

# Marriage on the Path to Motherhood: Silent Indicators of Adjustment During Pregnancy

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## ABSTRACT

This study aims to identify the factors influencing marital adjustment among pregnant women and to provide a scientific basis for interventions that promote family stability and maternal health, including couple-focused counseling, training programs that strengthen communication and problem-solving skills, prenatal initiatives that enhance partner involvement, and psychosocial monitoring.

A descriptive research design was used. The study sample consisted of volunteer pregnant women admitted to the Obstetrics and Gynecology outpatient clinics of a hospital in eastern. Sociodemographic Data Form and Near East Marital Adjustment Scale (NEMAS) were used for data collection. The study was completed with 370 pregnant women. In the analyses, parametric methods including Pearson and Spearman's rho correlation tests, the Student t-test, and ANOVA (F-test) were employed, and a multiple linear regression analysis was additionally conducted. Regression/decision tree analysis was performed with CHAID method.

The total NEMAS score was found to be 120.6. The analyses indicated that the NEMAS scores of pregnant women varied significantly across several demographic, social, and obstetric characteristics. A statistically significant difference was found between all sub-dimensions and total scores of the NEMAS according to age, working status, marriage type, number of children, previous stillbirth, gravidity, pregnancy planning status and gestational week ( $p < 0.01$ ). A statistically significant difference was found between the sub-dimensions of Marital Satisfaction (MS), Marital Communication (MC), Marital Empathy (ME) and the total scores of the NEMAS according to educational level and duration of marriage ( $p < 0.01$ ). According to family type, a statistically significant difference was found between the scores of pregnant women in the sub-dimension of Relationships with Families (FR)" ( $p < 0.05$ ).

Nurses are in a unique position to assess and monitor marital adjustment as part of routine prenatal care. Integrating marital and emotional well-being into antenatal care not only improves the health of pregnant women, but also contributes to family stability and better outcomes for both mothers and babies.

**Keywords:** Marital Adjustment, Spousal Adjustment, Pregnancy, Nursing

## Introduction

Pregnancy is a transitional period during which women struggle with biochemical, physiological and anatomical changes (1). The transition to motherhood is influenced by a variety of factors at different levels, including individual factors (partner support, career goals), organizational factors (family-friendly work practices, role models), and societal factors (social norms, attitudes towards the maternal body) (2). Marital relationships constitute an important part of human life and strongly determine life satisfaction (3). Marital adjustment refers to couples' satisfaction and happiness with their marriage (4,5).

Marital harmony refers to a situation in which couples can exchange ideas and resolve the causes of their dissatisfaction. Maintaining marital harmony is important for having a healthy family

(6). Marital harmony is influenced by factors such as couples' expectations from each other, parenting styles, financial problems, friends and acquaintances, sexual relationships, relatives, relationships with family members, presence of children and stress associated with their problems (6,7). Pregnancy-related marital satisfaction plays an important role in maternal psychology, fetal development, and infant health (8–10). Partners should understand the emotional changes experienced by pregnant women as a result of hormonal fluctuations (11). Mercer's theory of mothering (12) states that the stages of commitment, attachment and preparation can increase the bond between mothers and children, as well as environmental factors that affect marital satisfaction between husband and wife.

Physical problems, depression, isolation, anxiety, fear, emotional instability, emotional instability, ambiguity of feelings and disturbance in sexual

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relationships during pregnancy have an impact on marital satisfaction (13). During pregnancy, the woman's focus on herself and the fetus increases and her interest in her husband and other children decreases, which may cause resentment. Sexual relations decrease during this period due to changes in sexual desire and fear of miscarriage and fetal damage (14). On the other hand, changes in body appearance and a feeling of heaviness reduce pregnant women's social and recreational activities and contacts with friends and acquaintances (9, 10). The increase in the family's economic needs can also cause financial problems for the family during pregnancy. In addition, changes in the physical and mental state of pregnant women can lead to avoidance of household chores and usual roles and the emergence of negative reactions and behaviors. Thus, all dimensions of marital satisfaction, namely sexual relationships and children, financial issues, conflict resolution and communication, are affected in some way by pregnancy, leading to deterioration of marital relationships in pregnant women (15).

The aim of this study was to investigate the factors affecting the marital adjustment of pregnant women. Understanding the dynamics of marital relationships during pregnancy is crucial because marital adjustment not only affects maternal mental health and fetal development, but also plays a critical role in the overall well-being of the family. This study is important as it highlights how the physical, emotional and social changes experienced during pregnancy can alter a couple's relationship dynamics and identifies areas where targeted interventions and support systems can promote healthier family outcomes.

## Materials and Methods

**Type of Study:** A descriptive study design was used.

**Population and Sample:** The study was conducted between March and July 2025. Data were collected from volunteer mothers who applied to the Obstetrics and Gynecology Outpatient Clinic of a hospital located in the Eastern Anatolia Region of Turkey. The hospital is a 1,500-bed public tertiary care institution that serves the region and, due to its high patient volume, provided an appropriate setting for sample recruitment. The study employed a convenience sampling method. The sample of the study was determined according to the power analysis result of the G\*Power program. For this;

F test, since ANOVA test statistics will be used as the basis, power analysis type default (a priori), 0.20 value for effect size, significance level 0.05 (95%) confidence interval and power of the test were determined as 90% (0.90) for this research and the sample size was calculated through the program. As a result of the power analysis, the minimum sample size was calculated as 360, and 370 people were reached by adding the margin of error. Pregnant women who spoke Turkish, were open to verbal communication and agreed to participate in the study were included. Pregnant women with risky pregnancies, refugee and migrant women and those with mental health problems were excluded from the study. After being informed about the study, consent was obtained from the volunteer pregnant women. Data collection forms were administered in a quiet room of the hospital. It took approximately 10-15 minutes.

**Data Collection Tools:** Socio-Demographic Data Form and Near East Marital Adjustment Scale will be used to collect the data.

**Socio-Demographic Data Form:** The socio-demographic data form created by the researchers was used. This form consists of statements including age, family income level, education status, length of marriage, working status, family type, type of marriage, previous stillbirth, gravidity, gestational age, number of children and planned pregnancy status.

