

Mediterr Nurs Midwifery 2024; 4(1): 54-64 DOI: 10.4274/MNM.2023.23165

# ORIGINAL ARTICLE





# The Fear of COVID-19 and Marital Adjustment in Pregnancy: Descriptive and A Cross-sectional Design

# Gebelikte COVID-19 Korkusu ve Evlilik Uyumu: Tanımlayıcı ve Kesitsel Çalışma

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#### Abstract

**Objective:** This research was planned to investigate the marital adjustment of pregnant women and their Coronavirus disease-2019 (COVID-19) fear during the COVID-19 pandemic period and identify the association between these two variables.

Method: This study was performed with a descriptive and cross-sectional design from October 2021 to January 2022.

**Results:** A total of 193 pregnant and married women participated in the research. It was discerned that the variable of marital adjustment perception had no effect on women's Fear of COVID-19 Scale scores (p>0.05) whereas it had a statistically significant effect on their Marital Adjustment Test, Relationship Style Sub-Scale, and Agreement Sub-Scale scores (p<0.05). Besides, it was identified that women's Fear of COVID-19 Scale scores had no statistically significant relationship with their scores on the Marital Adjustment Test and its dimensions (p>0.05).

**Conclusion:** It was determined in the present study that the fear of COVID-19 did not affect the marital adjustment levels of pregnant women significantly, and as the marital adjustment scores of the participants increased, their agreement and relationship style scores also increased.

Keywords: Pregnancy, fear of COVID-19, marriage, adjustment, fear

#### Öz

Amaç: Bu araştırma Koronavirüs hastalığı-2019 (COVID-19) pandemisi sırasında gebelerin evlilik uyumunu ve COVID-19 korkusunu değerlendirmek ve bu iki değişken arasındaki ilişkiyi belirlemek amacı ile planlanmıştır.

Yöntem: Tanımlayıcı ve kesitsel tipte olan bu araştırma Ekim 2021-Ocak 2022 tarihleri arasında yürütülmüştür.

**Bulgular:** Araştırmaya 193 gebe ve evli kadın katılmıştır. Kadınların evlilik uyumu algısı COVID-19 Korkusu Ölçeği puanlarını etkilemezken (p>0,05), Evlilik Uyum Ölçeği toplam, ilişki tarzı ve anlaşma alt ölçeği puanlarını etkilediği bulunmuştur (p<0,05). COVID-19 Korkusu Ölçeği ile Evlilik Uyum Ölçeği toplam ve alt ölçekleri puanları arasında ilişki bulunmadığı saptanmıştır (p>0,05).

Sonuç: Bu çalışmanın sonucunda gebelikte yaşanan COVID-19 korkusunun evlilik uyumunu etkilemediği ancak evlilik uyumunun anlaşma ve ilişki tarzı ile yüksek düzeyde pozitif yönde bir ilişkiye sahip olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Gebelik, COVID-19, evlilik, uyum, korku

#### Introduction

Pregnancy is a process in which women undergo biopsychosocial changes (1,2). In this process, the woman assumes certain developmental roles such as accepting the pregnancy, reorganizing her relations with her mother and spouse, forming a relationship with her unborn baby, and getting prepared for the childbirth experience (3). While the woman copes with these situations, the man is also affected

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**Received:** July 24, 2023 **Accepted:** October 17, 2023

Cite this article as: Ağapınar Şahin S, Hasdemir Ö. The Fear of COVID-19 and Marital Adjustment in Pregnancy: Descriptive and A Cross-sectional Design. Mediterr Nurs Midwifery 2024; 4(1): 54-64

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by these changes that occur during the pregnancy process (2). So that the woman can have a successful experience during this process, the spouse's involvement in the process is important (3). At this point, marital adjustment is one of the concepts that come forward. As per the study by Deliktas Demirci et al. (4), marital adjustment is defined as the reciprocal relationship between the acceptance of pregnancy, the adaptation to the motherhood role, and maternal attachment. In other words, pregnancy and marital adjustment are concepts that both affect each other and are affected by each other (5). Marital adjustment in pregnancy is affected by variables such as social support, motherhood role, acceptance of pregnancy, pregnant woman's education level, marriage duration, whether the woman has household responsibilities, income level, the status of having a planned pregnancy, and whether the spouses are in a love marriage (4,6-10). Nosrati et al. (11) stated that affective changes, anxiety, and fears felt during the pregnancy period were factors that were likely to affect the marital adjustment negatively.

