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## Birth Perceptions and Birth Satisfaction of Primiparous Women Having Vaginal Delivery\*

### Vajinal Doğum Yapan Primipar Kadınların Doğumu Algılamaları ve Doğum Memnuniyetleri\*

Ayşegül ŞAHİN ÇELEBİ<sup>a</sup>, Öznuur ÇETİN<sup>b\*</sup><sup>a</sup> Research Assistant, Department of Midwifery, Faculty of Health Sciences, Bitlis Eren University, Bitlis, Türkiye. [ROR](#)<sup>a</sup> Araştırma Görevlisi, Ebelik Bölümü, Sağlık Bilimleri Fakültesi, Bitlis Eren Üniversitesi, Bitlis, Türkiye. [ROR](#)<sup>b</sup> Assistant Professor, Department of Nursing, Faculty of Health Sciences, Tokat Gaziosmanpaşa University, Tokat, Türkiye. [ROR](#)<sup>b</sup> Doktor Öğretim Üyesi, Hemşirelik Bölümü, Sağlık Bilimleri Fakültesi, Tokat Gaziosmanpaşa Üniversitesi, Tokat, Türkiye. [ROR](#)\* Corresponding Author / İletişimden Sorumlu Yazar, E-mail: [sevval2008@gmail.com](mailto:sevval2008@gmail.com)

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#### ABSTRACT

**Introduction:** The aim of this study is to explore the birth perceptions and satisfaction levels of primiparous women who delivered vaginally in a public hospital.**Methods:** The study was conducted with a descriptive and cross-sectional design and was carried out with 160 primiparous women admitted to the delivery room. Data were collected using the Participant Information Form, the Birth Satisfaction Scale, and the Mother's Perception of Birth Scale. The data has been analyzed using numbers, percentages, and averages, as well as One-Way ANOVA, T-Test, and Tukey's test.**Results:** It was determined that 77.5% of the participants had planned pregnancies, and 96.9% had assisted birth. The mean score for the Birth Satisfaction Scale was 30.89±5.90, and the mean score for the Perception of Birth Scale (POBS) was 85.18±12.18. Significant differences were observed in the Mother's Perception of Birth Scale and Birth Satisfaction Scale scores based on educational level and whether the pregnancy was planned. However, no significant relationship was found between the two scales and factors such as age, employment status, and social security coverage.**Conclusion:** The findings of the study indicate that, during the birth process, women's perceptions of birth and birth satisfaction levels were generally high.**Keywords:** Birth perception, Birth satisfaction, Midwifery, Postpartum, Primiparous

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#### ÖZET

**Giriş:** Bu çalışma, bir kamu hastanesinde vajinal doğum yapan primipar kadınların doğum süreçlerine ilişkin algılarını ve doğum memnuniyet düzeylerini incelemeyi amaçlamaktadır.**Yöntem:** Çalışma, tanımlayıcı ve kesitsel bir tasarımla gerçekleştirilmiş olup, doğum salonuna kabul edilen 160 primipar kadın ile yürütülmüştür. Veriler, Katılımcı Bilgi Formu, Doğum Memnuniyet Ölçeği ve Annenin Doğum Algısı Ölçeği kullanılarak toplanmıştır. Veriler sayı, yüzde ve ortalama, One WAY ANOVA, T Testi, Tukey's testi ile analiz edilmiştir.**Bulgular:** Katılımcıların %77.5'inin gebeliğinin planlı olduğu ve %96.9'u müdahaleli doğum yapmış olduğu belirlenmiştir. Doğum Memnuniyet Ölçeği genel puanı 30.89±5.90, Annenin Doğum Algısı Ölçeği genel puanı ise 85.18±12.18 olarak bulunmuştur. Katılımcıların Annenin Doğum Algısı Ölçeği ve Doğum Memnuniyet Ölçeği puanları arasında, eğitim düzeyi ve gebeliğin planlı olup olmadığına bağlı olarak belirgin farklar gözlemlenmiştir. Ancak, yaş, gelir getirici bir işte çalışma durumu ve sosyal güvence varlığına göre bu iki ölçüt arasında anlamlı bir ilişki saptanmamıştır.**Sonuç:** Çalışmanın bulgularına göre, doğum süreci sırasında kadınların doğum algıları ve doğum memnuniyet düzeyleri genel olarak yüksek bulunmuştur.**Anahtar Kelimeler:** Doğum algısı, Doğum memnuniyeti, Ebelik, Lohusa, Primipar

## 1. Introduction

A woman naturally goes through various stages of life from childhood, adolescence, sexual maturity, menopause, and old age, from the beginning to the end of her life (Çakmak Yıldızhan and Ağgön, 2020). Pregnancy, childbirth, and motherhood are among the most critical events in this process. During this period, women undergo physical and psychological changes, and it is very important to adapt to these changes (Davis and Narayan, 2020). Although pregnancy is a natural phase in life, the individual experiencing pregnancy for the first time may face emotions they have never felt before and may not foresee the events that will occur during childbirth, which they may perceive as something to fear (Barut and Güney, 2022). Even though giving birth is perceived as a positive event by most women, factors such as young age, the desired or undesired nature of the pregnancy, experiencing pregnancy for the first time, exposure to negative birth experiences, and personal characteristics may cause the woman to feel fear, helplessness, and loneliness during childbirth (Holopainen et al., 2020).