**Near East Marital Adjustment Scale (NEMAS):** The Near East Marital Adjustment Scale was developed to assess the compatibility of married individuals within their marital life. The scale consists of a total of 42 items and four subscales: Marital Satisfaction (MS) – 16 items, Marital Communication (MC) – 9 items, Marital Empathy (ME) – 10 items, and Relationships with Families (FR) – 7 items. The scale is organized as a four-point Likert-type scale as “Always, Mostly, Occasionally, and Never” indicating frequency categories; Always “4”, Mostly “3”, Occasionally “2”, and Never “1”; and items 7, 10, 14, 18, 20, 24, 26, 29, 32, 38, and 40 are reverse scored in order to prevent reaction formation in answering. The total score that can be obtained from all scale items is 168. It is thought that the higher the score obtained from the scale, the higher the level of adjustment of married individuals. As a result of the reliability analysis, Cronbach's alpha coefficients were calculated as .94, .92, .86, .81 and .78 for the total, Marital Satisfaction, Marital Communication, Marital Empathy, Marital Empathy and Relationships with Family of Origin subscales, respectively. In the first half and last

half reliability test of the scale, the correlation between the first half and the last half was calculated as .806, the first half Cronbach alpha coefficient was calculated as .89, and the last half Cronbach alpha coefficient was calculated as .92 (16). In this study, the Cronbach's alpha coefficients of the total, MS, MC, ME, ME and FR sub-dimensions of the NEMAS were found to be 0.87, 0.72, 0.85, 0.81 and 0.70, respectively.

**Variables of the Study:** The dependent variable of the study was the NEMAS, and the independent variables were age, income, educational status, employment status, family type, marriage duration, marriage type, number of pregnancies, number of children, history of stillbirth, gestational week and planned pregnancy status.

**Ethical Principles:** Ethical approval was obtained from Van Yüzüncü Yıl University Non-Interventional Clinical Research Ethics Committee (Approval No. 2025/02-11, Date. 28/02/2025) and study permission was obtained from the hospital where the study was conducted. Mothers were informed about the study and verbal consent was obtained in accordance with the "Informed Consent" principle. The study adhered to the ethical principles of "Respect for Autonomy", ensuring that participants were aware of their right to freely participate or withdraw at any stage of the study, and "Confidentiality and Data Protection", guaranteeing that all participant information would remain confidential. The research was conducted in accordance with the ethical guidelines of the Declaration of Helsinki.

**Statistical Analysis:** The data of the study were analyzed using the SPSS 26 statistical software package. Descriptive statistics-including sample size (n), percentage (%), mean and standard deviation ( $\bar{x} \pm SD$ ), maximum/minimum values, mode, and median-were calculated and presented in the tables. Pearson correlation was used for parametric conditions and Spearman's rho for non-parametric conditions when examining relationships between variables. The magnitude of correlations was interpreted using the following thresholds: .10-.29 = small, .30-.49 = moderate, and  $\geq .50$  = large. For all statistical tests, significance levels were reported using p-values, and results with  $p < .05$  were considered statistically significant. Effect size was also reported using eta squared ( $\eta^2$ ), interpreted as  $\eta^2 = .01$  small,  $\eta^2 = .06$  moderate, and  $\eta^2 = .14$  large. For the normality assessment, skewness and kurtosis values were examined, and values between -2.0 and +2.0 were accepted as an

indication of normal distribution. Homogeneity of variances between groups was evaluated using Levene's test, and the assumption of equal variances was confirmed. As these assumptions were met, the differences between two groups were analyzed using the independent samples t-test. In the one-way analysis of variance (ANOVA), homogeneity of variances was again tested with Levene's test and found to be satisfied ( $p > .05$ ). However, due to unequal group sizes, the Gabriel post hoc test-known to be more sensitive to unequal sample sizes and more effective in controlling Type I error than the classical Tukey test-was preferred. Accordingly, multiple comparisons following ANOVA were conducted using the Gabriel test.

For multiple linear regression analysis, the linearity assumption was examined using a scatterplot of standardized predicted values (ZPRED) and standardized residuals (ZRESID), which showed randomly distributed points with no observable pattern, indicating a linear relationship between the dependent and independent variables. Multicollinearity was tested using Variance Inflation Factor (VIF) and tolerance values. VIF values below 10 (range: 1.108-3.314) and tolerance values above 0.2 (range: 0.302-0.902) indicated that the assumption was met. Normality was assessed using the histogram and Normal P-P Plot of residuals. The histogram showed a distribution close to normal, and the P-P Plot displayed points aligned along the diagonal line. Both graphs indicated that the residuals were normally distributed, which is sufficient for large samples ( $n > 50$ ). Homoscedasticity was assessed using a scatterplot of standardized residuals versus predicted values, which showed a random distribution of points, indicating that the assumption was satisfied. Independence of errors was tested using the Durbin-Watson statistic; the obtained value of 1.670 (within the acceptable range of 1.5-2.5) indicated no autocorrelation among observations. The Enter method, commonly used in the social sciences, was employed for regression analysis, and the statistical significance of the model was evaluated using the ANOVA test statistic. The proportion of variance in the NEMAS explained by the model was determined using the adjusted  $R^2$  value. In the social sciences,  $R^2$  values of 0.10 indicate a small effect, 0.30 a medium effect, and 0.50 a large effect. In this study, the adjusted  $R^2$  indicated a large effect size ( $R_a = 0.503$ ). However, it is emphasized that in the social sciences, the statistical significance of the overall

model is often more important than the magnitude of R or R<sup>2</sup>. In this study, the regression model was found to be statistically significant ( $p < .001$ ).

## Results

When Table 1 is analyzed, 48.6% of the pregnant women were between the ages of 25-34, 56.8% were primary school graduates, 88.9% were not working, 66.8% had income less than expenses, 47.6% had been married for 1-5 years, 68.6% lived in nuclear family and 31.4% in extended family, and 68.1% stated that they married for love. It was determined that 42.4% of the pregnant women had 3 or more pregnancies, 94.2% had no history of stillbirth, 78.9% had a gestational week of 21 or more, 70.8% had planned pregnancies, and 34.3% had 1 child.