The fear of Coronavirus disease-2019 (COVID-19) is defined as reactions that arise along with the intense stimulation of the fear of being infected with the virus causing the COVID-19 disease (12). The most significant psychological influence of the COVID-19 pandemic was asserted to be fear (13). It was put forward that factors such as the health anxiety, the use of social media, the worry felt about the wellbeing of one's loved ones, the inability to access information regarding the virus, uncertainties and the failure to act, fears about the financial consequences of the COVID-19 pandemic, the hesitation to come together with strangers, and virus control and elimination behaviors that challenged the individuals were among the factors that explained the fear of COVID-19 (14-18). Women experience greater degrees of COVID-19 fear in comparison to men (19-21). In the study by Fitzpatrick et al. (22), certain groups were found to have higher greater COVID-19 fear levels, while it was also a quite striking finding that women and married individuals were among the sensitive groups.

Additionally, being in the pregnancy period during the COVID-19 pandemic comes forward as another factor that negatively affects women (23). The effects of past epidemics on pregnant women varied, and due to changes in both hormonal levels and in the immune system, pregnancy made women a risky group in this process (24). Considering that the pregnancy is accompanied by affective changes (1), it is considered that the fear of COVID-19 may also have had negative effects on the woman's affective state and deeply influenced the woman's life. Marital adjustment can be one of these effects. Upon the examination of studies in the

#### **Main Points**

- Pregnancy affects marital adjustment.
- The fear of Coronavirus disease-2019 is higher among women and married individuals.
- Pregnant women who have high-level marital adjustment perception also have high-level agreement and relationship style.

literature, it was found that there were not enough studies on this particular topic (2). Thus, studies to be performed on this topic with different samples are needed as well as more comprehensive knowledge about the topic in the relevant literature. In this respect, this research was planned to investigate the marital adjustment and COVID-19 fear levels of pregnant women in the COVID-19 pandemic period and identify the association between these two variables.

Thus, the below research questions were put forward:

• What are the pregnant women's marital adjustment levels like?

• What are the pregnant women's COVID-19 fear levels like?

• Is there any difference in pregnant women's marital adjustment and COVID-19 fear levels as per their sociodemographic characteristics, pregnancy-related characteristics, and martial adjustment perception?

• Does the fear of COVID-19 felt by pregnant women affect the pregnant women's marital adjustment?

## **Material and Method**

#### **Design and Sample**

The research was conducted with a descriptive and crosssectional design. The research population was the married pregnant women registered at three family health centers selected by lot in the Central Anatolia Region of Turkey, were in any trimester of pregnancy, were aged over 18 years, and agreed to take part in this study. It was determined that the number of pregnant women aged over 18 years and registered at these family health centers was 473 (n=473). The minimum required size of a sample for the research was computed using the OpenEpi Version 3.0 (OpenEpi, 2021) (25), and in this respect, the minimum sample size was found as 173 (n=473, p=50% ±5, d= ±0.05, confidence interval: 90%) and the research was finalized with 193 women. In addition, a pilot study was conducted with 10 pregnant women before the study in order to test the understandability of the data collection forms of the study and to eliminate possible problems. The understandability of the questions was determined and the data collection phase began. Pregnant women included in the pilot study were not included in the research sample. Pregnant women were asked to fill out the data forms as soon as they were available during the day.

#### **Data Collection**

The data were obtained using a personal information form, the marital adjustment test, and the fear of COVID-19 scale.

The data collection process took place between October 2021 and January 2022. The data were provided by the participants women with an online questionnaire form (Google Forms) due to the ongoing COVID-19 pandemic.

## Instruments

## **The Personal Information Form**

The personal information form was a form consisting of 13 items that was developed by researchers to find out women's and their spouses' socio-demographic characteristics, women's pregnancy-related characteristics, and their marital adjustment perceptions.

## The Marital Adjustment Test (MAT)

Locke and Wallace (26) developed the MAT that aimed to measure marital adjustment and the satisfaction felt from the marital relationship, and Kışlak (27) performed a validity and reliability study to adapt the MAT to Turkish. Comprised of two sub-scales, the MAT has 15 items offering different numbers of choices to select. The first MAT sub-scale (the first nine items) shows the status of the respondent's agreement or disagreement whilst the second MAT sub-scale (the last six items) refers to the respondent's relationship style (27). Each MAT item is scored depending on the number of its choices. In this respect, the item 1 is scored from 0 to 6, items 2-9 are scored from 0 to 5, the item 10 is scored respectively as 0, 0, 1, the item 11 is scored as 3, 2, 1, 0, the item 12 is scored as 0 for the choice of "disagreement" and as 1 for choices of "on the go" and "stay at home" in the two sub-items, the item 13 is scored as 0, 1, 2, 3, the item 14 is scored as 2, 1, 0, and lastly, the item 15 is scored as 0, 1, 2, 2 (27). A respondent obtaining 43 points or above from the MAT is considered to have a well-adjusted marital relationship while a respondent obtaining a score below 43 points is accepted as having no well-adjusted marital relationship. In the assessments of the validity and reliability of the scale that were performed by Kışlak (27), Cronbach's alpha coefficient of the scale was reported to be 0.80. In the current study, it was calculated as 0.83 for the MAT.