Childbirth is one of the most unforgettable experiences in a woman's life, and these experiences affect various situations and are influenced by them (Ängeby and Ternström, 2024). Satisfaction with the birth experience is related to whether expectations are met during the antenatal period, labor, and postpartum phase (Baranowska et al., 2020). This satisfaction is also reported to affect the attitudes and behaviors in the early postpartum period, which plays a crucial role in the health of both the mother and the newborn (Takayama et al., 2019). High satisfaction with childbirth enhances the mother's relationship with her baby and strengthens the personal power and development of the mother during the transition to motherhood (Karakayalı Ay et al., 2023). Maternal satisfaction during childbirth is directly linked to healthy mother-infant bonding, improved breastfeeding rates, and reduced risk of postpartum depression (Hamm et al., 2019). Women with low satisfaction levels regarding childbirth have been found to experience negative effects on their ability to bond with their babies, and breastfeeding success, and are more likely to suffer from post-traumatic stress disorder, adverse health outcomes, birth trauma, fear of childbirth, social isolation, unwanted pregnancies leading to abortion, sexual dysfunction, and an increased tendency for elective cesarean sections in future pregnancies (Karakayalı Ay et al., 2023; Takayama et al., 2019).

Every woman has unique expectations about childbirth. Meeting these expectations is the fundamental determinant of satisfaction

(Baranowska et al., 2020). This study aims to explore the perceptions and satisfaction levels of primiparous women who have experienced vaginal births, while also highlighting the factors that influence their perceptions and satisfaction. The research questions guiding the study are:

1. How do primiparous women who have had a vaginal birth perceive childbirth?
2. What is the level of labour satisfaction of primiparous women who give birth vaginally?
3. How does the perception of childbirth among primiparous women who have had a vaginal birth vary according to their demographic and obstetric characteristics?
4. How does the level of childbirth satisfaction among primiparous women who have had a vaginal birth differ based on their demographic and obstetric characteristics?

## 2. Methods

### 2.1. Type of the Study

This research was conducted as descriptive and cross-sectional to determine the perception of childbirth and the level of childbirth satisfaction among primiparous women who have had vaginal births.

### 2.2. Setting and Time of the Study

This research was conducted between 01/01/2021 and 31/03/2021 in the delivery room of a public hospital located in the Southern Anatolia region of Turkey.

### 2.3. Population and Sample of the Study

The population of the study was composed of women who were giving birth for the first time and had a gestational age of 37 weeks or more in the delivery room. The sample size was calculated using G-power analysis with a 95% confidence interval, a 5% margin of error, and  $\alpha$ : 0.333, as in a similar study (Aksoy Derya et al., 2019), resulting in 107 participants. The study sample consisted of 160 women who were over 18 years old, had a gestational age of 37 weeks or more, were literate, had no communication problems (able to speak Turkish), and had no psychiatric disorders. Women with maternal systemic diseases (Gestational Diabetes Mellitus, cardiovascular diseases, kidney diseases, hyperthyroidism, hypothyroidism, etc.), multiple

pregnancies, or babies with chromosomal or congenital fetal anomalies were excluded from the study.

#### 2.4. Data Collection Tools

The data for the research were collected through face-to-face interviews using the Personal Information Form, Birth Satisfaction Scale, and Perception of Birth Scale.

**Personal Information Form:** The form, designed to gather socio-demographic and obstetric information about the women, includes a total of 14 questions (Akçay Yaldir, 2016; Çıtak Bilgin et al., 2018; Güven Olgun, 2019). The socio-demographic data include questions about the woman's age, education and employment status, year of marriage, and social security. The obstetric characteristics include questions about whether the pregnancy was planned, the receipt of prenatal care, and the mode of delivery.

**Birth Satisfaction Scale Revised Form (BSS-R):** This measurement tool contains statements regarding the satisfaction of women with childbirth, which is applied to women who have recently given birth. The "Birth Satisfaction Scale" developed by Hollins Martin and Fleming (2011) was restructured by Hollins Martin and R. Martin (2014) as the "Birth Satisfaction Scale Short Form." The scale was adapted into Turkish by Gökmen 2017. The Birth Satisfaction Scale Short Form consists of 10 items in a 5-point Likert format. The lowest possible score from the scale is 0, and the highest score is 40. An increase in the score obtained from the scale without a cutoff point means that the mother had more positive experiences during childbirth. The Cronbach's alpha level of the scale was found to be 0.682. In this study, the Cronbach's alpha level was found to be 0.723.