When Table 2 is examined, a statistically significant difference was found between the MS, MC, ME, FR sub-dimensions and total scores of the NEMAS of pregnant women according to employment status, age, marriage type, number of children, history of stillbirth, number of pregnancies, pregnancy planning status and gestational week ( $p < 0.001$ ). A statistically significant difference was found between the MS, MC, ME sub-dimensions and total scores of the NEMAS of pregnant women according to educational level and duration of marriage ( $p < 0.001$ ). According to family type, a statistically significant difference was found between the scores of pregnant women in the sub-dimension of FR ( $p < 0.05$ ).

In Table 3, it was determined that the regression model established using the Enter method was statistically significant, and that at least one of the independent variables had a significant effect on the dependent variable (NEMAS) ( $F = 38.33$ ,  $p < 0.001$ ). The independent variables explained 50.3% of the change in NEMAS. Among the independent variables in the model, age, educational status, employment status, type of marriage, duration of marriage, history of stillbirth, number of pregnancies and planning status of pregnancy and gestational week were found to have a statistically significant effect on the NEMAS ( $p < 0.05$ ). Regression/decision tree analysis was conducted to composite this result (Table 4).

Regression tree analysis was performed according to the Chi-squared Automatic Interaction Detection (CHAID) method. In the regression analysis, 9 independent variables that have an

effect on the NEMAS were included in the analysis. The obtained correlation coefficient ( $r = 0.678$ ) indicates a strong relationship according to Cohen's (1988) classification (17). However, according to Akoglu's (2018) classification, it is considered a moderate-strength relationship (18). This finding demonstrates that the values predicted by the model show a significant and acceptable level of agreement with the NEMAS measurements. The  $r^2$  value of the model was calculated as 0.46 (Table 4).

According to the decision tree analysis, the NEMAS was divided into two branches at a statistically significant level according to the employment status of pregnant women ( $F = 110.246$ ,  $p < 0.001$ ). The level of NEMAS was differentiated between those who were not working (Node 1) and those who were working (Node 2). While the mean level of NEMAS was 100.00 in employed pregnant women ( $n = 41$ , 11.1%), the mean level of NEMAS was 123.21 in non-employed pregnant women ( $n = 329$ , 88.9%), and the level of marital adjustment was higher in non-employed women.

There was a statistically significant difference ( $F = 26.881$ ,  $p < 0.001$ ) in the mean NEMAS of working pregnant women according to the planning status of pregnancy (Nodes 5 and 6). In working pregnant women, while the mean NEMAS of those who stated that their pregnancy was planned ( $n = 22$ , 5.9%) was 110.18, the mean NEMAS of those who stated that their pregnancy was not planned ( $n = 19$ , 5.1%) decreased to 88.2. Among working pregnant women, those whose pregnancies were unplanned had lower levels of marital adjustment than those whose pregnancies were planned.

The mean NEMAS of those who were not working showed a statistically significant difference according to the gestational week (Nodes 3 and 4) ( $F = 61.257$ ,  $p < 0.001$ ). Among the non-working pregnant women, those with a gestational week lower than 12 ( $n = 26$ , 7.0%) had a mean of 140.5, while those with a gestational week higher than 13 ( $n = 303$ , 81.9%) had a mean of 121.1. Among the unemployed pregnant women, those with a gestational week less than 12 weeks had a higher level of marital adjustment than those with a gestational week greater than 13 weeks.

The mean NEMAS of those who were not working and whose gestational age was greater than 13 weeks showed a statistically significant difference according to the duration of marriage (Nodes 7-8) ( $F = 49.243$ ,  $p < 0.001$ ). While the mean

**Table 1:** Results Related to Sociodemographic Characteristics and Scales (n=370) (bilimsel çalışmada kısırlı sayılarda virgül değil nokta kullanılmalıdır. Rakamlar buna göre revize edilmelidir.

Variables	n.	%	Variables	n.	%		
Age			Family income level				
19-24	116	31,4	Income is less than expenses	247	66,8		
25-34	180	48,6	Income equals expenses	93	25,1		
35+	74	20,0	Income is more than expenses	30	8,1		
Education status			Length of marriage				
Primary education	210	56,8	1-5 years	176	47,6		
Secondary education	111	30,0	6-10 years	133	35,9		
High school	49	13,2	10+	61	16,5		
Working status			Family type				
Working	41	11,1	Nuclear	254	68,6		
Not working	329	88,9	Extended	116	31,4		
Type of marriage			Previous stillbirth				
Arranged marriage	118	31,9	Yes	21	5,7		
Love marriage	252	68,1	No	349	94,3		
Gravidity			Gestational age				
1	106	28,6	<12 weeks	26	7,0		
2	107	28,9	13-20 weeks	52	14,1		
3+	157	42,4	>21 weeks	292	78,9		
Pregnancy planning status			Number of children				
Yes	262	70,8	No children	120	32,4		
No	108	29,2	1	127	34,3		
			2	68	18,4		
			+3	55	14,9		
Scale ( $\alpha$ )	$\bar{x}\pm ss$	Min-Maks.	Median(Mode)	MS	MC	ME	RFO
NEMAS (0,872)	120,6 $\pm$ 15,2	67-151	123-127	r:0,898 R2:0,806 p:0,000*	r:0,951 R2:0,904 p:0,000*	r:0,871 R2:0,759 p:0,000*	r:0,308 R2:0,095 p:0,000*
MS (0,721)	44,6 $\pm$ 6,4	22-56	46-48		r:0,826 R2:0,682 p:0,000*	r:0,696 R2:0,484 p:0,000*	r:0,217 R2:0,047 p:0,000*
MC (0,858)	29,6 $\pm$ 5,3	13-36	36-30			r:0,752 R2:0,566 p:0,000*	r:0,190 R2:0,036 p:0,000*
ME (0,810)	31,6 $\pm$ 5,1	18-40	32-29				r:0,212 R2:0,045 p:0,000*
FR (0,704)	14,8 $\pm$ 3,1	8-26	13-13				

$\bar{x}\pm ss$ : Mean standard deviation; Min.-Max: Minimum-Maximum value; r: Pearson (parametric) correlation, R<sup>2</sup>: Proportion of variance explained, \*p<0.05, ( $\alpha$ )=Cronbach's alpha reliability coefficient

NEMAS of those with a marriage duration of 1-5 years (n=154, 41.6%) was 126.18, the mean NEMAS of those with a marriage duration of more than 1-5 years decreased to 117.12.

According to the regression tree analysis, it was found that the employment status of the pregnant

women was important in terms of NEMAS, and unplanned pregnancy for working women decreased their mean NEMAS at a statistically significant level. It was determined that the mean of NEMAS of those who were not working was higher than those who were working, but the

**Table 2:** Comparison and Correlation of Scales According to Independent Variables

	MS		MC		ME		FR		NEMAS	
	$\bar{x} \pm ss$	Statistics	$\bar{x} \pm ss$	Statistics	$\bar{x} \pm ss$	Statistics	$\bar{x} \pm ss$	Statistics	$\bar{x} \pm ss$	Statistics
Age										
19-24(1)	47,9±4,2	F:40,4	32,4±3,4	F:35,9	33,9±4,6	F:32,1	14,6±3,5	F:11,3	128,9±10,9	F:40,8
25-34(2)	44,2±6,3	0,000*	28,7±5,8	0,000*	31,4±4,6	0,000*	13,5±2,1	0,000*	119,4±14,5	0,000*
35+(3)	40,3±6,5	$\eta^2:0,180$ r:-,448 0,000*	26±6,1	$\eta^2:0,164$ r:-,402 0,000*	28,4±4,9	$\eta^2:0,149$ r:-,377 0,000*	12,9±2,3	$\eta^2:0,06$ r:-,168 0,000*	110,7±15,9	$\eta^2:0,182$ r:-,418 0,000*
		R2:0,201		R2:0,161		R2:0,142		R2:0,03		R2:0,175
Post hoc	3 <1; 3<2;2<1*		3 <1; 3<2;2<1*		3 <1; 3<2;2<1*		3 <1; 3<2;2<1*		3 <1; 3<2;2<1*	
Education status										
Primary education(1)	45,9±5	F:54,9	30,7±4,8	F:45,8	32,8±4,7	F:35,4	14±2,9	F:3,5	124,6±12,3	F:55,5
Secondary education(2)	45,5±5,3	0,000*	29,5±5,1	0,000*	31,6±4,7	0,000*	13,7±2,4	0,053	121,2±13,5	0,000*
High school(3)	36,8±7,9	$\eta^2:0,230$ r:-,278* R2:0,077	22,9±6,6	$\eta^2:0,200$ r:-,323* R2:0,104	26,6±4,4	$\eta^2:0,162$ r:-,331* R2:0,110	12,8±2,7		102,3±16,9	$\eta^2:0,232$ r:-,337* R2:0,114
Post hoc	3<2-1*		3<2-1*		3<2-1				3<2-1*	
Working status										
Working	35,3±7,8	t:-11,5	22±6,9	t:-9,7	25,8±4,3	t:-8,5	12,5±2,7	t:-3,0	100±17,4	t:-10,5
Not working	45,7±5,1	0,000* $\eta^2:0,264$ r:,396* 0,000* R2:0,157	30,2±4,9	0,000* $\eta^2:0,203$ r:,356* 0,000* R2:0,127	32,3±4,7	0,000* $\eta^2:0,164$ r:,369* 0,000* R2:0,136	13,9±2,7	0,003* $\eta^2:0,02$ r:,141* 0,004* R2:0,02	123,2±12,8	0,000* $\eta^2:0,230$ r:,382* 0,000* R2:0,146
Family income level										
Income is less than expenses	44,3±6,2	F:1,32	29,4±5,6	F:2,49	31,7±4,9	F:0,77	13,6±2,4	F:0,86	120,5±14,4	F:1,28
Income equals expenses	45,5±6,3	0,27	29,7±5,6	0,085	31,6±5,4	0,463	13,9±3,2	0,426	122,1±15,9	0,279
Income is more than expenses	43,8±7,6	r:0,06	27,1±7	r:-0,03	30,5±5,7	r:-0,04	14,3±4	r:0,067	117±19,1	r:-0,023
Family income level		0,621		0,192		0,284		0,195		0,665
Type of marriage										
Arranged marriage	41,5±7,3	t:-6,8	26,4±6,6	t:-7,1	29,5±5,6	t:-5,6	12,9±2	t:-4,1	112,5±17,4	t:-7,5
Love marriage	46±5,3	0,000* $\eta^2:0,111$ r:,311 0,000* R2:0,097	30,7±4,7	0,000* $\eta^2:0,120$ r:,310 0,000* R2:0,096	32,5±4,5	0,000* $\eta^2:0,078$ r:,246 0,000* R2:0,061	14,1±2,9	0,000* $\eta^2:0,004$ r:,149 0,004* R2:0,022	124,4±12,4	0,000* $\eta^2:0,132$ r:,319 0,000* R2:0,102
Length of marriage										
1-5 years(1)	47,6±4,2	F:54,5	32±3,8	F:48,4	33,5±4,3	F:37,6	14,1±3,1	F:3,3	127,9±10,5	F:56,8
6-10 years(2)	42,7±6,3	0,000*	27,6±5,9	0,000*	30,8±4,9	0,000*	13,5±2,2	0,059	116,5±14,9	0,000*
10+(3)	39,9±7,2	$\eta^2:0,229$ r:-,474 0,000* R2:0,225	25,5±6,5	$\eta^2:0,209$ r:-,441 0,000* R2:0,194	27,8±4,9	$\eta^2:0,170$ r:-,398 0,000* R2:0,158	13,2±2,4	r:-0,06 0,216	108,7±16,6	$\eta^2:0,236$ r:-,474 0,000* R2:0,225
Post hoc	3 <1; 3<2;2<1*		3 <1; 3<2;2<1*		3 <1; 3<2;2<1*				3 <1; 3<2;2<1*	
Family type										
Nuclear	44,8±6,2	t:1,1	29,5±5,8	t:1,1	31,7±4,9	t:0,8	13,4±2,2	t:-3,7	120,7±15,1	t:0,2
Extended	44,1±6,8	0,29 r:-0,06 0,273	28,8±5,7	0,275 r:-0,07 0,192	31,3±5,3	0,451 r:-0,04 0,446	14,5±3,5	0,004 $\eta^2:0,06$ r:0,125 0,017*	120,5±15,6	0,877 r:-0,02 0,665

R2:0,016										
Number of children										
No children	46,7±4,9	F:19,9	30,9±4,5	F:21,7	32,7±4,5	F:15,2	14,6±3,3	F:6,9	125,5±12,4	F:21,3
1	45,5±5,3	0,000*	30,6±4,9	0,000*	32,8±4,8	0,000*	13,6±2,4	0,000*	123,7±12,8	0,000*
2	43,1±7,2	η2:0,140	27,6±6,7	η2:0,151	29,6±5,5	η2:0,111	13,3±2,1	η2:0,053	115,2±17,8	η2:0,149
3 +	39,7±7,3	r:-,321 0,000*	24,8±6	r:-,318* 0,000*	28,8±4,5	r:-,279* 0,000*	12,8±2,4	r:-,166* 0,001*	109,7±15,1	r:-,326* 0,000*
		R2:0,103		R2:0,101		R2:0,078		R2:0,028		R2:0,106
Post hoc	2,3<0,1*		2,3<0,1*		2,3<0,1*		3<2,1,0*		2<0,1*, 3<2,1,0*	
Previous stillbirth										
Yes	35,4±8,7	t:-7,3	22,3±8,3	t:-6,0	25,7±5,9	t:-5,7	11,5±2,4	t:-4,0	98,7±21,2	t:-7,3
No	45,1±5,8	0,000*	29,7±5,3	0,000*	31,9±4,8	0,000*	13,9±2,7	0,000*	122±13,7	0,000*
		η2:0,126		η2:0,089		η2:0,081		η2:0,042		η2:0,126
		r:,258		r:,205		r:,225		r:,199		r:,240
		0,000*		0,000*		0,000*		0,000*		0,000*
		R2:0,067		R2:0,042		R2:0,051		R2:0,040		R2:0,058
Gravidity										
1	47,2±4,8	F:14,1	31,4±4,2	F:10,9	32,9±4,7	F:5,4	14,8±3,5	F:12,9	126,7±12,2	F:13,1
2	43,9±6,2	0,000*	28,8±5,6	0,000*	30,4±5,1	0,000*	13,4±2,1	0,000*	119,5±14,7	0,000*
3+	43,3±6,9	η2:0,071	28,2±6,4	η2:0,056	29,9±5,1	η2:0,029	13,2±2,3	η2:0,065	117,3±16,2	η2:0,067
		r:-,235 0,000*		r:-,195 0,000*		r:-,163 0,000*		r:-,165 0,000*		r:-,220 0,000*
		R2:0,055		R2:0,038		R2:0,027		R2:0,027		R2:0,048
Post hoc	2,+3<1*		2,+3<1*		2,+3<1*		2,+3<1*		2,+3<1*	
Pregnancy planning status										
Yes	45,6±5,6	t:5,2	30,4±5,1	t:5,7	32,5±4,6	t:5,5	14,1±2,8	t:3,8	123,8±13	t:6,5
No	42±7,3	0,000*	26,8±6,4	0,000*	29,4±5,4	0,000*	12,9±2,3	0,000*	113,1±17,3	0,000*
		η2:0,068		η2:0,081		η2:0,076		η2:0,038		η2:0,126
		r:-,242		r:-,268		r:-,248		r:-,188		r:-,275
		0,000*		0,000*		0,000*		0,000*		0,000*
		R2:0,059		R2:0,072		R2:0,067		R2:0,035		R2:0,076
Gestational age										
<12 w.(1)	50,7±2,3	F:14,0	35,2±1,3	F:15,9	38,3±1,5	F:29,4	18,2±4,6	F:48,0	140,5±5,8	F:27,3
13-20 w.(2)	43,7±7	0,000*	29,1±5,9	0,000*	30,4±5,2	0,000*	14±3,2	0,000*	118,8±16,5	0,000*
>21w.(3)	44,2±6,2	η2:0,071	28,8±5,7	η2:0,080	31,2±4,8	η2:0,138	13,3±2	η2:0,207	119,2±14,3	η2:0,130
		r:-,173 0,001*		r:-,221 0,000*		r:-,201 0,000*		r:-,196 0,000*		r:-,246 0,000*
		R2:0,03		R2:0,049		R2:0,04		R2:0,038		R2:0,061
Post hoc	2,3<1*		2,3<1*		2,3<1*		2,3<1*		2,3<1*	

F: ANOVA, t: Independent sample t test, r: Spearman's rho (Nonparametric Correlation), R<sup>2</sup>: Proportion of variance explained, Post hoc: Multiple comparison analysis, \*p<0.01

mean of NEMAS decreased when the gestational week was 13 and above, and this mean decreased even more when the gestational week was 13 and above and the duration of marriage was more than 5 years.

## Discussion

This study examines how the pregnancy process affects marital adjustment and highlights the importance of emotional support, communication, and mutual understanding between spouses in promoting maternal well-being and family stability.

In the current study, as the age of the pregnant women increased, their scores from the NEMAS and all its sub-dimensions decreased. Studies by

Dursun (19) and Findik & Yagmur (20) support our result. As women age, their relationships may face different kinds of challenges, for example, accumulated stress, changes in roles within the family, or changing emotional needs. These changes may affect how couples communicate, resolve conflicts or support each other during pregnancy. Given these results, health professionals should pay attention to the unique emotional and relational needs of older pregnant women.