# The Fear of COVID-19 Scale (FCV-19S)

The FCV-19S was created by Ahorsu et al. (28), and its validity and reliability study in Turkish was carried out by Satici et al. (29). Composed of seven questions, the FCV-19S is scored as per a five-point Likert scale (1- I strongly disagree, 5- I strongly agree). No inversely scored items are included in the FCV-19S. The lowest and highest possible score on the FCV-19S is 7 and 35. Higher FCV-19S scores show that the respondent has higher levels of fear of the COVID-19 pandemic. In the Turkish validity and reliability study for the FCV-19S, the Cronbach's alpha value of the scale was reported to be 0.82. In the current study, this coefficient was calculated as 0.88.

## **Ethical Considerations**

Before implementing the study, ethical approval was received from the non-invasive clinical trials Ethics Committee of the Atatürk University (B.30.2.ATA.0.01.00/280), and permission was provided in writing by the institution where the study would be carried out (commission decision no: 2021/05). All procedures in the study, institutional research committee's ethical standards and the 1964 Helsinki Declaration and its subsequent amendments or in accordance with comparable ethical standards has been carried out. Pregnant and married women who signed the informed consent form were included in the study.

## **Statistical Analysis**

The IBM Statistical Package for the Social Sciences (SPSS) 22.0 was used to analyze the data. Percentage, arithmetic mean, standard deviation, median, and minimum and maximum values were used to express descriptive statistics. The normality of the distribution of the data was checked using the Shapiro-Wilk test and Q-Q plots. For the normally distributed data, the Mann-Whitney U test was used to compare two groups independent of each other, whereas the Kruskal-Wallis H test was utilized to compare more than two groups independent of each other. Spearman's correlation analysis was conducted to identify the relationship between the two variables. The level of statistical significance was accepted to be a p-value smaller than 0.05 (p<0.05).

# Results

First, Table 1 displayed women's socio-demographic characteristics. Of all participant women, 33.7% were aged 25-29 years, 41.5% were graduates of a university undergraduate program, 62.2% had an income equaling their expenses, and 43.1% were married for 1-3 years. Next, of the women's spouses, 36.3% were aged 30-34 years, 42.0% were graduates of a university undergraduate program, and 87.6% had nuclear families.

Second, Table 2 exhibited women's pregnancy-related characteristics. Of all participant women, 75.6% had a planned pregnancy, 49.2% were having their first pregnancy, 68.4% had a gestational age of 27-41 weeks, 64.8% had social support during pregnancy, and 50.3% perceived their marital adjustment as good.

Third, upon the review of Table 3 that indicated women's MAT and FCV-19S scores, it was revealed that the mean MAT scores, the mean MAT agreement and relationship style subscale scores, and the mean FCV-19S scores of the participants were consecutively  $46.95\pm7.69$ ,  $36.19\pm5.94$ ,  $10.76\pm2.51$ , and  $19.04\pm7.05$  points.

Fourth, Table 4 showed the breakdown of women's mean FCV-19S and MAT scores as per their socio-demographic characteristics. The analyses revealed no significant difference in women's mean FCV-19S and MAT scores as per the variables of age, employment status, spouse's age, and family type (p>0.05).

Besides, it was identified that the variable of education level had no statistically significant effect on women's FCV-19S scores (p>0.05) whereas women who were primary school graduates and women who were graduates of a university undergraduate program obtained higher mean scores from

Characteristics	Number (n)	Percentage (%)
Age		
18-24 years	42	21.8
25-29 years	65	33.7
30-34 years	61	31.5
35-49 years	25	13
Education level		
Primary school	45	23.3
High school	50	25.9
Undergraduate program	80	41.5
Graduate program	18	9.3
Employment status		
Working	68	35.2
Not working	125	64.8
Perceived income level	·	
Income below expenses	46	23.8
Income equaling expenses	120	62.2
Income above expenses	27	14
Duration of marriage		
Below 1 year	17	8.8
1-3 years	83	43.1
4-7 years	51	26.4
8-10 years	18	9.3
10 years or above	24	12.4
Spouse's age		
18-24 years	15	7.8
25-29 years	53	27.4
30-34 years	70	36.3
35-49 years	55	28.5
Spouse's education level		
Primary school	45	23.3
High school	58	30.1
Undergraduate program	81	42
Graduate program	9	4.6
Family type		
Nuclear family	169	87.6
Extended family	24	12.4
Total	193	100

Table 1

the MAT and its agreement sub-scale than other groups of women with different education levels and this difference in the comparisons of the groups was found to be significant (consecutively p=0.010 and p=0.028). Also, it was found that women who were high school graduates obtained a lower mean score from the MAT relationship style sub-scale than other groups of women with different education levels and this difference between the groups was found to be significant (p=0.020).