**Perception of Birth Scale (POBS):** The Perception of Birth Scale is an instrument that evaluates how mothers perceive their experiences during normal or unplanned cesarean births immediately after childbirth. The Perception of Birth Scale was developed by Fawcett and Knauth (1997), and the Turkish adaptation and validity-reliability study were conducted by Güngör and Beji (2007). The scale consists of 25 items and 5 subscales in a 5-point Likert format. The minimum score that women can receive from the scale is 25, and the maximum score is 125. The Cronbach's alpha level of the Perception of Birth Scale was found to be 0.822. In this study, the Cronbach's alpha level was found to be 0.854.

#### 2.5. Data Collection

After obtaining the necessary permissions for the study, the data were collected by the researcher through face-to-face interviews with the participants between 01/01/2021 and 31/03/2021.

#### 2.6. Data Analysis

The data analysis was performed using SPSS version 20.0 software. The data were analyzed using frequency, percentage, mean, One-Way ANOVA, T-test, and Tukey's test. A statistical significance level of  $p < 0.05$  was applied.

#### 2.7. Ethical Consideration

Research approval was obtained prior to the study from the Clinical Research Ethics Committee of a university (Date/Number: 17.12.2020/061) as well as from the institution where the study was carried out. Prior to the study, the women were informed about the research, and their written informed consent was obtained. Both verbal and written consent were acquired from the participants. The study was carried out in line with the ethical guidelines of 'Informed Consent, Protection of Privacy and Confidentiality, and Respect for Autonomy,' as well as the principles outlined in the Helsinki Declaration. The required permissions were obtained from the individuals responsible for the Turkish validity and reliability of the scales used in the study.

#### 3. Results

The mean age of the women was  $23.62 \pm 3.90$  years. Among the women included in the study, 35.0% had completed high school, 95.6% were housewives, 47.5% had been married for 1-2 years, and 58.1% had social security coverage. It was determined that 77.5% of the women planned their pregnancy, none of the women experienced any health issues during pregnancy, 4.4% received prenatal education, 98.8% of them received this education from a midwife, and 98.8% of their births were attended by a midwife (Table 1).

**Table 1.** Some Variables Regarding the Socio-Demographic Information and Obstetric Characteristics of Women

Characteristics	Min-Max	$\bar{X} \pm SD$
Age	18.0-36.0	23.62-3.90
	<b>n</b>	<b>%</b>
<b>Education Level</b>		
Illiterate	10	6.3
Literate	12	7.5
Primary Education	31	19.4
Secondary Education	38	23.7
High School	56	35.0
University and higher	13	8.1
<b>Occupation</b>		
Housewife	153	95.6
Civil Servant	1	0.6
Worker	4	2.5
Other	2	1.3
<b>Social Security</b>		
Yes	93	58.1
No	67	41.9
<b>Pregnancy Planning Status</b>		
Planned Pregnancy	124	77.5
Unplanned Pregnancy	36	22.5
<b>Prenatal Education Status</b>		
Received	7	4.4
Not Received	153	95.6
<b>Person Providing Prenatal Education</b>		
Midwife	4	57.1
Nurse	2	28.6
Doctor	1	14.3

Min= Minimum, Max= Maximum, X= Mean, SD= Standard Deviation

The average score of the Women's Perception of Birth Scale (POBS) was found to be 85.18±12.18, and the average score of the Birth Satisfaction Scale (BSS-RS) was 30.89±5.90 (Table 2).

**Table 2.** Distribution of Average Scores of the Perception of Birth Scale, Birth Satisfaction Scale, and the Subscale Average Scores of the Scales

Scales	Min-Max	$\bar{X} \pm SD$
<b>Perception of Birth Scale (PBS)</b>		
Birth Experience	10-35	24.33±5.10
Painful Labor Experience	10-33	23.01±4.93
Postpartum	4-13	7.95±2.10
Partner's Participation	20-20	20.00±0.00
Awareness	3-15	9.90±2.85
<b>Birth Satisfaction Scale (BSS)</b>		
Quality of care services	4-19	9.27±3.49
Stress experienced during labor	6-20	14.21±2.68
Personal characteristics of the woman	2-10	7.41±2.00

Min= Minimum, Max= Maximum, X= Mean, SD= Standard Deviation

The average POBS scores of women according to their educational levels were as follows: illiterate (91.40±11.43), literate (85.92±12.39), primary school graduates (86.19±10.50), secondary school graduates (82.47±11.68), high school graduates (85.43±13.75), and university graduates and above (84.00±10.88). The awareness subscale revealed a significant difference based on education level, whereas no significant differences were found in the overall scale and other subscales (p<0.05). The total POBS scores and subscale scores were similar between women employed in income-generating jobs and those who were not. The average POBS score of women with social security was 84.70±13.14, while the average score of women without social security was 85.85±10.78, which was higher. When the distribution of the women's overall POBS scores and subscale averages according to social security was examined, no significant difference was found (p>0.05) (Table 3).