In this study, marital adjustment was found to be higher in pregnant women with low educational level and not working. While the study conducted by Sönmez et al. (21) supported our result, the study conducted by Küçükkaya et al. (22) reported

**Table 3:** Results of Multiple Linear Regression Analysis of Independent Variables Affecting NEMAS

	$\beta_0$	SE.	$\beta_1$	t	p.	LB.	UB.	r1	r2	Model Summary
(Sabit)	114,1	8,7		13,1	0	96,9	131,2			F:38,33
Age	-2,68	1,1	-0,12	-2,4	0,017*	-4,8	-0,5	-	-0,125	p:0,000*
1:19-24								0,426		R:0,719
2:25-34										R2:0,516
3:35+										Ra:0,503
Education status	-4,54	1,1	-0,21	-4,2	0,000*	-6,7	-2,4	-	-0,215	
1: Primary education								0,433		
2: Secondary education										
3: High school										
Working status	7,18	2,6	0,15	2,8	0,006*	2,1	12,3	0,48	0,145	
1: Working										
2: Not working										
Type of marriage	6,08	1,4	0,19	4,5	0,000*	3,4	8,8	0,366	0,23	
1: Arranged marriage										
2: Love marriage										
Length of marriage	-3,52	1,2	-0,17	-2,9	0,004*	-5,9	-1,1	-	-0,152	
1:1-5 years								0,483		
2:6-10 years										
3:10+										
Number of children	-1,15	0,9	-0,08	-1,2	0,239	-3,1	0,8	-	-0,062	
1: Yes								0,371		
2: No										
Previous stillbirth	9,01	2,7	0,14	3,4	0,001*	3,8	14,2	0,355	0,177	
1: Yes										
2: No										
Gravidity	-2,83	1,1	0,16	2,6	0,011*	0,7	5,0	-	-0,134	
1: 1								0,248		
2: 2										
3: 3+										
Pregnancy planning status	-5,11	1,3	-0,15	-3,8	0,000*	-7,7	-2,5	-0,32	-0,198	
1: Yes										
2: No										
Gestational age	-5,43	1,0	-0,21	-5,4	0,000*	-7,4	-3,5	-	-0,275	
1: <12 w.(1)								0,285		
2:13-20 w.(2)										
3: >21w.(3)										

$\beta_0$ : Unstandardized beta coefficient, SE: Standard error,  $\beta_1$ : Standardized beta coefficient, t: Critical value for independent sample t test is 1.96, LB: Lower bound at 95% confidence interval, UB: Upper bound at 95% confidence interval, r1: Zero-order correlation, r2: Partial correlation, R=Correlation, R2: Explanatory power of the model, Ra: Adjusted R<sup>2</sup>

**Table 4:** Regression Tree Analysis Information and Results Related to Correlation on the NEMAS

Method	Dependent Variable	Independent Variables Included in the Analysis	Correlation
CHAID	NEMAS	(1) (1) Age (Categorical variable) (2) Education status (Categorical variable) (3) Working status (Categorical variable) (4) Type of marriage (Categorical variable) (5) Length of marriage (Categorical variable) (6) Previous stillbirth (Categorical variable) (7) Gravidity (Categorical variable) (8) Pregnancy planning status (Categorical variable) (9) Gestational week (Categorical variable)	r=0,678 (p=0,000) r <sup>2</sup> =0,46

CHAID: Chi-squared Automatic Interaction Detection  
r=Correlation, R<sup>2</sup>= Coefficient of Determination

that marital adjustment of women with higher education level and working women was higher. In studies conducted in India, the marital adjustment of housewives and non-working women was found to be higher than that of working women (23,24). This discrepancy in the literature can be attributed to various contextual or sociocultural factors. For example, women with low education and no employment may value marital relationships more as a central source of emotional and social support, which may influence their perceptions of marital satisfaction. On the other hand, higher education and employment may result in additional responsibilities, stress, or changes in family dynamics that may affect relationship adjustment. These different results illustrate the importance of considering individual, cultural and socioeconomic contexts when assessing marital adjustment during pregnancy

In this study, the scores obtained from the NEMAS and all its sub-dimensions were higher in pregnant women who married by love than those who married through arranged marriages. The literature supports our result and it was reported that the marital adjustment of pregnant women who married by meeting their spouses was higher than those who married through arranged marriages (22,25). In a study, it was reported that the marital adjustment of those who married by meeting/agreement was higher than those who married through relatives, internet and arranged marriages (19). The observed difference may be attributed to the fact that marriages grounded in love and emotional closeness tend to foster stronger relational bonds and more open communication. In contrast, in arranged marriages-where cultural norms are more influential and family involvement in partner selection is greater-the process of getting to know one another may take longer, and trust and mutual

understanding develop more gradually. Conducting the study in Van suggests that the region's traditional family structure and marriage practices may have influenced these findings. Thus, within this cultural context, the mode of partner selection can substantially shape couples' relationship dynamics and their adjustment during pregnancy.

In the study, marital adjustment was found to be higher in those with a marriage duration of 1-5 years. The study conducted by Dursun (19) supported our result and it was stated that the marital adjustment of those with a marriage duration of 1 year was higher than those with a marriage duration of 11 years. In the study of Findik and Yağmur (20), it was stated that the marital adjustment of pregnant women with a marriage duration of 1-5 years was higher than those with a higher marriage duration. As time progresses, couples may face increasing responsibilities; for example, parenthood, financial pressures or changes in personal expectations may challenge marital satisfaction. These results emphasize the importance of providing support to couples as their marriages mature, especially during transitional periods such as pregnancy when relational dynamics may be particularly sensitive.

In the present study, the scores obtained from the subscale of the FR were found to be higher in those living in extended families. In the study conducted by Ataman et al. (26), marital adjustment was found to be higher in those living in extended families compared to nuclear families; it was stated that this was related to family support and emotional involvement provided by the close environment. In the study conducted by Tunca & Durmuş (27), it was emphasized that the family adjustment levels of women with positive mother-in-law relationships were significantly

higher, and it was stated that conflictual relationships negatively affected family adjustment. These results suggest that the extended family environment supports pregnant women socially and emotionally. Close relationships with mother-in-law, father-in-law or other family members may also affect the harmony between the couple. The presence of this support system is thought to positively affect marital and family adjustment by strengthening relational trust and sense of belonging.

In the study, it was found that the number of children and number of pregnancies affected the scores obtained from the NEMAS and all its sub-dimensions. This result is supported by previous studies (19,20,28). A large-scale study of 7,178 married individuals in 33 countries reported a statistically significant negative correlation between the number of children and marital satisfaction. The effect was particularly pronounced for women and it was emphasized that marital satisfaction tended to decrease as the number of children increased (29). A study of 213 married women in Iran reported that marital satisfaction scores decreased significantly with each additional child. Women with more children were reported to have lower marital satisfaction compared to those with fewer children (30). Accordingly, increased caregiving responsibilities, physical and emotional strain, and changes in couple dynamics that accompany higher parity may contribute to reduced marital satisfaction. These results highlight the need for health professionals, especially nurses, to provide family-centered counseling and psychosocial support, especially to couples with multiple children or pregnancies, to help them maintain marital harmony during pregnancy.

The result that pregnant women with a history of stillbirth exhibited lower levels of marital adjustment is consistent with previous literature showing that perinatal loss can have a profound emotional and relational impact on couples. Stillbirth is a traumatic experience that often triggers intense grief, feelings of guilt, anxiety about future pregnancies, and communication difficulties between partners. As emphasized by Côté-Arsenault et al. (31), such losses can disrupt the emotional bond between spouses, reduce shared optimism about parenting, and create different coping mechanisms. All of these can strain the marital relationship (31). Health professionals, especially nurses, who are often the first point of contact, play an important role in identifying couples at risk and facilitating access to

emotional support services. Tailored interventions aimed at coping with grief, strengthening communication and rebuilding emotional intimacy can help improve marital adjustment and overall well-being in subsequent pregnancies.

In the present study, the scores of those with planned pregnancies on the NEMAS and all its sub-dimensions were higher than those with unplanned pregnancies. In the study conducted by Ataman et al. (26), it was stated that the fact that couples have a planned and desired pregnancy has a positive effect on the relationship between spouses and this increases marital adjustment. Other studies also support our result (19,22,28,33). A England based study of 12,462 married women reported that unplanned pregnancies were associated with poorer maternal mental health, further supporting the negative relationship effect, partly through increased marital conflict, couple tensions and lower couple cohesion (32). Planned pregnancies reflect psychological preparation and relationship stability, allowing couples to manage the transition to parenthood with greater adjustment. In contrast, unplanned pregnancies can create unexpected stressors, emotional uncertainty and conflict, which can negatively impact marital adjustment. By helping couples make informed decisions about pregnancy, nurses can contribute to both the emotional well-being of expectant mothers and the quality of marital relationships, ultimately supporting healthier family dynamics.

The results of the current study show that pregnant women in the early stages of pregnancy ( $\leq 12$  weeks) reported higher levels of marital adjustment when measured by NEMAS and its subscales compared to pregnant women in the second (13-20 weeks) and third trimesters ( $> 21$  weeks). This may be attributed to the fact that physical, emotional, and psychological discomfort typically intensifies as pregnancy progresses and may potentially affect the quality of marital interactions. In early pregnancy, the novelty of the experience and the anticipation of parenthood may contribute to greater emotional closeness and shared excitement between partners, thereby enhancing marital adjustment. However, as pregnancy progresses, factors such as physical fatigue, sleep disturbances, anxiety about childbirth, and changing family dynamics can cause additional tension in the couple's relationship. The results are consistent with the findings of Ünal and Yağmur (28), who reported a decline in marital adjustment scores in later weeks of pregnancy.

Pregnancy is a period during which marital adjustment may be influenced by various demographic and psychosocial factors. The physical, emotional, and social changes experienced during pregnancy affect not only the pregnant woman but also her spouse. Increasing responsibilities, hormonal fluctuations, evolving family roles, and uncertainties related to the transition to parenthood can shape the couple's communication, emotional closeness, and mutual support. For some couples, these changes strengthen the marital relationship, whereas for others they may heighten the risk of stress and conflict. Thus, pregnancy represents a sensitive phase for both partners, during which emotional support, open communication, and mutual understanding become critical determinants of marital adjustment. In this context, healthcare professionals, particularly nurses play a key role in identifying and addressing the emotional and relational needs of both pregnant women and their partners. Nurses can contribute to enhancing couple adjustment through brief couple-focused counseling sessions, educational interventions that strengthen communication and problem-solving skills, prenatal programs that encourage partner involvement, and psychosocial assessments aimed at supporting both members of the couple during this transition.

**Limitations and Generalizability:** This study has several limitations. First, the research was conducted in a single tertiary care center located in the Eastern Anatolia Region, which may limit the extent to which the findings can be generalized to populations with different cultural and socioeconomic characteristics. Second, the data were obtained through self-report measures, which may introduce potential biases inherent in participant-reported information. Additionally, although the sample size was adequate, the use of a convenience sampling method may limit the representativeness of the sample relative to the broader population of pregnant women.

For these reasons, the findings should be interpreted within the context of these methodological constraints. Future research employing multi-center designs, more diverse sampling strategies, and objective data collection methods is recommended to enhance the generalizability of the results.

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## References

1. Can V, Bulduk M, Can EK, Aysin N. Impact of social support and breastfeeding success on the self-efficacy levels of adolescent mothers during the postpartum period. *Reprod Health* 2025; 22: 19.
2. Hennekam S, Syed J, Ali F, Dumazert J-P. A multilevel perspective of the identity transition to motherhood. *Gend Work Organ*. 2019; 26: 915-933.
3. Neumann AP, Wagner A, Remor E. Couple relationship education program "Living as Partners": evaluation of effects on marital quality and conflict. *Psicol Reflex Crit* 2018; 31: 26.
4. Bamesghi M, Kimiaei SA, Mashhadi A. Effectiveness of the Unified Protocol for Transdiagnostic Treatment in Reducing Depression Associated with Marital Problems. *Int J Health Life Sci* 2019; 5: e93299.
5. Taghani R, Ashrafzavah A, Ghanbari Soodkhori M, Azmoude E, Tatari M. Marital satisfaction and its associated factors at reproductive age women referred to health centers. *J Educ Health Promot* 2019; 8: 133.
6. Besral B, Misrawati M, Afyanti Y, Ismail RI, Arifin H. MIESRA mHealth: Marital satisfaction during pregnancy. *PLoS One* 2023; 18: e0289061.
7. Bulduk M, Can EK, Can V, Aysin N. The relationship between social support and maternal attachment of adolescent mothers and postpartum depression in Turkey. *BMC Pregnancy Childbirth* 2025; 25: 603.
8. Yalcintas S, Pike A. Co-parenting and marital satisfaction predict maternal internalizing problems when expecting a second child. *Psychol Stud* 2021; 66: 212-219.
9. Jawed-Wessel S, Santo J, Irwin J. Sexual activity and attitudes as predictors of sexual

- satisfaction during pregnancy: a multi-level model describing the sexuality of couples in the first 12 weeks. *Arch Sex Behav* 2019; 48: 843-854.
10. Fuchs A, Czech I, Sikora J, Fuchs P, Lorek M, Skrzypulec-Plinta V, et al. Sexual functioning in pregnant women. *Int J Environ Res Public Health*. 2019;16(21):4216.
  11. Behrang K, Koraei A, Shahbazi M, Abbaspour Z. The effects of emotion-focused therapy on sexual stability, marital forgiveness, and marital adjustment among discordant couples. *J Res Health* 2022; 12: 177-184.
  12. Mercer RT. Nursing support of the process of becoming a mother. *J Obstet Gynecol Neonatal Nurs* 2006; 35: 649-651.
  13. Özçoban FA, Dilcen HY. The effects of pregnancy on marital adjustment and sexuality. *Journal of Family Medicine and Primary Care Services of Türkiye* 2022; 16: 639-649.
  14. Kuersten-Hogan R, Jarquin S, Charpentier L. The interrelationship between the prenatal marital and coparenting subsystems: Forecasting postpartum family dynamics in first-time parents. In: *Prenatal Family Dynamics: Couple and Coparenting Relationships During and Postpregnancy*. Cham: Springer International Publishing; 2021; 227-249.
  15. Rosen NO, Williams L, Vannier SA, Mackinnon SP. Sexual intimacy in first-time mothers: Associations with sexual and relationship satisfaction across three waves. *Arch Sex Behav* 2020; 49: 2849-2861.
  16. Bayraktaroğlu H, Tezer M, Beyazıt U, Çakıcı E. The Development and Assessment of Psychometric Properties of Near East Marital Adjustment Scale. *Int J Educ Sci* 2017; 19: 205-213.
  17. Cohen J, Set correlation and contingency tables. *Applied psychological measurement*. 1988; 12: 425-434.
  18. Akoglu H, User's guide to correlation coefficients. *Turkish journal of emergency medicine* 2018; 18: 91-93.
  19. Dursun D. The Effect of Marital Adjustment on Fear of Childbirth in Pregnant Women [Master's thesis]. Institute of Health Sciences; 2019.
  20. Findik FY, Yagmur Y. The Effect of Marital Adjustment on Prenatal Breast-Feeding Self-Efficacy in Pregnants. *J Midwifery* 2024; 9: 36-47.
  21. Sönmez T, Apay SE, Gür EY. Assessment of Marital Satisfaction Among Pregnant Women. *Hacettepe Univ Fac Nurs J* 2018; 5: 209-219.
  22. Küçükaya B, Süt HK, Öz S, Sarıkaya NA. The Relationship Between Marital Adjustment And Prenatal Attachment During Pregnancy. *Acibadem Univ J Health Sci* 2020; 1: 102-110.
  23. Meena PS, Jain M, Dosodiya Y. Marital Adjustment Among Employed and Unemployed Women: A Study in Rajasthan. *Ann Psychiatr Res* 2023; 1: 20-24.
  24. Rajora PA. Comparative study of life satisfaction and marital adjustment of employed and unemployed married women. *Int J Indian Psychol* 2019; 7: 167-172.
  25. Toprak FÜ, Turan Z. The Effect of Marital Satisfaction on Prenatal Attachment In Pregnant Women. *Ordu Univ J Nurs Stud*. 2023; 6: 578-590.
  26. Ataman H, Akarsu Ö, Budak Mİ. Determining the relationship between marital adjustment and prenatal attachment in high-risk pregnancies during the third trimester. *Turk J Fam Med Prim Care* 2022; 16: 670-680.
  27. Tunca A, Durmuş E. Married Women's Relationships with Their Mothers-in-Law and Family Adaptation. *Inonu Univ J Int Soc Sci* 2022; 11: 37-52.
  28. Ünal E, Yağmur Y. Sexual quality of life and marital adjustment in pregnant women. *Health Care for Women International*. 2024; 45: 1384-1396.
  29. Kowal M, Groyecka-Bernard A, Kochan-Wójcik M, Sorokowski P. When and how does the number of children affect marital satisfaction? An international survey. *PLoS One* 2021; 16: e0249516.
  30. Ghahremani F, Ahmadi Doulabi M, Eslami M. The correlation between marital satisfaction and childbearing characteristics in women in Tehran. *Int J Adolesc Med Health* 2021; 33: 20190018.
  31. Côté-Arsenault D, Leerkes EM, Zhou N. Individual differences in maternal, marital, parenting and child outcomes following perinatal loss: a longitudinal study. *J Reprod Infant Psychol* 2020; 38: 3-15.
  32. Barton K, Redshaw M, Quigley MA, Carson C. Unplanned pregnancy and subsequent psychological distress in partnered women: a cross-sectional study of the role of relationship quality and wider social support. *BMC pregnancy and childbirth* 2017; 17: 44.
  33. Can V, Bulduk M. The effect of a web-based BF education program for adolescent pregnant women in the third trimester on BF practices. *Ital J Pediatr* 2025; 51: 294. Tüm kaynaklar derginin yazım kurallarına göre revise edilmelidir.