What is more, it was discerned that the variable of income level had no significant influence on the MAT relationship style sub-scale scores of the women (p>0.05), while, in contrast, women who had an income equaling their expenses obtained higher mean scores from the MAT

Table 2. Participant Women's Pregnancy-related Characteristics			
Characteristics	Number (n)	Percentage (%)	
Status of having a planned preg	inancy		
Yes	146	75.6	
No	47	24.4	
Gravidity			
1	95	49.2	
2	52	26.9	
3	29	15.1	
4 or above	17	8.8	
Gestational age			
1-13 weeks	12	6.2	
14-26 weeks	46	23.8	
27-41 weeks	132	68.4	
41 weeks or above	3	1.6	
Status of having social support	during pre	egnancy	
Yes	125	64.8	
No	68	35.2	
Perception of the marital adjustment			
Moderate	26	13.4	
Good	97	50.3	
Very good	70	36.3	
Total	193	100	

#### Table 3. Participant Women's MAT and FCV-19S Scores

Scales and sub-scales	<b>X</b> ± SD	Median (min-max)		
MAT	46.95±7.69	48 (16-60)		
Agreement sub-scale	36.19±5.94	36 (6-46)		
Relationship style sub-scale	10.76±2.51	11 (3-14)		
<b>FCV-19S</b> 19.04±7.05 19 (7-35)				
SD=standard deviation, MAT=marital adjustment test, FCV-19S=fear of COVID-19 scale, COVID-19=Coronavirus disease-2019				

		MAT		
Characteristics	FCV-19S	Agreement sub- scale	Relationship style sub-scale	Overall MAT
	<b>X</b> ± SD	<b>X</b> ± SD	<b>X</b> ± SD	<b>X</b> ± SD
Age				
18-24 years	17.00±7.79	36.26±5.92	10.33±2.66	46.60±7.96
25-29 years	19.94±7.41	36.25±6.52	11.12±2.00	47.37±7.81
30-34 years	19.28±5.60	35.80±5.35	10.56±2.79	46.36±7.43
35-49 years	19.52±7.69	36.88±6.00	11.00±2.69	47.88±7.86
Test*	χ <sup>2</sup> =3.960	χ <sup>2</sup> =1.260	χ <sup>2</sup> =2.395	χ <sup>2</sup> =1.437
	p=0.266	p=0.739	p=0.495	p=0.697
Education level			P	
Primary school	18.62±6.44	36.58±5.80ª	10.56±2.26°	47.13±7.67ª
High school	18.58+7.42	34.58±5.86 <sup>b</sup>	9.92±2.96 <sup>b</sup>	44.50+7.97 <sup>b</sup>
Undergraduate program	19 90+716	3758+5.03*	11 31+2 34°	48 89+6 67ª
Graduate program	1750+710	33 56+8 37 <sup>b</sup>	1111+181°	44 67+9 25 <sup>b</sup>
Teet*	w <sup>2</sup> -2 370	v <sup>2</sup> -9120	w <sup>2</sup> -9 798	v <sup>2</sup> -11 433
iest	n=0.499	λ = 7.120 n=0.029	<u>λ</u> = 7.770	χ =11.400
Employment status	p=0.477	p=0.020	p=0.020	p=0.010
Working	18 31+704	35 88+617	11 24+212	4712+728
Notworking	10.31±7.04	26 26 15 92	10.50+2.66	4/.1217.20
	77.43±7.03	0 247	10.30±2.00	40.00±7.73
Test^^	2=-1.305	2=-0.247	2=-1.700	2=-0.234
Denne institute and a land	p=0.192	p=0.805	p=0.075	p=0.800
	170117000		10.0010.45	447047400
	17.91±7.88ª	34.50±5.86ª	10.22±2.45	44./2±/.49ª
Income equaling expenses	20.31±6.73°	36.48±6.05°	10.95±2.57	47.43±7.90°
Income above expenses	15.30±5.28°	37.81±5.01°	10.81±2.27	48.63±6.43°
Test*	χ²=13.427	χ² <b>=6.577</b>	χ²=4.066	χ² <b>=6.177</b>
	p=0.001	p=0.037	p=0.131	p=0.046
Duration of marriage	17.18±7.52	36.59±6.46	10.53±3.18 <sup>ab</sup>	47.12±9.12
Below I year	19.48±7.12	30.58±6.13	11.30±2.24ª	47.88±7.57
1-3 yedis 1-7 years	10./3±/.08	30.0213.17 34 67+5 91	917+3 07b	40./3±0.30
a / years 8-10 vears	18 83+732	36 08+6 74	10 29+2 88ab	46.38+8.91
10 years or above	v <sup>2</sup> =1 816	$v^2 = 2.582$	y <sup>2</sup> =9.948	$y^2 = 4706$
Test*	p=0.769	p=0.630	p=0.041	p=0.319
Spouse's age	16.80±6.83	34.53±5.69	10.47±2.92	45.00±8.34
18-24 years	19.51±7.92	37.30±5.19	11.13±2.27	48.43±6.74
25-29 years	19.27±6.57	35.56±6.71	10.21±2.69	45.77±8.53
30-34 years	18.89±6.88	36.38±5.56	11.16±2.28	47.55±7.08
35-49 years	χ²=1.556	χ <sup>2</sup> =2.893	χ²=5.655	χ²=3.602
Test*	p=0.669	p=0.408	p=0.130	p=0.308

Table 4. Continued				
<b>Spouse's education level</b> Primary school High school Undergraduate program Graduate program Test*	$18.56\pm7.00 \\19.78\pm6.70 \\18.37\pm7.29 \\22.67\pm6.89 \\\chi^{2}=3.966 \\p=0.265$	$\begin{array}{c} 35.91\pm5.89^{a} \\ 35.93\pm6.05^{a} \\ 37.30\pm4.82^{b} \\ 29.33\pm9.77^{c} \\ \chi^{2}=9.341 \\ p=0.025 \end{array}$	10.33 $\pm$ 2.54° 10.29 $\pm$ 2.78° 11.46 $\pm$ 2.01° 9.56 $\pm$ 3.21° $\chi^2$ =9.946 <b>p=0.019</b>	$46.24\pm7.94^{a}$ $46.22\pm8.15^{a}$ $48.75\pm6.02^{b}$ $38.89\pm11.19^{c}$ $\chi^{2}=10.573$ $p=0.014$
<b>Family type</b> Nuclear family Extended family Test**	19.20±7.06 17.92±7.03 z=-0.530 p=0.596	36.18±6.07 36.25±5.03 z=-0.153 p=0.879	10.83±2.46 10.25±2.80 z=-1.008 p=0.313	47.01±7.80 46.5±7.02 z=-0.518 p=0.604

\*=the Kruskal-Wallis H test, \*\*=the Mann-Whitney U test, \*\*\*=superscripts <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> show the statistically significant between-group differences in mean scores as per each characteristic, and there is no statistically significant difference between groups with the same superscript, SD=standard deviation, MAT=marital adjustment test, FCV-19S=fear of COVID-19 scale, COVID-19=Coronavirus disease-2019

and its AGREEMENT SUB-SCALE than women who had an income below their expenses whilst women who had an income above their expenses obtained higher mean scores from the MAT and its agreement sub-scale than the other two groups of women with different income levels, and all these variations in the scores of the two groups of women were found significant (successively p=0.046 and p=0.037). Additionally, it was identified that women who had an income below their expenses had a higher FCV-19S mean score compared to women who had an income above their expenses while women who had an income equaling their expenses had higher FCV-19S mean scores compared to the other two groups with different income levels, and all these differences between the groups of women was statistically significant (p=0.001).

Furthermore, it was found that the variable of marriage duration had no statistically significant influence on women's FCV-19S, MAT, and MAT agreement sub-scale scores (p>0.05) whereas women who were married for 8-10 years had a lower MAT relationship style sub-scale score than women who were married for 1-3 years, and this difference was significant (p=0.041).

Next, it was discerned that the variable of spouse's education level had no significant influence on the FCV-19S scores of the participants (p>0.05), while conversely, women whose spouses were primary school graduates and women whose spouses were high school graduates obtained lower mean scores from the MAT, the MAT agreement sub-scale, and the MAT relationship style sub-scale than the other two groups of women, and all these differences in the comparisons of the groups was significant (respectively p=0.014, p=0.025, p=0.019).

Fifth, Table 5 indicated the breakdown of women's FCV-19S and MAT scores as per their pregnancy-related characteristics. No statistically significant variation was found in women's mean FCV-19S and MAT scores as per the variables of gestational age and the status of having social support during pregnancy (p>0.05). Besides, it was found that the status of having a planned pregnancy had no statistically significant effect on women's FCV-19S and MAT agreement sub-scale scores (p>0.05) whereas women who had a planned pregnancy obtained higher mean scores from the MAT and its relationship style sub-scale than women who did not have planned pregnancies and this variation between the two groups of women was significant (successively p=0.004, p=0.042).

Moreover, it was discerned that the variable of gravidity had no statistically significant effect on women's FCV-19S, MAT, and MAT agreement sub-scale scores (p>0.05), while, as opposed to this result, women who had 4 or more pregnancies obtained a lower mean score from the MAT relationship style sub-scale than the two groups of women that had 1 pregnancy and 2 pregnancies and this difference between the groups of women turned out to be significant (p=0.007).

Furthermore, it was identified that the variable of the perception of the marital adjustment had no statistically significant influence on women's FCV-19S scores (p>0.05) whereas it had a statistically significant influence on women's MAT, MAT relationship style sub-scale, and MAT agreement sub-scale scores (p<0.05). In this regard, women who perceived their marital adjustment as very good obtained higher mean scores from the MAT and its relationship style sub-scale and agreement sub-scale than other groups of women with different perceptions, and this variation in the comparison of the groups of women was found significant (p=0.000).

Sixth, Table 6 showed the breakdown of women's mean FCV-19S scores as per the status of having a well-adjusted marital relationship. Considering the cutoff point designated for the MAT, it was found that the status of having a well-adjusted marital relationship had no statistically significant effect on women's FCV-19S scores (p>0.05).

Lastly, upon the review of the analysis of the correlation between women's MAT and FCV-19S scores in Table 7, it was discerned that women's FCV-19S scores had no statistically

Table 5. The Breakdown of the Women's Mean FCV-19S and MAT Scores as Per Their Pregnancy-related Characteristics							
	FCV-19S	MAT					
Characteristics		Agreement sub-scale	Relationship style sub-scale	Overall MAT			
	<b>X</b> ± SD	<b>X</b> ± SD	<b>X</b> ± SD	<b>X</b> ± SD			
Status of having a planned pregnancy							
Yes	19.18±6.67	36.52±5.88	11.09±2.27	47.61±7.38			
No	18.57±8.18	35.17±6.06	9.72±2.92	44.89±8.34			
Test**	z=-0.833	z=-1.502	z=-2.865	z=-2.034			
	p=0.405	p=0.133	p=0.004	p=0.042			
Gravidity							
1	18.74±6.75	37.00±6.28	11.29±2.26ª	48.29±7.81			
2	19.04±7.34	35.54±5.09	10.63±2.43ª	46.17±6.66			
3	20.97±6.60	35.41±5.76	10.03±3.02 <sup>ab</sup>	45.45±8.27			
4 or above	17.41±8.43	35.00±6.51	9.35±2.40 <sup>b</sup>	44.35±8.16			
Test*	χ²=3.362	χ²=5.302	χ²=12.113	χ²= <b>7.619</b>			
	p=0.339	p=0.151	p=0.007	p=0.055			
Gestational age							
1-26 weeks	18.62±7.51	35.69±6.39	10.31±2.51	46.00±7.82			
27 weeks or above	19.21±6.87	36.41±5.74	10.95±2.49	47.36±7.63			
Test**	z=-0.712	z=-0.656	z=-1.729	z=-1.297			
	p=0.476	p=0.512	p=0.084	p=0.195			
Status of having social support d	uring pregnancy						
Yes	19.27±6.66	36.71±5.70	10.95±2.38	47.66±7.24			
No	18.60±7.75	35.24±6.28	10.40±2.70	45.63±8.36			
Test**	z=-0.685	z=-1.598	z=-1.285	z=-1.515			
	p=0.493	p=0.110	p=0.199	p=0.130			
Perception of the marital adjustment							
Moderate	19.12±7.45	30.15±4.64ª	9.08±3.14ª	39.23±7.08ª			
Good	18.80±6.87	35.44±4.91 <sup>b</sup>	10.35±2.35 <sup>b</sup>	45.79±6.49 <sup>b</sup>			
Very good	19.33±7.23	39.47±5.60°	11.94±1.88°	51.41±6.58°			
Test*	χ²=0.192	χ² <b>=58.870</b>	χ <sup>2</sup> =30.027	χ² <b>=58.012</b>			
	p=0.908	p=0.000	p=0.000	p=0.000			

\*=the Kruskal-Wallis H test, \*=the Mann-Whitney U test, \*\*\*=superscripts <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> show the statistically significant between-group differences in mean scores as per each characteristic, and there is no statistically significant difference between groups with the same superscript, SD=standard deviation, MAT=marital adjustment test, FCV-19S=fear of COVID-19 scale, COVID-19=Coronavirus disease-2019

significant correlation with their MAT total and sub-scale scores (p>0.05).

#### Discussion

The results of this study showed that of all participating women, 75.6% had a planned pregnancy, 49.2% were having their first pregnancy, 68.4% had a gestational age of 27-41 weeks, 64.8% had social support during pregnancy, and 50.3% perceived their marital adjustment as good. Abdollahpour et al. (30) reported that 69% of the women

had social support during pregnancy, and women who had an unwanted pregnancy had lower social support levels compared to those who had a wanted pregnancy, where this difference between the results of the two groups was significant (p<0.05). Also in other studies, it was discerned that having a planned pregnancy increased the received social support (31,32). Thus, the above-cited studies are in support of our study.