In other words, the general perception of childbirth is similar for women with and without social security. The POBS score of women who planned their pregnancies was 84.21±12.48, while the score of women with unplanned pregnancies was 88.53±10.60. The subscale for experiences during childbirth showed a significant difference between planned and unplanned pregnancies (p<0.05). The POBS scores and the scores for each subscale were similar between women who participated in prenatal education and those who did not (Table 3).

When the changes in the BSS-R average scores of women according to their educational levels were examined, the following results were found: illiterate women 32.80±5.45, literate women 29.67±5.23, primary school graduates 29.87±5.22, secondary school graduates 29.24±5.94, high school graduates 32.09±6.01, and university graduates and above 31.09±5.49. While there was a significant difference in the satisfaction level regarding the quality of care services based on educational level, no statistically significant differences were found in the overall scale and other subscales (p>0.05). To determine the source of the significant difference in the satisfaction level of care services, post hoc analysis showed that high school graduates reported significantly higher satisfaction compared to literate individuals, primary school graduates, and secondary school graduates, with this difference being statistically significant (p<0.05). The general level of birth satisfaction and subscales of women who worked in income-generating jobs and those who did not were similar. The BSS-R average score of women with social security was 30.88±6.32, while the score of women without social security was

30.90±5.30. When the distribution of women's overall BSS-R and subscale scores according to social security status was examined, the difference was not significant ( $p>0.05$ ). The general birth satisfaction level and subscales of women with and without social security were similar ( $p>0.05$ ) (Table 3).

The average POBS scores of women according to their educational levels were as follows: illiterate (91.40±11.43), literate (85.92±12.39), primary school graduates (86.19±10.50), secondary school graduates (82.47±11.68), high school graduates (85.43±13.75), and university graduates and above (84.00±10.88). A significant difference was found in the awareness subscale based on educational level, while no significant differences were observed in the overall scale or other subscales ( $p<0.05$ ). The total POBS scores and subscale scores of women who worked in income-generating jobs and those who did not were similar. The average POBS score of women with social security was 84.70±13.14, while the average score of women without social security was 85.85±10.78, which was higher. An examination of the distribution of women's overall POBS scores and subscale averages according to social security status revealed no significant differences ( $p>0.05$ ). In other words, the general perception of childbirth was similar between women with social security and those without it. The POBS score of women who planned their pregnancies was 84.21±12.48, while the score of women with unplanned pregnancies was 88.53±10.60. The subscale for experiences during childbirth showed a significant difference between planned and unplanned pregnancies ( $p<0.05$ ). The POBS scores and subscales for women who received prenatal education and those who did not were similar (Table 3).

When the changes in BSS-R scores of women according to their educational levels were examined, the scores were as follows: illiterate women (32.80±5.45), literate women (29.67±5.23), primary school graduates (29.87±5.22), secondary school graduates (29.24±5.94), high school graduates (32.09±6.01), and university graduates and above (31.09±5.49). There was a significant difference in the satisfaction level with the quality of care services based on educational level, while no statistically significant differences were found in the overall scale or other subscales ( $p>0.05$ ). To identify which group caused the significant difference in the satisfaction level with the quality of care services, further analysis revealed that high school graduates had significantly higher satisfaction with the quality of care services compared to literate women, primary school graduates, and

secondary school graduates. This result was found to be statistically significant ( $p<0.05$ ) (Table 3).

The overall satisfaction level with childbirth and subscale scores for women working in income-generating jobs and those not working were similar. The average BSS-R score for women with social security was 30.88±6.32, while the average score for women without social security was 30.90±5.30. An analysis of the distribution of women's overall BSS-R scores and subscale scores by social security status revealed no significant differences ( $p>0.05$ ). The general level of satisfaction with childbirth and subscale scores were similar for women with and without social security ( $p>0.05$ ) (Table 3).

When BSS-R scores were analyzed based on pregnancy planning, the average score for women who planned their pregnancies was 30.36±5.80, whereas for women with unplanned pregnancies, it was 32.69±5.94. The overall satisfaction with childbirth and the subscales of quality of care services and stress experienced during labor showed significant differences according to pregnancy planning ( $p<0.05$ ). In the study, the average BSS-R score for women who received prenatal care education was 29.57±6.80, while for those who did not receive education, it was 30.95±5.87. When BSS-R scores were examined according to the receipt of prenatal education, no significant differences were found between the overall scale and subscales ( $p>0.05$ ) (Table 3). The level of satisfaction with childbirth was similar for women who received prenatal care education and those who did not.

The average POBS score had a moderate positive correlation with the satisfaction score of childbirth, a weak positive correlation with the quality of care services, a weak positive correlation with stress experienced during labor, and a moderate positive correlation with the woman's characteristics.

**Table 3.** Comparison of Scale Score Averages of PBS and Its Subscales with BSS and Its Subscale Scores According to Descriptive and Obstetric Characteristics

Characteristics	PBS Mean Scores and Subdimension						BSS Mean Scores and Subdimension			
	PBS X̄ ± SD	Birth Experience X̄ ± SD	Painful Labor Experience X̄ ± SD	Postpartum X̄ ± SD	Partner's Participation X̄ ± SD	Awareness X̄ ± SD	BSS X̄ ± SD	Quality of care services X̄ ± SD	Stress experienced during labor X̄ ± SD	Personal characteristics of the woman X̄ ± SD
<b>Education Level</b>										
Illiterate	91.40 ± 11.43	26.30 ± 4.00	24.40 ± 5.68	7.90 ± 1.52	20.00 ± 0.00	12.80 ± 2.04	32.80 ± 5.45	9.10 ± 3.35	15.40 ± 2.01	8.30 ± 1.83
Literate	85.92 ± 12.39	23.83 ± 5.52	23.58 ± 4.87	8.08 ± 1.93	20.00 ± 0.00	10.42 ± 2.78	29.67 ± 5.23	7.92 ± 2.61	14.25 ± 2.56	7.50 ± 1.78
Primary Education	86.19 ± 10.50	24.94 ± 4.70	23.45 ± 4.44	7.84 ± 2.07	20.00 ± 0.00	9.97 ± 2.17	29.87 ± 5.22	8.48 ± 2.84	14.06 ± 2.92	7.32 ± 1.90
Secondary Education	82.47 ± 11.68	23.37 ± 4.77	21.87 ± 4.87	7.87 ± 2.04	20.00 ± 0.00	9.37 ± 2.93	29.24 ± 5.94	8.18 ± 2.73	13.79 ± 2.85	7.26 ± 2.08
High School	85.43 ± 13.75	24.41 ± 5.72	23.23 ± 5.20	8.11 ± 2.30	20.00 ± 0.00	9.68 ± 3.02	32.09 ± 6.01	10.39 ± 3.83	14.30 ± 2.65	7.39 ± 2.02
University and higher	84.00 ± 10.88	24.09 ± 4.93	23.36 ± 4.32	7.45 ± 2.42	20.00 ± 0.00	9.09 ± 2.74	31.09 ± 5.49	10.18 ± 4.42	13.82 ± 2.14	7.09 ± 2.43
F	0.963	0.674	0.680	0.216	-	2.842	1.641	2.965	0.649	0.500
p	0.442	0.644	0.640	0.955	-	0.018	0.152	0.014	0.663	0.776
<b>Occupation</b>										
Housewife	86.9 ± 17.1	25.6 ± 7.4	23.7 ± 5.6	7.7 ± 2.8	20.0 ± 0.0	9.9 ± 3.5	31.6 ± 6.3	9.9 ± 3.1	14.6 ± 2.4	7.1 ± 2.8
Civil Servant	85.1 ± 12.0	24.3 ± 5.0	23.0 ± 4.9	8.0 ± 2.1	20.0 ± 0.0	9.9 ± 2.8	30.9 ± 5.9	9.2 ± 3.5	14.2 ± 2.7	7.4 ± 2.0
t	0.138	0.436	0.150	0.091	-	0.002	0.098	0.207	0.135	0.133
p	0.711	0.510	0.699	0.763	-	0.968	0.755	0.650	0.714	0.716
<b>Social Security</b>										
Yes	84.70 ± 13.14	24.13 ± 5.52	22.92 ± 5.27	8.05 ± 2.07	20.00 ± 0.00	9.59 ± 2.93	30.88 ± 6.32	9.45 ± 3.73	14.25 ± 2.59	7.18 ± 2.18
No	85.85 ± 10.78	24.60 ± 4.47	23.12 ± 4.44	7.81 ± 2.16	20.00 ± 0.00	10.33 ± 2.70	30.90 ± 5.30	9.01 ± 3.15	14.15 ± 2.84	7.73 ± 1.67
t	0.347	0.327	0.060	0.539	-	2.633	0.000	0.607	0.052	2.972
p	0.557	0.568	0.806	0.464	-	0.107	0.988	0.437	0.821	0.087
<b>Pregnancy Planning Status</b>										
Planned Pregnancy	84.21 ± 12.48	23.87 ± 5.12	22.77 ± 5.02	7.89 ± 2.12	20.00 ± 0.00	9.69 ± 2.96	30.36 ± 5.80	8.92 ± 3.29	13.95 ± 2.47	7.49 ± 1.99
Unplanned Pregnancy	88.53 ± 10.60	25.89 ± 4.75	23.83 ± 4.55	8.17 ± 2.06	20.00 ± 0.00	10.64 ± 2.29	32.69 ± 5.94	10.47 ± 3.93	15.08 ± 3.21	7.14 ± 2.03
t	3.562	4.466	1.311	0.491	-	3.167	4.459	5.678	5.084	0.870
p	0.061	0.036	0.254	0.484	-	0.077	0.036	0.018	0.026	0.352
<b>Prenatal Education Status</b>										
Received	80.14 ± 5.05	22.14 ± 3.08	20.86 ± 1.35	7.71 ± 1.98	20.00 ± 0.00	9.43 ± 2.76	29.57 ± 6.80	9.86 ± 3.98	13.43 ± 3.55	6.29 ± 2.50
Not Received	85.41 ± 12.37	24.42 ± 5.16	23.10 ± 5.01	7.96 ± 2.11	20.00 ± 0.00	9.92 ± 2.86	30.95 ± 5.87	9.24 ± 3.48	14.24 ± 2.65	7.46 ± 1.97
t	1.254	1.344	1.396	0.091	-	0.199	0.363	0.207	0.613	2.348
p	0.264	0.248	0.239	0.763	-	0.656	0.548	0.650	0.435	0.127

PBS= Perception of Birth Scale, BSS= Birth Satisfaction Scale, X= Mean, SD= Standard Deviation

#### 4. Discussion

Childbirth is one of the most significant experiences in a woman's life, leaving lasting impressions and staying in her memory for years to come. Therefore, how women perceive childbirth and the level of satisfaction they experience from it is significant (Aktaş and Yılar Erkek, 2018). The general average of the Maternal Satisfaction Scale (BSS-R) is  $30.89 \pm 5.90$ , indicating a high level of satisfaction. The general average of the Perception of Birth Scale (POBS) is  $85.18 \pm 12.18$ , showing a positive, strong relationship.

Many factors influence women's satisfaction with childbirth and their perception of it. One of these factors is educational level, which is a socio-demographic characteristic. Many studies have not found a common result regarding the relationship between educational level, childbirth satisfaction, and perception of childbirth. In this study, a significant difference was observed in the "Awareness" subscale of the Perception of Birth Scale (POBS) based on educational level ( $p < 0.05$ ). However, no statistically significant differences were found between the overall scale and the other subscales when comparing education-level groups. The mean score for the "Awareness" subscale was found to be highest among illiterate women ( $12.80 \pm 2.04$ ) compared to those with other levels of education. This situation can be associated with the idea that as the educational level increases, research, awareness, and expectations grow, which could lead women with higher educational levels to perceive childbirth more negatively. According to a study by Yılmaz and Nazik (2018), which involved 97 women who had experienced vaginal birth or emergency cesarean, it was found that mothers with a primary school education had a more positive perception of childbirth compared to those with secondary school or university education (Yılmaz and Nazik, 2018). According to the data obtained in a study by Sariboğa (2020), the POBS average score was higher in illiterate women (81.15), primary school graduates (79.79), and those with a high school or higher education (76.65). However, this difference was not found to be statistically significant (Sariboğa and Zeyneloğlu, 2021). In a separate study, it was observed that as the level of education increased, mothers reported more positive birth experiences, with a significant difference noted between educational level and the perception of childbirth (Yılmaz Güleş, 2019). When the changes in the Birth Satisfaction Scale according to educational level were examined, it was found that the satisfaction level with the quality of care services showed a

statistically significant difference according to educational level ( $p < 0.05$ ), while no statistically significant differences were observed between the overall scale score and subscales. Satisfaction with the quality of care services was significantly higher in high school graduates compared to illiterate individuals and those with primary or secondary school education.

This situation might be related to women's increased engagement in reading, researching, and curiosity. In Güven Olgun's 2019 study, it was observed that women's educational level did not affect their birth satisfaction (Güven Olgun, 2019). Similar results were found in a study by Çıtak Bilgin et al. (2018) with 387 women, and in a study conducted by Conesa Ferrer et al. (2016) in Spain with 406 women, examining women's birth satisfaction and obstetric outcomes (Çıtak Bilgin et al., 2018; Conesa Ferrer et al., 2016). In a study conducted with 300 women who had vaginal births and were postpartum on the first day, no significant relationship was found between educational level and the total score of the Maternal Birth Satisfaction Scale (Akçay Yaldir, 2016). As educational level increases, women's age at marriage also tends to rise, which consequently leads to advanced age pregnancies and the associated risks. Additionally, as women become more aware through research and reading, their expectations from healthcare personnel also increase. This can lead to a more negative perception of childbirth (Yalnız Dilcen and Genç, 2019).

When examining the effect of a woman's employment status on her satisfaction and perception of childbirth, in this study, women who worked and those who did not have similar scores on the overall Perception of Birth Scale (POBS) and its subscales, as well as similar overall satisfaction levels and subscale scores. A review of the literature shows similar results, as well as studies that demonstrate a significant impact of employment status on childbirth satisfaction and perception. In a study conducted by Sariboğa, the perception scores of working and retired women were found to be lower compared to women who were not employed (Sariboğa and Zeyneloğlu, 2021). In Güven Olgun's (2019) study, no significant difference was found in the BSS-R scale scores based on employment status (Güven Olgun, 2019). In a study by Çıtak Bilgin et al. (2018) with 387 women in a public hospital, it was determined that working women had higher childbirth satisfaction. This has been associated with unmet needs such as information and communication, as well as the higher awareness and expectations of working individuals.

One of the factors evaluated to determine perception and satisfaction related to childbirth is whether the woman has social security. In this study, when examining the changes in BSS-R and POBS concerning social security, no statistically significant differences were found. This can be related to the fact that women with social security are able to meet their needs more easily, leading to an increased sense of well-being during childbirth. In a different study, social security was found to significantly and positively influence the perception and satisfaction of childbirth (Perriman and Davis, 2016). In a study that examined the distribution of POBS scores according to health insurance, it was found that women without health insurance had lower POBS scores compared to those with health insurance (Sariboğa and Zeyneloğlu, 2021). In contrast to these results, another study found that women with social security had higher childbirth satisfaction (Çıtak Bilgin et al., 2018).

When evaluating the impact of planned pregnancy on childbirth perception and satisfaction, it was found that the general satisfaction level with childbirth, the quality of care services, and the stress experienced during labor significantly differed based on whether the pregnancy was planned. Women who did not plan their pregnancies had significantly higher satisfaction with childbirth, better quality of care services, and higher stress levels during labor compared to women who planned their pregnancies. Although the Perception of Birth Scale was statistically significant according to whether the pregnancy was planned, no significant relationship was found between the overall scale score and its subscales. Women who did not plan their pregnancies had significantly higher levels of experience during childbirth than those who planned their pregnancies. Similar results have been found in studies by Güven Olgun (2019) and Akçay Yaldır (2016). Similarly, in a study by Jafari et al. (2017), it was found that planned pregnancies increased childbirth satisfaction (Jafari et al., 2017). In contrast to these results, some studies have shown that women with planned pregnancies have lower childbirth satisfaction compared to those with unplanned pregnancies (Akçay Yaldır, 2016; Güven Olgun, 2019). This could be related to women with unwanted pregnancies having lower expectations from healthcare services, not worrying about the newborn's health, and not feeling they deserve the pain/fear experienced during labor. A study has shown that women who experience an unwanted pregnancy develop negative emotions and thoughts, leading to a more negative perception of childbirth and a decrease in satisfaction. In contrast, in Çıtak Bilgin's study with women who gave birth, no significant difference was found between

planned and desired pregnancies and childbirth satisfaction (Çıtak Bilgin et al., 2018).

Prenatal education for pregnant women is important for making them more conscious during labor and for their active participation in childbirth. Studies have shown that women who receive prenatal education tend to have a higher perception of childbirth and greater satisfaction with the birth process. In this study, when examining the women's participation in prenatal education, no significant differences were found between those who received prenatal education and those who did not in terms of childbirth satisfaction and the overall Perception of Birth Scale, as well as its subscales. This may be related to the small number of women who received prenatal education in the study or the fact that educational level influences participation in education. In Güven Olgun's study, it was also shown that participation in childbirth preparation education did not affect childbirth satisfaction (Güven Olgun, 2019). Perceptions of childbirth can affect satisfaction with the process. The study found that women who expressed positive experiences of childbirth had a moderately positive relationship with their satisfaction level.

#### 4.1. Limitations

The research was conducted in a public hospital in a province in the Southeastern Anatolia region of Turkey, and the results are valid for this specific group and cannot be generalized to the entire population. Since the data obtained in the research were based on women's statements, the answers were accepted as accurate.

#### 5. Conclusion

This study was conducted to assess the perceptions of childbirth and the satisfaction levels related to childbirth among primiparous women who experienced vaginal births:

- Women's satisfaction with childbirth and their level of perception of childbirth were found to be high.
- The study found that the average scores of the POBS and subscale scores of the women participating in the study differed significantly across educational level groups. The satisfaction level regarding the quality of care services was significantly higher in women with a high school education compared to those who were literate, had an elementary education, or had a middle school education.
- The general level of satisfaction with childbirth, the quality of care services, and the subscale of stress experienced during labor differ significantly according to the planned status of the

pregnancy ( $p<0.05$ ). POBS scores also show significant differences based on the planned status of the pregnancy ( $p<0.05$ ). Those with unplanned pregnancies have a significantly higher level of experience during childbirth compared to those with planned pregnancies.

The role of midwives in women's preparedness for labor, their perception of childbirth, and their satisfaction during the birth process is crucial. It should be emphasized based on the data collected from this study that satisfaction with childbirth and a positive perception of birth are achieved by supporting the woman during the labor process, ensuring she is treated with respect, maintaining empathetic communication, encouraging active participation, providing a comfortable birth experience, and offering information in case of emergency interventions. Therefore, all healthcare professionals involved in childbirth services should provide supportive midwifery care, prepare women for the birth process, alleviate fears and anxieties, and offer prenatal education and counseling services. Healthcare professionals should know effective communication skills and keep their knowledge updated through regular in-service training. The satisfaction outcomes of the institution should be shared with the staff regularly, and feedback should be provided. By implementing all of these, women will have a satisfying childbirth experience, which will lead to improved perceptions of childbirth and higher satisfaction levels.

#### Article Information / Makale Bilgileri

**Evaluation:** Two External Reviewers / Double Blind

**Değerlendirme:** İki Dış Hakem / Çift Taraflı Körlüme

**Ethical Consideration:** Before starting the research, approval was obtained from the Clinical Research Ethics Committee of a university (Date/No: 17.02.2020/312) and the institution where the research was conducted. Written consent was obtained from the women who were informed prior to the research. Verbal and written consent was obtained from the participants. The research was conducted in accordance with the ethical principles of "Informed Consent, Privacy and Confidentiality Protection, and Respect for Autonomy" and the Helsinki Declaration. The necessary scale permissions were obtained from those who conducted the Turkish validity and reliability of the scale used.

It is declared that scientific and ethical principles were complied with during the preparation of this study and all the studies used in this study were cited in the bibliography.

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**Ethical Statement / Etik Bildirim:** [health@artuklu.edu.tr](mailto:health@artuklu.edu.tr)

#### Authorship Contribution/ Yazar Katkıları:

Araştırmanın Tasarımı (CRediT 1)	AŞÇ (%60) - ÖÇ (%40)
Veri Toplanması (CRediT 2)	AŞÇ (%100)
Araştırma - Veri Analizi - Doğrulama (CRediT 3-4-6-11)	AŞÇ (%50) - ÖÇ (%50)
Makalenin Yazımı (CRediT 12-13)	AŞÇ (%60) - ÖÇ (%40)
Metnin Geliştirilmesi ve Tashihi (CRediT 14)	AŞÇ (%60) - ÖÇ (%40)
Research Design (CRediT 1)	AŞÇ (%60) - ÖÇ (%40)
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## References

- Acıkay Yaldir, I. (2016). Maternal Satisfaction in the Early Postpartum Period After Vaginal Birth. Unpublished Master's Thesis, Department of Midwifery, Institute of Health Sciences, Adnan Menderes University.
- Aksoy Derya, Y., Erdemoğlu, Ç., Özşahin, Z., and Karayalı, Ç. (2019). Annenin doğumu algılamasının doğum sonu güvenlik hissine etkisi. *Ebelik ve sağlık bilimleri dergisi*, 2(3), 88–95.
- Aktaş, S., and Yılar Erkek, Z. (2018). Investigating the reasons why mothers prefer vaginal birth: a qualitative research example. *Gümüşhane University Journal of Health Sciences*, 7(1), 111–124.
- Ängeby, K., and Ternström, E. (2024). Women's experiences and needs concerning care and support during the various phases of childbirth and postnatal period: Analysis of free-text comments based on Quality from the Patient's Perspective in Sweden. *European Journal of Midwifery*, 8, 1–9. <https://doi.org/10.18332/ejm/176698>
- Baranowska, B., Kajdy, A., Pawlicka, P., Pokropek, E., Rabiowski, M., Sys, D., and Pokropek, A. (2020). What are the critical elements of satisfaction and experience in labor and childbirth—A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(24), 1–13. <https://doi.org/10.3390/ijerph17249295>
- Barut, S., and Güney, E. (2022). The relationship between pregnant women's birth beliefs, traumatic birth perception levels, birth outcomes, and postpartum depression. *Artuklu International Journal of Health Sciences*, 2(3), 1–7. <https://doi.org/10.58252/artukluder.1202529>
- Çakmak Yıldızhan, Y., and Ağgön, E. (2020). The effects of regular physical activities on subjective well-being levels in women of menopause period. *Balneo Research Journal*, 11(3), 224–229. <https://doi.org/10.12680/balneo.2020.344>
- Çıtak Bilgin, N., Ak, B., Coşkun Potur, D., and Ayhan, F. (2018). Birth satisfaction of women who have given birth and influencing factors. *Journal of Health Sciences and Professions*, 5(3), 342–353. <https://doi.org/10.17681/hsp.422360>
- Conesa Ferrer, M.B., Canteras Jordana, M., Ballesteros Meseguer, C., Carrillo García, C., and Martínez Roche, M.E. (2016). Comparative study analysing women's childbirth satisfaction and obstetric outcomes across two different models of maternity care. *BMJ Open*, 6(8). <https://doi.org/10.1136/BMJOPEN-2016-011362>
- Davis, E.P., and Narayan, A.J. (2020). Pregnancy as a period of risk, adaptation, and resilience for mothers and infants. *Development and Psychopathology*, 32(5), 1625–1639. <https://doi.org/10.1017/S0954579420001121>
- Fawcett J., and Knauth D. (1997). The Factor Structure of the Perception of Birth Scale. *MCN: The American Journal of Maternal/Child Nursing*. 22(3):160.
- Gökmen, Ö. (2017). