access, likely contribute to the remaining direct effect. Comparing effect sizes, the direct pathway ( $\beta = 1.361$ ) substantially exceeds the indirect pathway through midwifery support ( $\beta = 0.448$ ), indicating that while midwifery support is a significant mediating mechanism, its buffering capacity is considerably limited relative to the magnitude of tokophobia's direct behavioral influence.

The direction of the mediating effect constitutes the most clinically significant and theoretically challenging finding of this study. Contrary to the protective direction expected under

Social Support Theory, midwifery support demonstrated a paradoxical positive association with CS requests, meaning that greater midwifery support was associated with increased rather than decreased CS-seeking behavior. This counterintuitive directionality is not indicative of a failure of midwifery support per se, but rather reflects a qualitative insufficiency in its therapeutic architecture. When midwives respond to expressed maternal fear through emotionally accommodative and validating communication without simultaneously integrating structured cognitive reframing techniques, their supportive responses may inadvertently legitimize the mother's distorted threat perceptions of vaginal delivery and entrench rather than attenuate CS-seeking behavior. In essence, support that acknowledges fear without therapeutically restructuring its cognitive foundations amplifies rather than reduces the fear-to-CS pathway.

This interpretation is empirically substantiated by (Abdelaziz et al., 2025), whose randomized controlled trial demonstrated that structured Cognitive Behavioral Therapy-based interventions produced significant reductions in childbirth fear scores (mean reduction:  $14.32 \pm 5.55$ ;  $p < 0.001$ ;  $\eta^2 = 0.876$ ), establishing that therapeutic structure rather than mere supportive presence determines intervention efficacy. Toohill et al., (2014) similarly demonstrated that structured antenatal psychoeducation incorporating fear-specific content significantly reduced both tokophobia scores and CS preference rates compared to standard care. Furthermore, Sandall et al., (2016) established through a Cochrane systematic review that continuity-of-care midwifery models reduced fear-driven CS requests only when interventions explicitly incorporated cognitive and emotional processing components rather than general reassurance alone. Sipayung (2022) additionally demonstrated that structured midwifery support produced a 5.135-fold greater probability of favorable maternal health behavioral outcomes, reinforcing that intentionality and competence in support delivery are decisive determinants of effectiveness. Evidence from the Indonesian context further affirms this urgency, as Eriyani et al. (2025) demonstrated that targeted non-pharmacological interventions effectively reduced prenatal anxiety prior to childbirth, confirming the viability of structured psychological approaches within Indonesian antenatal care settings.

These findings collectively yield three urgent practical implications. First, standardized tokophobia screening using validated instruments must be institutionalized as a mandatory component of ANC protocols from the first trimester, ensuring that at-risk primigravidae are identified and referred before fear consolidates into irreversible CS preference. Second, midwifery training curricula require substantial expansion to incorporate evidence-based psychological competencies, specifically cognitive restructuring, motivational interviewing, and trauma-informed communication, equipping practitioners to deliver therapeutically structured rather than merely emotionally accommodative support. Third, community-based psychoeducation programs targeting distorted childbirth narratives in urban digital environments must be systematically developed and implemented to address the social amplification of tokophobia at the population level. Several methodological limitations must be transparently acknowledged. The cross-sectional design precludes verification of temporal precedence among constructs, limiting causal inference from the mediation model despite the robustness of the bootstrapping procedure. The anomalous path coefficient and elevated  $R^2$  values necessitate independent replication across larger and more heterogeneous samples before generalizability can be established. The structural model additionally omits theoretically relevant variables including partner social support, childbirth self-efficacy, health literacy, and birth preparation access, each of which possesses documented capacity to influence the tokophobia–CS preference relationship (Souto et al., 2022), representing a meaningful constraint on the comprehensiveness of the current explanatory framework.

## **CONCLUSION**

This study demonstrated that tokophobia constitutes the dominant psychological determinant of non-medically indicated caesarean section requests among primigravid women in Bandar Lampung City, with a direct and statistically significant effect confirmed through PLS-SEM mediation analysis. The findings address the central research objectives: tokophobia exerted a strong direct influence on CS preference without medical indication among primigravidae, and midwifery support was confirmed as a significant partial mediator within this

relationship. Critically, the mediating effect operated in a paradoxical positive direction, indicating that emotionally accommodative midwifery support delivered without structured cognitive components may inadvertently reinforce rather than reduce CS-seeking behavior among fearful first-time pregnant women. This finding repositions the quality and therapeutic intentionality of midwifery support as more decisive than its mere presence in shaping maternal birth preferences. The Indonesian-adapted W-DEQ Version A and the researcher-developed Midwifery Support Scale demonstrated sound validity and reliability, establishing both instruments as applicable and contextually appropriate tools for midwifery research and clinical assessment within Indonesian antenatal care settings. These instruments provide a practical foundation for future screening and intervention efforts targeting tokophobia in primigravid populations. Three evidence-based recommendations emerge directly from these findings. Standardized tokophobia screening should be institutionalized as a routine component of antenatal care from the first trimester to enable early identification and timely psychological intervention. Midwifery training curricula must be expanded to incorporate structured psychological counseling competencies, particularly cognitive restructuring and trauma-informed communication, so that practitioners can deliver therapeutically effective rather than merely supportive responses to maternal fear. Community-based psychoeducational programs addressing distorted childbirth narratives in urban digital environments should be developed and systematically implemented to reduce preventable caesarean demand and strengthen evidence-based birth decision-making across Indonesian primary healthcare settings.

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