

# Ayşegül UNUTKAN1



Kutahya Health Sciences University, Faculty of Health Sciences, Department of Midwifery, Kütahva, Türkive,

#### Sercan



### MANSUROĞLU<sup>2</sup>

Kütahya Health Sciences University, Kütahya Vocational School, Department of Health Care Services, Kütahya, Türkiye.

# Kübra KARABULUT<sup>3</sup>



Kütahya Health Sciences University Evliya Çelebi Training and Research Hospital, Kütahya, Türkiye.



Geliş Tarihi/Received 25 07 2023 Kabul Tarihi/Accepted 29.01.2024 Yayın Tarihi/Publication 05 07 2024 Date

Sorumlu Yazar/Corresponding author: Sercan MANSUROĞLU

E-mail: sercanmansuroglu@gmail.com Cite this article: Unutkan, A., Mansuroğlu S., & Karabulut, K. (2024). Factors Affecting the Perception of Traumatic Childbirth: A Cross-Sectional Study in Pregnant Women. Journal of Midwifery and Health Sciences, 7(2):217-227.



Content of this journal is licensed under a Creative Commons Attribution-Noncommercial 4.0 International License.

# Factor Affecting the Perception of Traumatic **Childbirth: A Cross-Sectional Study in Pregnant** Women

# Travmatik Doğum Algısını Etkileyen Faktörler: Gebelerde Kesitsel Bir Çalışma

#### **ABSTRACT**

Objective: In order to experience all the processes of pregnancy and childbirth in a healthy way, it is necessary that the perception of traumatic birth is not high and the affecting factors should be known. This study was conducted to evaluate the factors affecting pregnant women's perception of traumatic childbirth.

Methods: A cross-sectional and descriptive study consisted with 305 pregnant women, who was in the last trimester of their pregnancy. Data collected face-to-face using the Perception of Traumatic Childbirth Scale and the socio-demographic, obstetric and birth-related information

Results: All of the pregnant women included in the study were married and their mean age was 28.04±5.20 years. The mean score of the pregnant women from the scale was 56.46±1.56 (Min-Max=0-120). Statistical significance was found between the score obtained from the scale and income status, the total number of miscarriages/mortal deliveries, mode of termination of the last delivery, fear experienced at the last delivery and anxiety experienced at the last delivery.

Conclusion: A thorough understanding of the factors that influence and/or increase the perception of traumatic childbirth could contribute to the development of birth services as well as the protection and promotion of women's and pregnant's mental well-being.

Keywords: Traumatic childbirth, pregnancy, pregnant women, childbirth, women's mental health

#### ÖZ

Amaç: Gebelik ve doğumun tüm süreçlerinin sağlıklı bir şekilde yaşanabilmesi için travmatik doğum algısının yüksek olmaması ve etkileyen faktörlerin bilinmesi gerekmektedir. Bu çalışma gebelerin travmatik doğum algısını etkileyen faktörleri değerlendirmek amacıyla yapılmıştır.

Yöntemler: Kesitsel ve tanımlayıcı tipteki bu çalışmaya gebeliğinin son üç ayında olan 305 gebe katılmıştır. Veriler Travmatik Doğum Algısı Ölçeği ve sosyo-demografik, obstetrik ve doğumla ilgili bilgi formu kullanılarak yüz yüze toplanmıştır.

Bulgular: Çalışmaya dahil edilen gebelerin tamamı evli ve yaş ortalamaları 28,04±1,56 yıl idi. Gebelerin ölçekten aldıkları puan ortalaması 56,46±1,56 (Min-Maks=0-120) idi. Ölçekten alınan puan ile gelir durumu, toplam düşük/ölümlü doğum sayısı, son doğumun sonlanma şekli, son doğumda yaşanan korku ve son doğumda yaşanan kaygı arasında istatistiksel olarak anlamlılık bulunmuştur.

Sonuç: Travmatik doğum algısını etkileyen ve/veya artıran faktörlerin tam olarak anlaşılması, doğum hizmetlerinin geliştirilmesinin yanı sıra kadınların ve gebelerin ruhsal iyilik halinin korunmasına ve geliştirilmesine katkıda bulunabilir.

Anahtar Kelimeler: Travmatik doğum, gebelik, gebe kadınlar, doğum, kadın ruh sağlığı

## Introduction

Birth is considered a positive event in many cultures (Garthus-Niegel et al. 2020) However, in some societies, birth is viewed as a stressful life event due to its unpredictable nature and pain (Kranenburg et al. 2023). Hence, it can be stated that the perception of birth is very subjective. Although the birth may seem to be obstetrically normal from the standpoint of a clinician, it may be perceived as traumatic by the women (Nagle et al. 2022). Beck (2004) defines Traumatic Birth (TB) is defined as a negative perinatal experience that is subjectively perceived or evaluated by the woman. The concept of Perception of Traumatic Childbirth (PTC) describes a woman's belief that birth poses a risk of harming herself or her unborn child at any stage of labor (Türkmen et al. 2021). Studies show that there is a wide variation in the PTC between countries, ranging from 5-68.6 percent (Bay and Sayiner, 2021; Türkmen et al. 2021;). Studies suggest that the PTC is formed based on several factors, including the woman's particular characteristics, her past birth experience, and the meanings society attaches to birth (Aktaş, 2018; Bay and Sayiner, 2021; Türkmen et al. 2021; Müslüman and Ejder Apay, 2022). In particular, TB that women have previously experienced play an important role in the formation of the perception of childbirth (Sun et al. 2023).

A TB can have an important effect on the physical and emotional health of a woman, her baby, and her family (Elmir et al. 2010). It can be stated that when birth-related trauma is mentioned, physical trauma usually comes to mind and psychological effects are ignored. However, in recent studies, this conceptual confusion has attracted attention and the psychological effects of birth traumas have become more emphasized (Sun et al. 2023). In 2023, a definition of psychological birth trauma was made in the meta-synthesis study by Sun et al. According to this definition, psychological birth trauma is the subjective feeling created in women by events directly or indirectly related to childbirth, which manifests itself as intertwined painful emotional experiences that begin during the birth process and continue until the postpartum period. Birth trauma has negative effects on mental health (Türkmen et al. 2021), mother-infant interaction (Beck and Watson, 2019), breastfeeding behavior (Türkmen et al. 2020) and future reproductive decisions. The above-mentioned negative effects can occur after a TB experienced by women, as well as if they have a negative perception of childbirth (Morton and Simkin, 2019). A negative perception of childbirth, in turn, can cause women to experience depression and anxiety and negatively influence their psychological health (Hollander et al. 2017; Yalnız Dilcen et al. 2021).

It is essential to initiate interventions during pregnancy to reduce the negative consequences of PTC, including fear of vaginal delivery, negative birth experiences, birth trauma, postpartum depression, and the burden of surgical delivery on the national economy (Barut and Uçar, 2023). Determining the perceptions of pregnant women about childbirth in advance will prevent potential risks and contribute to the promotion of maternal and infant health. To understand the PTC, it is crucial to discuss the factors that influence a woman's perception of her birth experience (Bay and Sayiner, 2021). Establishing a clear picture of risk factors for TB will support to accurately identify, assess and follow up with women with birth trauma in maternity wards. That information will also assist determine domains in greater requirement of resource assignment and guide policy changes to improve maternal mental health services (Nagle et al. 2022). Thus, in this study, it was aimed to investigate the factors affecting the perception of traumatic childbirth of pregnant women.

# **Research Questions**

- What are the PTC levels of pregnant women?
- Is there a significant difference between the levels of PTC of pregnant women and their socio-demographic, obstetric and birth-related characteristics?

#### Methods

#### **Design and Setting**

This descriptive and cross-sectional study was conducted with pregnant women who applied to the non-stress test (NST) outpatient clinic of a training and research hospital between May 4, 2022, and December 30, 2022.

# Population and Sample

The population of the study consisted of pregnant women who applied to the outpatient clinic on the dates of the study. Women who were in 3<sup>th</sup> trimester of pregnancy and who agreed to participate in the study were included in the study. Women who had difficulty speaking and understanding Turkish and who had problems communicating were excluded from the study. In the study, power analysis was performed to determine the sample size. The sample size was 189 with an effect size of 0.5, a margin of error of 0.05, and a 99% confidence interval. The study was finished with 305 women.

# **Data Collection Tools**

Data collected face to face using the "Socio-Demographic, Obstetric and Childbirth-related Data Form" and "Perception of Traumatic Childbirth Scale".

- 1. Socio-Demographic, Obstetric and Childbirth-related Data Form: The data collection form consists of 10 demographic and 10 obstetric and 9 birth-related questions developed in line with the relevant literature (Türkmen et al. 2021; Bay and Sayiner, 2021; Yalniz Dilcen et al. 2021).
- 2. Perception of Traumatic Childbirth Scale (PTCS): The PTCS is a measurement tool developed by Yalniz et al. in 2017 to determine women's level of perception of labor as traumatic (Yalniz et al. 2017). In the internal consistency analysis conducted to determine the reliability of the PTCS, Cronbach's alpha reliability coefficient was found to be 0.895. The scale consists of 13 items with a minimum score of 0 and a maximum score of 130. Based on a rating from zero to ten points, the scale total score averages 0-26 points indicating a "very low" PTC level, 27-52 point range indicates a "low" PTC level, a 53-78 point range indicates "moderate", while a score range of 79-104 indicates a "high" level of PTC, and a score range of 105-130 indicates a "very high" level of PTC. The Cronbach Alpha value of the scale calculated for this study is 0.823.

Ethical Aspect of the Study: To use the PTCS in the study, permission was obtained from the developing authors. Written permissions were obtained from Kütahya Health Sciences University Non-Interventional Research Ethics Committee (number 2022/04 on 06/04/2022) and the institution where the study was acted. After the purpose of the study was clarifyed to the women participating in the study, their informed consent was obtained. Throughout the study, the ethical principles of the current Helsinki Declaration were followed.

Data Analysis: Data were analyzed using IBM SPSS Statistics for Windows, version 25. Shapiro Wilk test was used to determine whether the data conformed to the normal distribution (p>0.05). Since the data were normally distributed, in addition to descriptive statistical methods (mean, standard deviation), the Student t-test and the oneway ANOVA test, Bonferroni and Tamhane's post-hoc tests were used. In addition, Cronbach's alpha value was calculated to assess the reliability of the scales. The results were accepted at a 95% confidence interval, with a significance level of p<0.05.

#### Results

According to the analysis results, the mean score of the pregnant women from the scale was 56.46±1.56 (Table 1).All of the pregnant women who participated in the study were married and their mean age was 28.04±5.20 years (Table 2). Socio-demographic (Table 2), obstetric (Table 3)

and childbirth related characteristics (Table 4) of the pregnant women also stated at the tables.

Table 1. The mean scores of the participants from the PTCS						
Scale	N	Minimum-	X±SD			
		Maximum				
PTCS	305	0-120	56.46±1.56			
X= Mean, SD= Standart Deviation						

When the socio-demographic information of the participants and the scores they obtained from PTCS were compared, a significant difference was found in terms of income status. (p<0.05) (Table 2). Further analysis between the groups revealed that this significant difference between the two groups was due to the group with a lower income than expenditure (p<0.016).

When the obstetric information of the pregnant women and the scores they obtained from the scale were compared, a significant difference was not found (p>0.05) (table 3). The childbirth related characteristics of the pregnant women and the scores they obtained from the scale were compared, a significant difference was found in the variables of the total number of miscarriages/stillbirths (p<0.01), mode of termination of the last delivery (p=0.05), fear experienced during the last delivery (p<0.01) and anxiety experienced during the last delivery (p<0.05) (Table 4). Upon further analysis of the variables concerning fear experienced at the last birth and anxiety experienced at the last birth to determine which group was responsible for the significance found it was determined that both variables did not differ between the groups (p>0.016).

#### Discussion

In this study, which investigated the factors affecting pregnant women's PTC, the results were discussed and interpreted in light of the literature reviewed. The PTC of the pregnant women who participated in our study were found to be at a moderate level (56.46±1.56) (Table 1). Similarly, in a study conducted with high-risk pregnant women, the mean PTC of women was found to be moderate (Yıldırım and Bilgin, 2021). Our study is also supported by other studies that have been conducted (Aktaş, 2018; Bay and Sayiner, 2021; Müslüman and Ejder Apay, 2022).

The present study revealed that pregnant women's sociodemographic characteristics, including their age, marriage age, family type, educational, spouse's educational, employment, spouse's employment, and social security status, did not affect the PTC (Table 2). However, it was found that women with lower income levels had higher PTC.

Variables	Group	N	%	X±SD	Test Value	Р
Age (X±SS=28.04±5.20)	19-26	133	43.6	59.00±26.58		
	27-34	129	42.3	52.55±26.46	F=2.353	.097
	35 and more	43	14.1	60.30±30.56		
Family type	Nuclear family	262	85.9	55.37±27.15	+ 1.720	.091
	Extended family	43	14.1	63.06±27.17	t=-1.720	
	Primary education	126	41.3	56.94±30.61	F=.223	.800
Educational status	High school	99	32.5	57.25±27.04		
	University	80	26.2	54.72±21.49		
[]	Primary education	97	31.8	57.64±27.63		
Educational status of	High school	129	42.3	58.79±29.35	F=2.060	.129
partner	University	79	25.9	51.18±22.36		
AAA alda - akakaa	Working	45	14.8	63.02±26.74	t=1.777	.081
Working status	Not working	260	85.2	55.32±27.22		
Manistra status of southorn	Working	288	94.4	56.37±27.43	t=254	.802
Working status of partner	Not working	17	5.6	57.94±24.52	1234	
Social security	Yes	282	92.5	56.66±27.22	t=.447	.659
Social Security	No	23	7.5	53.95±28.02	1447	
	Income <expenses< td=""><td>83</td><td>27.2</td><td>62.98±23.30</td><td></td><td></td></expenses<>	83	27.2	62.98±23.30		
Income level	Income = Expenses	200	65.6	54.53±28.30	F=3.685	.026*
	Income>Expenses	22	7.2	49.40±27.86		
History of psychiatric	Yes	28	9.2	59.89±28.09	t=.680	.501
diagnosis	No	277	90.8	56.11±27.18	1=.000	
Chronic illness	Yes	46	15.1	50.08±28.01	+- 1 601	.097
CHI OHIC IIII1ess	No	259	84.9	57.59±27.00	t=-1.684	

The results of other studies support our study (Bay and Sayiner, 2021; Yalniz Dilcen et al. 2021; Aydın et al. 2022). It is thought that women with higher income levels have more access to special services such as follow-up, education, and support, thus their perceptions of childbirth are affected. The findings of the study suggest that pregnant women should have free access to quality health care and that income disparities should be eliminated.

Unlike our study findings, studies showed that the PTC with increasing age (Ghanbari-Homayi et al. 2019; Mucuk and Özkan, 2022). In our study, childbirth perceptions of women over 35 years of age were found to be more traumatic, but the difference was not significant. On the other hand, in some studies (Bay and Sayiner, 2021; Yalniz Dilcen et al.

2021; Barut and Uçar, 2023; Aydın et al. 2022; Altuntuğ et al. 2023), it was determined that PTC averages decreased as the education level increased. In our study, the PTCS score of women with university degrees was found to be lower, but the difference was not significant (Table 2). Women with higher levels of education may have higher self-confidence and self-efficacy and make more conscious choices regarding their childbirth.

Our study found no significant differences in the number of births between factors related to pregnancy and PTCS scores, but women's perceptions of TB increased as the number of miscarriages/stillbirths went up (Table 4).

	tetric Characteristics And PTCS		· /		1	
Obstetric Characteristics	Group	N	%	X±SD	Test Value	р
Intended pregnancy	Yes	213	69.8	54.71±26.88	t=-1.689	.093
	No	92	30.2	60.51±27.78		
Childbirth	Yes	257	84.3	55.62±27.30	t=-1.259	.212
education/information	No	48	15.7	60.93±26.73	ι=-1.259	.212
	Pregnancy follow-up clinic	245	80.3	55.44±27.29		.647
Resource of information	Other (Doctor. Public Education Center. Private hospital)	12	3.9	59.41±28.65	t=.470	
B	Yes	283	92.8	55.81±26.91	t=-1.324	.198
Prenatal care	No	22	7.2	64.72±30.64		
Who received prenatal care?	Doctor	4	1.3	62.75±25.91	F=1.839	.161
	Family health worker (Midwife/nurse)	2	.7	92.00±19.79		
•	Doctor and midwife	299	98.0	56.14±27.20		
Social support from	Yes	291	95.4	56.51±26.95		.895
the partner during pregnancy	No	14	4.6	55.28±33.94	t=.134	
Social support from	Yes	239	78.4	55.74±27.09		
the relatives/friends during pregnancy	No	66	21.6	59.07±27.85	t=866	.388
Health problem during	Yes	74	24.3	58.17±25.56	+ 640	.518
pregnancy	No	231	75.7	55.91±27.79	t=.648	
Have you heard of a	Yes	138	45.2	59.00±27.08		
traumatic					]	
pregnancy/birth experience from your surroundings?	No	167	54.8	54.36±27.28	t=1.483	.139

In some studies, PTC increased as the number of pregnancies and miscarriages increased (Şahin, 2020; Müslüman and Ejder Apay, 2022; Barut and Uçar, 2023), whereas, in some studies, it was determined that primiparous women had higher levels of PTC (Aktaş, 2018; Bay and Sayiner, 2021). It has been suggested that women experiencing their first pregnancy may perceive birth as traumatic because of the anxiety and uncertainty they experience about the process, whereas multiparous women may have been affected by traumatic processes in previous births. It is thought that past birth experiences of multiparous patients may be determinant in the differences between studies.

Another factor that may affect PTC is planned pregnancy. Pregnancy is a vital crisis that requires many changes in the woman and her family. While this crisis can be easily

overcome if the pregnancy is planned, an unplanned pregnancy can create mental and emotional imbalances (Gençer and Ejder Apay, 2020). In some studies, it was demonstrated that women whose pregnancy was planned perceived birth as less traumatic (Şahin, 2020; Bay and Sayiner, 2021; Yalniz Dilcen et al. 2021). In the present study, it was found that 69.8% of the participants had planned pregnancies, but there was no difference in terms of PTCS scores (Table 3). On the other hand, studies have reported that prenatal care affects the perception of birth as traumatic (Bay and Sayiner, 2021). In our study, no significant difference was observed between PTC and the prenatal care status of women (Table 3). The fact that there was no difference can be explained by the fact that almost all of the women who participated in the study (92.8%) received prenatal care.

Variables	Group	n	%	X±SD	Test Values	Р
Total number of birth	One	95	55.6	54.47±28.18	t=-0.735	0.463
	Two and more	76	44.4	57.72±29.13	10.733	
Total number of child	One	94	55.6	54.51±27.96	t=-0.776	0.439
	Two and more	75	44.4	57.96±29.26	1=-0.770	
Total number of	One	44	75.9	48.45±28.34	t=-2.905	0.009**
miscarriage/stillbirth	Two and more	14	24.1	75.64±31.15		
Type of delivery	Vajinal delivery	76	44.4	51.22±25.40	+_ 1 070	0.050*
Гуре of delivery	Cesarean section	95	55.6	59.67±30.49	t=-1.976	
)	Doctor	119	69.6	58.15±29.89	+_1 670	0.098
Person giving delivery	Midwife	52	30.4	50.80±24.80	t=1.670	
	Below expected	28	16.8	60.85±29.19	F=1.254	0.288
Midwife support during	At the expected level	94	54.5	57.06±29.40		
childbirth	More than expected	49	28.7	50.89±26.35		
	Below expected	33	19.3	43.24±28.86	F=4.857	0.009**
ear at the last childbirth	At the expected level	77	45.0	59.31±28.26		
	More than expected	61	35.7	59.53±27.05		
	Below expected	32	18.7	44.21±29.60	F=3.398	0.036*
Anxiety at the last childbirth	At the expected level	76	44.4	58.84±28.76		
·	More than expected	63	36.8	58.33±26.69		
	Below expected	54	31.6	59.59±31.41		0.278
_abor pain	At the expected level	55	32.2	57.38±27.96	F=1.291	
•	More than expected	62	36.3	51.41±26.29		
	Below expected	49	28.2	54.14±26.24		0.645
Postpartum pain	At the expected level	88	51.5	55.36±28.41	F=0.440	
	More than expected	34	19.9	59.91±32.48		

Childbirth education class increases women's self-efficacy for childbirth by eliminating fears and uncertainties related to childbirth (Howart and Swain, 2019). Hence, it is considered that it may affect the perception of birth as traumatic. However, in our study, although 84.3% of the women received education about pregnancy, the difference was not significant and the majority of the participants (80.3%) stated that they acquired information about pregnancy from the pregnancy follow-up unit of the hospital (Table 3). Similar to our study, in Sahin's (2020) study, no difference was found between receiving childbirth preparation training and PTCS averages. On the other hand,

in some studies, it was found that those who received prenatal information perceived the birth as less traumatic (Bay and Sayiner, 2021; Yalniz Dilcen et al. 2021). It is thought that the difference between the studies may be attributed to the quality and content of the prenatal information provided and that the education may not have created the change that would make the difference. Problems related to the mother or the baby during pregnancy may cause birth to be perceived as traumatic. Indeed, studies have reported that women with chronic health problems during pregnancy perceive childbirth as more traumatic (Şahin, 2020; Türkmen et al. 2020). Unlike

the literature, no significant difference was found between health problems during pregnancy and PTC in our study (Table 3). However, studies have shown that complications experienced during pregnancy are associated with birth trauma<sup>3</sup>. Further, studies have shown that women with existing health problems and chronic diseases before or during pregnancy are at an increased risk for maternal and fetal mortality and morbidity, as well as higher rates of cesarean delivery (Kersten et al. 2014; Zhang et al. 2016; Liang et al. 2018). In the present study, no significant correlation was found between chronic disease status and PTC (Table 2). Differences in the literature may be related to the sample size and perceived social support.

The PTC increases as the perceived social support of pregnancy and partner relationships, especially related to familial relationships, decreases (Yalniz Dilcen et al. 2021). In our study, no difference was found between perceived social support during pregnancy and PTC (Table 3). In contrast, in a study conducted with pregnant women, it was shown that social support provided by significant others during pregnancy was a predictor variable of the birth experience (Zamani et al. 2019). In addition, in a study, a weak positive correlation was found between perceived social support during pregnancy and the psychosocial wellbeing of pregnant women (Değirmenci and Vefikuluçay Yılmaz, 2019). The reason why there was no difference in our study may be explained by the fact that almost all of the participants (95.4%) received social support from their spouses.

The widespread social transmission of negative birth narratives, the media coverage of birth, and the psychological transmission of traumas such as sexual abuse all contribute to the PTC as a secondary trauma (Kellermann, 2001; Anderson, 2017). In a study, the mean PTCS score of pregnant women with a "positive" birth story told by their mothers was found to be significantly lower than other pregnant women (Şahin, 2020). In another study, fear of childbirth in single girls was found to be associated with their mothers' stress levels during pregnancy (Akgül, 2023). In our study, it was determined that pregnant women's PTC were not affected by their family and environment. Emotions evoked by birth can affect society's view of birth due to widespread social transfer and epigenetic transfers (Altuntuğ et al. 2023). Considering that birth will be remembered in detail even after many years due to the important place in women's life, it can be said that it is necessary to pay attention to the transfer of experiences of the family and the environment towards birth.

Pregnancy and the postpartum period can be a complex process in which psychiatric disorders emerge or recur

(Yılmaz and Yar, 2021). The presence of a history of mental disorders in women in the perinatal period is considered a risk factor for pregnant and infant health and increases the risk of psychiatric disorders in the postpartum period (Kızılkaya Beji et al. 2022). In the present study, pregnant women with a history of psychiatric diagnosis had higher PTCS scores, but the difference was not significant (Table 2). Studies suggest that previous depression is an important trigger for women to experience depression during and after pregnancy (Yazici et al. 2015; Gentile, 2017). The lack of a significant difference in the variable of history of psychiatric diagnosis in the present study may be explained by the fact that almost all of the pregnant women (90.8%) who participated in the study did not have a history of psychiatric diagnosis. The treatment and rehabilitation process for psychiatric disorders, notably depression, is fraught with challenges for the mother. Thus, timely screening is valuable to prevent mental disorders in the perinatal period.

Birth-related factors are important predisposing factors in the occurrence of birth trauma (Sun et al. 2023). A metaanalysis study on factors associated with perceptions of childbirth found that factors such as type of delivery, medical complications during labor, inadequate social support, history of mental health problems, and high perceived stress were all closely associated with traumatic childbirth experiences (Chabbet et al. 2021). In our study, the mode of delivery was found to be one of the effective factors in perceiving birth as traumatic. It was determined that women who had cesarean delivery perceived the birth as more traumatic (Table 4). Similar results were obtained in a study (Bay and Sayiner, 2021). On the other hand, in some studies, it was determined that women who gave birth vaginally found the birth more traumatic (Aktaş, 2018; Sahin, 2020). The fact that cesarean section includes surgical intervention and the recovery period is longer than normal delivery can be thought to cause a higher PTC.

Labor pain and pain in the postpartum period can be addressed in a similar way to the mode of delivery. Labor pain is considered to be the most severe of the pain types known among women (Aziato et al. 2017). However, after childbirth, women remember the way they were treated more than the pain associated with childbirth. In the case of labor pain, taking comforting measures for pain or not leaving the mother alone during the painful process may change the way the process is perceived (Annborn and Finnbogadóttir, 2022). Studies have reported that the pain experienced in childbirth causes birth to be perceived as traumatic (Hollander et al. 2017; Karaman and Yıldız, 2018). However, no significant difference was observed in our study (Table 4). It is thought that the midwife support

delivered during labor may have changed the negative perception of labor pain.

The PTC can be minimized with continuous midwifery led care during labor (Rodríguez-Almagro et al. 2019; Yalnız Dilcen et al. 2021). In our study, women who received more midwife support than expected had lower PTC, but the difference was not significant (Table 4). Likewise, in a study, it was revealed that women with lower-than-expected midwife support perceived the birth as more traumatic (Bay and Sayiner, 2021). In a meta-analysis, it was reported that continuous support at birth increased positive birth experiences and improved birth outcomes (Bohren, 2017). These results draw attention to the importance of one-to-one midwife support at birth.

A negative birth experience can be effective in experiencing fear of childbirth (Aksoy, 2015). In our study, the PTC was found to be low in women who experienced fear and anxiety lower than expected (Table 4). The results of Bay and Sayiner (2021) are consistent with our study. Similarly, Yildirim and Bilgin (2021) found that traumatic anxiety and PTC were associated. Rúger-Navarrete et al. (2023) reported that the greater the fear, the higher the likelihood of having a bad birth experience (Rúger-Navarrete et al. 2023). As the cause of fears surrounding childbirth is the birth itself, a situation that has not yet occurred, it should be understood that any situation that can occur may cause fear. All these results emphasize the cruciality of reducing fears related to childbirth. Efforts to reduce the fear of childbirth starting from the pregestational period are valuable in reducing the PTC.

# Limitations of the study

The results of this study are limited to the answers given by the women included in the research to the scales and forms directed to them.

#### **Conclusion and Recommendations**

Based on the result of this study, it was found that pregnant women's PTC were at a moderate level and were affected by income level, number of births, mode of delivery, fear of childbirth, and birth anxiety variables. It is hoped that the results obtained here will guide the interventions to be implemented to reduce the PTC and the negativities it causes. Health professionals' awareness of these factors and consideration of risk groups in their interactions with women are valuable in improving delivery services and protecting, promoting, and maintaining both the physical and mental well-being of mother and baby. It may be beneficial to conduct the study with larger samples and different groups to gain a better understanding of the effect

of the variables. Furthermore, psycho-educational intervention studies on reducing the PTC can guide practitioners.

**Etik Komite Onayı:** Kütahya Sağlık Bilimleri Üniversitesi etik kurulundan 06/04/2022 tarih ve 2022/04 nolu onay ve ilgili veri toplanan hastaneden kurum izni alınmıştır.

**Hasta Onamı:** Araştırmaya katılan gebelere çalışmanın amacı açıklandıktan sonra bilgilendirilmiş onamları alındı. Çalışma boyunca güncel Helsinki Bildirgesi'nin etik ilkelerine bağlı kalındı.

Hakem Değerlendirmesi: Dış bağımsız.

Yazar Katkıları: Fikir – AU, SM, KK; Tasarım – AU, SM, KK; Denetleme – AU, SM; Kaynaklar - AU, SM, KK; Veri Toplaması ve / veya İşlemesi – AU, KK; Analiz ve / veya Yorum - SM; Litaretür Tarama - AU, SM, KK; Yazıyı Yazan – AU, SM; Eleştirel İnceleme – AU, SM

Çıkar Çatışması: Yazarlar, çıkar çatışması olmadığını beyan etmiştir.

**Finansal Destek:** Yazarlar, bu çalışma için finansal destek almadığını beyan etmiştir

Ethics Committee Approval: Written permissions were obtained from the ethics committee of the Kütahya Health Sciences University (number 2022/04 on 06/04/2022).

**Informed Consent:** After the purpose of the study was clarifyed to the women participating in the study, their informed consent was obtained. Throughout the study, the ethical principles of the current Helsinki Declaration were followed.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – AU,SM,KK; Design – AU, SM, KK; Supervision – AU, SM; Resources - AU,SM,KK; Materials - AU,SM,KK; Data Collection and/or Processing – AU, KK; Analysis and/or Interpretation - SM; Literature Search - AU,SM,KK; Writing Manuscript – AU, SM; Critical Review – AU, SM

**Conflict of Interest:** The authors have no conflicts of interest to declare. **Funding:** This research received no funding.

#### References

Akgül, S., Sabancı Baransel, E. & Uçar, T. (2023). Effect of childbirth perceptions in mothers on the childbirth fears of their single daughters. *İnönü Üniversitesi Sağlık Hizmetleri Meslek Yüksek Okulu Dergisi, 11*(1), 1221-1231. https://doi.org/10.33715/inonusaglik.1156159

Aksoy, A. N. (2015). Doğum Korkusu Literatür. *ODÜ Tıp Dergisi / ODU Journal of Medicine*, *2*, 161–165. Retrieved from

https://dergipark.org.tr/tr/pub/odutip/issue/16306/170 937#article\_cite

Aktaş S. (2018). Multigravidas' perceptions of traumatic childbirth: Its relation to some factors, the effect of previous type of birth and experience. *Medicine Science*, 7(1), 203-209. https://doi.org/http://doi.org/10.5455/medscience.2017.06.8728

Altuntuğ, K., Kiyak, S., Ege, E. (2023). Relationship between birth memories and recall and perception of traumatic birth in women in the postpartum one-year period and affecting factors. *Current Psychology*, 1–9. https://doi.org/10.1007/s12144-023-04336-3

- Anderson C. A. (2017). The trauma of birth. *Health Care for Women international, 38*(10), 999–1010. https://doi.org/10.1080/07399332.2017.1363208
- Annborn, A. & Finnbogadóttir, H. R. (2022). Obstetric violence a qualitative interview study. *Midwifery, 105*, 103212. https://doi.org/10.1016/j.midw.2021.103212
- Aydın, R., Aktaş, S. & Binic, D. K. (2022). Vajinal doğum yapan annelerin doğuma ilişkin travma algısı ile maternal bağlanma düzeyi arasındaki ilişkinin incelenmesi: bir kesitsel çalışma. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi,* 11(1), 158–69. https://doi.org/10.37989/gumussagbil.1051454
- Aziato, L., Acheampong, A. K., & Umoar, K. L. (2017). Labour pain experiences and perceptions: a qualitative study among post-partum women in Ghana. *BMC Pregnancy and Childbirth*, 17(1), 73. https://doi.org/10.1186/s12884-017-1248-1
- Barut, S., & Uçar, T. (2023). Effects of motivational interviews on childbirth perceptions and childbirthself-efficacy in nulliparous pregnant women: a randomised-controlled trial. *Journal of Reproductive and Infant Psychology*, 41(5), 540–555. https://doi.org/10.1080/02646838.2022.2102601
- Bay, F., & Sayiner, F. D. (2021). Perception of traumatic childbirth of women and its relationship with postpartum depression. *Women & Health*, *61*(5), 479–489. https://doi.org/10.1080/03630242.2021.1927287
- Beck C. T. (2004). Birth trauma: in the eye of the beholder. *Nursing Research*, *53*(1), 28–35. https://doi.org/10.1097/00006199-200401000-00005
- Beck, C. T., & Watson, S. (2019). Mothers' Experiences Interacting with Infants after Traumatic Childbirth. *MCN. The American Journal of Maternal Child Nursing*, 44(6), 338–344.
  - https://doi.org/10.1097/NMC.000000000000565
- Bohren, M. A., Hofmeyr, G. J., Sakala, C., Fukuzawa, R. K., & Cuthbert, A. (2017). Continuous support for women during childbirth. *The Cochrane Database of Systematic Reviews*, 7(7), CD003766. https://doi.org/10.1002/14651858.CD003766.pub6
- Chabbert, M., Panagiotou, D., & Wendland, J. (2021).

  Predictive factors of women's subjective perception of childbirth experience: a systematic review of the literature. *Journal of Reproductive and Infant Psychology*, 39(1),

  https://doi.org/10.1080/02646838.2020.1748582
- Değirmenci, F., & Vefikuluçay Yılmaz, D. (2020). The relationship between psychosocial health status and social support of pregnant women. *Journal of Psychosomatic Obstetrics and Gynaecology*, 41(4), 290–297. <a href="https://doi.org/10.1080/0167482X.2019.1678021">https://doi.org/10.1080/0167482X.2019.1678021</a>

- Elmir, R., Schmied, V., Wilkes, L., & Jackson, D. (2010). Women's perceptions and experiences of a traumatic birth: a meta-ethnography. *Journal of Advanced Nursing*, 66(10), 2142–2153. https://doi.org/10.1111/j.1365-2648.2010.05391.x
- Garthus-Niegel, S., Ayers, S., von Soest, T., Torgersen, L., & Eberhard-Gran, M. (2015). Maintaining factors of posttraumatic stress symptoms following childbirth: A population-based, two-year follow-up study. *Journal of Affective Disorders*, 172, 146–152. https://doi.org/10.1016/j.jad.2014.10.003
- Gençer, E. & Ejder Apay, S. (2020). Gebeliğin istenme durumu öznel mutluluğu etkiler mi? *J Psychiatric Nurs,* 11(2), 88-97. https://doi.org/10.14744/phd.2019.63496
- Gentile S. (2017). Untreated depression during pregnancy: Short- and long-term effects in offspring. A systematic review. *Neuroscience*, *342*, 154–166. <a href="https://doi.org/10.1016/j.neuroscience.2015.09.001">https://doi.org/10.1016/j.neuroscience.2015.09.001</a>
- Ghanbari-Homayi, S., Fardiazar, Z., Meedya, S., Mohammad-Alizadeh-Charandabi, S., Asghari-Jafarabadi, M., Mohammadi, E., & Mirghafourvand, M. (2019). Predictors of traumatic birth experience among a group of Iranian primipara women: a cross sectional study. *BMC Pregnancy and Childbirth*, 19(1), 182. https://doi.org/10.1186/s12884-019-2333-4
- Hollander, M. H., van Hastenberg, E., van Dillen, J., van Pampus, M. G., de Miranda, E., & Stramrood, C. A. I. (2017). Preventing traumatic childbirth experiences: 2192 women's perceptions and views. *Archives of Women's Mental Health*, 20(4), 515–523. https://doi.org/10.1007/s00737-017-0729-6
- Howarth, A. M., & Swain, N. R. (2019). Skills-based childbirth preparation increases childbirth self-efficacy for first time mothers. *Midwifery*, *70*, 100–105. <a href="https://doi.org/10.1016/j.midw.2018.12.017">https://doi.org/10.1016/j.midw.2018.12.017</a>
- Karaman, Ö. & Yıldız, H. (2018). Doğum Eylemi Travay Sürecinde Hareket Serbestliği: Nasıl? Ne Sağlar? Kadın Doğum Hemşiresinin Rolü Nedir?. *Türkiye Klinikleri Hemşirelik Bilimleri Dergisi*, *10*(1), 78-87.
- Kellermann N. P. (2001). Transmission of Holocaust trauma--an integrative view. *Psychiatry*, *64*(3), 256–267. <a href="https://doi.org/10.1521/psyc.64.3.256.18464">https://doi.org/10.1521/psyc.64.3.256.18464</a>
- Kersten I, Lange AE, Haas JP, Fusch C, Lode H, Hoffmann W et al. (2014). Chronic diseases in pregnant women: prevalence and birth outcomes based on the SNiP-study. BMC Pregnancy Childb. 14, 75-88. https://doi.org/10.1186/1471-2393-14-75
- Kızılkaya Beji, N., Murat, M. & Köse, S. (2022). Perinatal dönem ruh sağlığı sorunları ve hemşirelik yaklaşımı. *Black Sea Journal of Health Science*, *5*(1), 116-123. <a href="https://doi.org/10.19127/bshealthscience.897439">https://doi.org/10.19127/bshealthscience.897439</a>

- Kranenburg, L., Lambregtse-van den Berg, M. & Stramrood, C. (2023). Traumatic childbirth experience and childbirth-related Post-Traumatic Stress Disorder (PTSD): A contemporary overview. International *Journal of Environmental Research and Public Health*, 20(4), 2775. https://doi.org/10.3390/ijerph20042775
- Liang, H., Fan, Y., Zhang, N., Chongsuvivatwong, V., Wang, Q., Gong, J. & Sriplung, H. (2018). Women's cesarean section preferences and influencing factors in relation to China's two-child policy: a cross-sectional study. *Patient Preference and Adherence*, 12, 2093–2101. https://doi.org/10.2147/PPA.S171533
- Morton, C. H. & Simkin, P. (2019). Can respectful maternity care save and improve lives?. *Birth*, *46*(3), 391–395. https://doi.org/10.1111/birt.12444
- Mucuk, Ö. & Özkan, H. (2022). Perception of Traumatic Childbirth of Women and Factors Affecting. *Journal of Basic and Clinical Health Sciences*, *6*(2), 608-616. <a href="https://doi.org/10.30621/jbachs.1001319">https://doi.org/10.30621/jbachs.1001319</a>
- Müslüman, M. & Ejder Apay, S. (2022). Doğumda algılanan destekleyici bakım ve travmatik doğum algısı arasındaki ilişkinin belirlenmesi: kesitsel çalışma. *Turkiye Klinikleri J Health Sci.* 7(2):376-85. https://doi.org/10.5336/healthsci.2021-83330
- Nagle, U., Naughton, S., Ayers, S., Cooley, S., Duffy, R. M. & Dikmen-Yildiz, P. (2022). A survey of perceived traumatic birth experiences in an Irish maternity sample prevalence, risk factors and follow up. *Midwifery, 113*, 103419. https://doi.org/10.1016/j.midw.2022.103419
- Rodríguez-Almagro, J., Hernández-Martínez, A., Rodríguez-Almagro, D., Quirós-García, J. M., Martínez-Galiano, J. M. & GómezSalgado, J. (2019). Women's perceptions of living a traumatic childbirth experience and factors related to a birth experience. *International Journal of Environmental Research and Public Health*, 16(9), 1654. https://doi.org/10.3390/ijerph16091654
- Rúger-Navarrete, A., Vázquez-Lara, J. M., Antúnez-Calvente, I., Rodríguez-Díaz, L., Riesco-González, F. J., Palomo-Gómez, R., Gómez-Salgado, J., & Fernández-Carrasco, F. J. (2023). Antenatal Fear of Childbirth as a Risk Factor for a Bad Childbirth Experience. *Healthcare (Basel, Switzerland)*, 11(3), 297. https://doi.org/10.3390/healthcare11030297
- Şahin M. (2020). Gebelerde travmatik doğum algısı ve anne bağlanması ilişkisi. Ordu Üniversitesi Sağlık Bilimleri Enstitüsü. Hemşirelik Anabilim Dalı, Yayınlanmamış Yüksek Lisans Tezi. Retrieved from https://tez.yok.gov.tr/UlusalTezMerkezi/TezGoster?key =Eb5EkakJlp3olBdo\_wNEGR9LL6VB73kV6G0TyXwHyDaJ yzHwhKnuYGB08wmB1GOT.

- Sun, X., Fan, X., Cong, S., Wang, R., Sha, L., Xie, H., Han, J., Zhu, Z. & Zhang, A. (2023). Psychological birth trauma: A concept analysis. *Frontiers in Psychology*, *13*, 1065612. https://doi.org/10.3389/fpsyg.2022.1065612
- Türkmen, H., Yalniz Dilcen, H. & Akin, B. (2020). The Effect of Labor Comfort on Traumatic Childbirth Perception, Post-Traumatic Stress Disorder, and Breastfeeding. Breastfeeding Medicine: The Official Journal of the Academy of Breastfeeding Medicine, 15(12), 779–788. https://doi.org/10.1089/bfm.2020.0138
- Türkmen, H., Yalniz Dilcen, H. & Özçoban, F. A. (2021). Traumatic childbirth perception during pregnancy and the postpartum period and its postnatal mental health outcomes: a prospective longitudinal study. *Journal of Rreproductive and Infant Psychology, 39*(4), 422–434. <a href="https://doi.org/10.1080/02646838.2020.1792429">https://doi.org/10.1080/02646838.2020.1792429</a>
- Yalnız Dilcen, H., Aslantekin, F. & Aktaş, N. (2021). The relationship of psychosocial well-being and social support with pregnant women's perceptions of traumatic childbirth. *Scandinavian Journal of Caring Sciences*, 35(2), 650–658. https://doi.org/10.1111/scs.12887
- Yalnız, H., Canan, F., Ekti Genç, R., Kuloğlu, M. M. & Geçici, Ö. (2017). Travmatik doğum algısı ölçeğinin geliştirilmesi. *Türk Tıp Dergisi, 8*(3), 81–88. Retrieved from http://hdl.handle.net/11772/2680
- Yazici, E., Kirkan, T. S., Aslan, P. A., Aydin, N., & Yazici, A. B. (2015). Untreated depression in the first trimester of pregnancy leads to postpartum depression: high rates from a natural follow-up study. *Neuropsychiatric Disease and Treatment*, 11, 405–411. https://doi.org/10.2147/NDT.S77194
- Yıldırım, G. & Bilgin, Z. (2021). Risk status and traumatic birth perception in pregnancy. *Perspectives in Psychiatric Care*, 57(4), 1897–1904. https://doi.org/10.1111/ppc.12764
- Yılmaz, M. & Yar, D. (2021). Gebelik ve Postpartum Dönemde Kadın Ruh Sağlığı: Derleme Çalışması. *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, 5*(1), 93-100. <a href="https://doi.org/10.46237/amusbfd.693233">https://doi.org/10.46237/amusbfd.693233</a>
- Zamani, P., Ziaie, T., Lakeh, N. M., & Leili, E. K. (2019). The correlation between perceived social support and childbirth experience in pregnant women. *Midwifery*, *75*, 146–151. https://doi.org/10.1016/j.midw.2019.05.002
- Zhang, N., Chen, H., Xu, Z., Wang, B., Sun, H., & Hu, Y. (2016).

  Pregnancy, Delivery, and Neonatal Outcomes of In Vitro
  Fertilization-Embryo Transfer in Patient with Previous
  Cesarean Scar. Medical Science Monitor: International
  Medical Journal of Experimental and Clinical
  Research, 22,
  https://doi.org/10.12659/msm.900581

# Genişletilmiş Özet

Travmatik bir doğum deneyimi, bir kadının, bebeğinin ve ailesinin fiziksel ve ruhsal sağlığı üzerinde önemli etkiye sahip olabilir. Doğumla ilgili travmadan söz edildiğinde genellikle fiziksel travmanın akla geldiği ve psikolojik etkilerinin göz ardı edildiği söylenebilir. Ancak son zamanlarda doğum travmalarının psikolojik etkileri daha çok vurgulanır hale gelmiştir. Travmatik doğum algısının doğum korkusu, olumsuz doğum deneyimi, doğum travması, postpartum depresyon ve operatif doğumlar gibi birden çok olumsuz sonuçları bulunmaktadır. Bu olumsuz sonuçları azaltmak için müdahalelelerin gebelikten itibaren başlaması önemlidir. Gebe kadınların doğuma ilişkin algılarının önceden belirlenmesi, potansiyel risklerin önüne geçerek anne ile bebeğin fiziksel ve ruhsal sağlığının yükseltilmesine katkı sağlayacaktır. Travmatik doğum için risk faktörlerinin net bir resmini oluşturmak, doğum servislerinde doğum travması olan kadınların doğru bir şekilde belirlenmesine, değerlendirilmesine ve takibine yardımcı olacaktır. Bu nedenle bu çalışmada, gebelerin travmatik doğum algısını etkileyen faktörlerin incelemek amaçlandı. Tanımlayıcı ve kesitsel tipteki bu çalışma, Mayıs-Aralık 2022 tarihleri arasında bir eğitim araştırma hastanesinin NST polikliniğine başvuran gebe kadınlarla yapılmıştır. Çalışmaya gebeliğinin üçüncü trimestirinde olan ve çalışmaya katılmayı kabul eden kadınlar dahil edildi. Türkçe konuşmakta ve anlamakta güçlük yaşayan, iletişim kurmakta sorun yaşanan kadınlar araştırmadan dışlandı. Örneklem büyüklüğü, 0,5 etki büyüklüğü, 0,05 hata payı ve %99 güven aralığına göre 189 bulundu. Dahil edilme kriterlerini taşıyan 305 kadın ile çalışma tamamlandı. Veriler Travmatik Doğum Algısı Ölçeği ve sosyo-demografik, obstetrik ve doğumla ilgili bilgi formu kullanılarak yüz yüze toplanmıştır. Çalışmanın yapılabilmesi için üniversitenin etik kurulundan ve çalışmanın yapıldığı kurumdan yazılı izinler alındı. Çalışmaya katılan kadınlara çalışmanın amacı açıklandıktan sonra bilgilendirilmiş onamları alındı. Ayrıca çalışma sürecinde güncel Helsinki Bildirgesi'nin etik ilkelerine bağlı kalındı. Verilerin değerlendirilmesi SPSS 25 paket programı ile yapıldı. Veriler normal dağılım gösterdiği için tanımlayıcı istatistiksel metodların (ortalama, standart sapma) yanı sıra iki gruplu değişkenlerin karşılaştırılmasında Student t Testi, üç ve daha fazla gruplu değişkenlerin karşılaştırılmasında ise Oneway Anova Testi kullanıldı. Gruplar arası anlamlılığın hangi gruptan kaynaklandığını belirlemek için Bonferroni ve Tamhane's post-hoc testlerinden yararlanıldı. Ayrıca ölçeklerin güvenilirliğini değerlendirmek için Cronbach alfa değeri hesaplandı. Sonuçlar %95'lik güven aralığında, anlamlılık düzeyi p<0,05 olarak kabul edildi. Gebelerin Travmatik Doğum Algısı Ölçeğinden aldıkları ortalama puan 56,46±1,56 (Min-Max= 0-120) olarak bulundu. Çalışmaya katılım sağlayan gebelerin tümü evli ve yaş ortalamaları 28,04±5,2 (Min-Max= 19-42) olarak hesaplandı. Katılımcıların sosyodemografik bilgilerine bakıldığında, %43,6'sı 19-26 yaş aralığında, %85,9'unun çekirdek aile yapısına sahip olduğu, %41,3'ünün ilköğretim mezunu olduğu, % 42,3'ünün eşinin lise mezunu olduğu, %85,2'sinin herhangi bir işte çalışmadığı, %94,4'ünün eşinin gelir getirici bir işte çalıştığı, %92,5'inin sosyal güvencesinin olduğu, %65,6'sının gelirinin giderine denk olduğu, %90,6'sının herhangi bir psikiyatrik tanı almadığı ve %84,9'unun kronik hastalığının olmadığı belirlendi. Gebelerin obstetrik bilgileri incelendiğinde, %69,8'inin gebeliğinin planlı olduğu, %84,3'ünün doğuma hazırlığa ilişkin eğitim/bilgi aldığı ve bilginin %80,3 oran ile gebe izlem biriminden alındığı görüldü. Katılımcıların, %92,8'i doğum öncesi bakım aldığı ve tamamına yakınının (%98) bu bakımı doktor ve ebeden almış olduğu tespit edildi. Çalışmaya dahil olan gebelerin %95,4'ünün eşten, %78,4'ünün ise yakınından sosyal destek aldığı, %75,7'sinin son gebeliğinde sağlık sorunu yaşamadığı ve %54,8'inin çevreden travmatik gebelik/doğum duymadığı belirlendi. Çalışmaya dahil olan multipar gebelerin doğuma ilişkin özelliklerine bakıldığında, %55,6'sının tek doğum sayısına ve tek yaşayan çocuk sayısına sahip olduğu görülürken, %75,9'unun tek düşük/ölü doğum sayısına sahip olduğu tespit edildi. Katılımcıların, %55,6'sının sezaryen doğum yaptığı ve %69,6'sının doğumunun doktor tarafından yapıldığı belirlendi. Gebelerin, doğum ağrısını ile beklenenden fazla olduğunu aktardıkları görülürken, doğumda ebe desteği, korku, kaygı ve doğum sonu ağrıyı ise beklenen düzeyde olduğu belirlendi. Katılımcıların sosyodemografik bilgileri ile Travmatik Doğum Algısı Ölçeğinden aldıkları puanlar karşılaştırıldığında gelir durumuna göre istatistiksel anlamlılık bulundu. Gruplar arası yapılan ileri analiz sonucunda belirlenen bu anlamlılığın geliri giderden az olan gruptan kaynaklandığı tespit edildi. Gebelerin obstetrik bilgileri ile ölçekten aldıkları puanlar karşılaştırıldığında, toplam düşük/ölü doğum sayısı, son doğumun sonlanma şekli, son doğumda yaşanan korku ve son doğumda yaşanan kaygı değişkenlerinde istatistiksel olarak anlamlılık bulundu. Son doğumda yaşanan korku ve son doğumda yaşanan kaygı değişkenlerinde bulunan anlamlılığın hangi gruptan kaynaklandığını belirlemek için yapılan gruplar arası yapılan ileri analiz sonucunda, her iki değişken için de gruplar arasında farklılığın olmadığı tespit edildi. Bu çalışma sonucunda gebe kadınların travmatik doğum algılarının orta düzeyde olduğu, gelir seviyesi, doğum sayısı, doğum şekli, doğum korkusu ve doğum kaygısı değişkenlerinden etkilendiği belirlendi. Buradan elde edilen sonuçların travmatik doğum algısını ve neden olduğu olumsuzlukları azaltmak için uygulanacak girişimlere yol gösterici olması umulmaktadır. Sağlık profesyonellerinin bu faktörlerin farkında olmaları ve kadınlarla etkileşimlerinde riskli grupları dikkate almaları doğum hizmetlerinin iyileştirilmesinde, anne ile bebeğin hem fiziksel hem de ruhsal sağlığının korunması, yükseltilmesi ve sürdürülmesinde değerlidir. Değişkenlerin etkisinin daha net anlaşılması için çalışmanın daha büyük örneklemlerle ve farklı gruplarla çalışılması fayda sağlayabilir.