Besides, in the current research, it was found that women obtained a mean MAT score ( $46.95\pm7.69$  points) and a

Table 6.
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The Breakdown of the Women's Mean FCV-19S Scores as Per the Status of Having A Well-adjusted Marital Relationship

Status of having a		FCV-19S	
relationship*	<b>X</b> ± SD		
Yes	134	18.74±6.59	
No	59	19.69±8.00	
Test**		z=-0.887 p=0.375	

\*=the cut-off point for the MAT was taken as 43.5 points, \*\*=the Mann-Whitney U test, SD=standard deviation, MAT=marital adjustment test, FCV-19S=fear of COVID-19 scale, COVID-19=Coronavirus disease-2019

Table 7.

The Correlation Between Women's MAT and FCV-19S Scores

Scales and sub- scales		FCV-19S	MAT agreement sub-scale	MAT relationship style sub- scale
MAT	r	-0.027		
agreement sub-scale	p	0.705		
MAT		0.047	0.587**	
relationship style sub- scale	r p	0.513	0.000	
MAT r	r	-0.002	0.966**	0.767**
	р	0.983	0.000	0.000
the the Cheerman's convelotion analysis MAT manifel adjustment test FCV				

\*\*=the Spearman's correlation analysis, MAT=marital adjustment test, FCV-19S=fear of COVID-19 scale, COVID-19=Coronavirus disease-2019

mean FCV-19S score (19.04 $\pm$ 7.05 points) above the medium level. Unlike the current study, in a study that analyzed the relationship of pregnancy stress to the fear of COVID-19, it was discerned that the mean score of FCV-19S (21.39 $\pm$ 6.38) was above the medium level (33). This difference between research findings may have arisen from the fact that the two studies were performed with different samples in different cultures. On the other hand, the finding of the study by Şahin Altun et al. (34) stating that the mean MAT score was above the medium level was in parallel with the result of our study.

In the review of the literature conducted in the context of our study, it was identified that the fear of COVID-19 positively affected depression, anxiety, and somatization (35). Wu et al. (36) stated that as per the comparison of women's anxiety levels before and after the onset of the COVID-19 pandemic period, pregnant women had higher levels of anxiety in the period following the declaration of COVID-19 as a pandemic. Also, the study by Saccone et al. (37) asserted that most pregnant women were worried to a severe extent in the COVID-19 pandemic while the study by Durankuş and Aksu (38) identified that the process of the COVID-19 pandemic period caused a rise in the pregnant women's depression and anxiety levels. Departing from the results of the above-cited studies in the relevant literature (35-38), the identification of medium-level fear of COVID-19 in pregnant women in the current research makes us think that pregnant participants may have been also at risk of psychological problems such as anxiety and depression.

Moreover, no statistically significant difference was discerned in this study in women's mean FCV-19S and MAT scores as per the variables of age, employment status, spouse's age, and family type (p>0.05). This result of the current research differs from results in the relevant literature in terms of certain variables (age, spouse's age, employment status). In a study conducted to identify the factors affecting the marital adjustment in women, findings are in a similar vein to the finding of this study regarding the variables of age and family type, however, unlike the current study, there were statistically significant differences in women's marital adjustment levels as per the variables of woman's working style and spouse's age (p<0.05) (34) In another study performed on working individuals' marital adjustment, a statistically significant difference in pregnant women's mean MAT scores was on their age groups was identified (p<0.05), and 82.10% of the pregnant women in the group aged 35-44 years did not have a welladjusted marriage (39). In the literature, some studies found statistically significant relationships between marital adjustment and demographic variables (34,40,41), however, in similarity to the result of our study, certain researchers stated there was no statistically significant relationship in this regard (42,43). Along with this situation, it is considered that the variables related to sociological, psychological, and environmental conditions that differed over time may have led to a difference in the effect of these variables on marital adjustment, and also, the differences between findings may have stemmed from the differences between regions where studies were carried out.

Furthermore, in the current research, it was identified that, as per the gestational age and the status of having social support during pregnancy, there was no statistically significant difference in the women's mean the FCV-19S, MAT total, and MAT sub-scale scores (p>0.05). In contrast with the result of this study, a study that was performed to identify the relationship of marital adjustment to perceived social support during pregnancy found that, while the levels of perceived social support increased, the marital adjustment levels of the participants decreased (8). This situation could have stemmed from differences in the sample size as well as cultural differences. In the present study, it was also found that the status of having a planned pregnancy had no significant influence on women's FCV-19S and MAT agreement sub-scale scores (p>0.05). Nonetheless, women who had a planned pregnancy obtained higher mean scores from the MAT and its relationship style sub-scale than women who did not have a planned pregnancy (successively p=0.004, p=0.042). Like the result of our study, the study by Dursun (44) found that, as per the status of having a planned pregnancy, a statistically significant difference

existed in pregnant women's mean MAT scores (p<0.05). In this context, it can be stated that having a planned pregnancy had no effect on the fear of COVID-19 whilst it positively affected the marital adjustment. Additionally, in the current research, it was identified that the variable of gravidity had no statistically significant effect on women's FCV-19S, MAT, and MAT agreement sub-scale scores (p>0.05). However, women who had 4 or more pregnancies obtained a lower mean score from the MAT relationship style sub-scale than the two groups of women who had 1 pregnancy and 2 pregnancies, and this difference between the groups of women was statistically significant. This situation may have arisen from the fact that pregnant women's responsibilities increased along with the increase in the number of children of whom the pregnant women took care.

Next, it was ascertained in this study that the perception of the marital adjustment showed no statistically significant influence on women's FCV-19S scores (p>0.05) whilst it displayed a statistically significant influence on the MAT, MAT relationship style sub-scale, and MAT agreement subscale scores of the women (p<0.05). Women who perceived their marital adjustment as very good obtained higher mean scores from the MAT and its relationship style subscale and agreement sub-scale than other groups of women with different perceptions, and this difference found in the comparison of the groups was statistically significant (p=0.000). In this regard, it is thought that this situation may have stemmed from the fact that women in the region where the research was conducted had a culturally positive perspective of the marriage and this positive perspective had implications on their marital adjustment. In a similar vein to our study, the studies performed in Turkey found that women had a positive perception of the marriage (45,46). Also, in a metaphoric analysis, it was identified that the metaphors created by women about marriage were positive (47). Hence, all these study results are consistent with our findings.

Lastly, upon the review of the analysis of the correlation between women's MAT and FCV-19S scores, it was found that women's FCV-19S scores had no statistically significant correlation with scores of theirs on the MAT and its subscales (p>0.05). It was identified that women's MAT scores had statistically significant strong positive correlations with their MAT Agreement Sub-Scale and MAT relationship style sub-scale scores (p=0.000). Along with this situation, it is considered that the pregnant woman who had a welladjusted marriage process may have had an agreement more easily, and also, having a well-adjusted marriage may have positively affected the pregnant woman's relationship style. Metaphors created about marriage in a metaphoric analysis, that is, "+Single body: It is to become one person", "+Light: When light beams are spread around and shared as love and respect, they serve as an occasion to increase the happiness", "+Tree: It takes root with each passing day. When it is a young tree, if it is not planted reluctantly, rather, if it is planted in the right period that is well-suited to its climatic conditions, it takes root, progressively grows, and gains magnificence over there for years ahead and

makes everyone admire its beauty" (47), are in support of our above finding. Besides, during the research period, the relative de-escalation of the COVID-19 pandemic crisis since its beginning, the removal of prohibitions implemented due to the pandemic, and the launch of the normalization process may have affected pregnant women's COVID-19 fear levels as well as their marital adjustment outcomes that were based on their COVID-19 fear.

## **Study Limitations**

The fact that the data were collected using an online questionnaire form (Google Forms) rather than in-person interviews due to the COVID-19 pandemic, the completion of the data collection stage in around four months, the pregnant women who have internet access at home or on their mobile phone; any tablet, computer or smartphone, and the generalizability of research results solely to its population are limitations of this research.

# Conclusion

The fear of COVID-19 felt by pregnant women had no implication on their marital adjustment. Pregnant women who perceived their marital adjustment as very good also had a significantly high level of marital adjustment. It is important to ensure that pregnant will have a reduced extent of fear in the COVID-19 pandemic period and to provide pregnant women with consultancy and training services in an effort to strengthen their positive marital adjustment perceptions even further. Besides, to develop the relevant literature on this topic, it is recommended that research studies with larger populations be conducted on the topic.

## Acknowledgments

We would like to thank the women who took part in this study.

**Ethics Committee Approval:** Before implementing the study, ethical approval was received from the non-invasive clinical trials Ethics Committee of the Atatürk University (B.30.2.ATA.0.01.00/280), and permission was provided in writing by the institution where the study would be carried out (commission decision no: 2021/05).

**Informed Consent:** Pregnant and married women who signed the informed consent form were included in the study.

Author Contributions: Concept – S.A.Ş.; Design – S.A.Ş., Ö.H.; Data Collection and/or Processing – S.A.Ş., Ö.H.; Analysis and/or Interpretation – S.A.Ş., Ö.H.; Literature Review – S.A.Ş., Ö.H.; Writing – S.A.Ş., Ö.H.

**Declaration of Interests:** No conflict of interest was declared by the authors.

**Funding:** The authors declared that this study received no financial support.

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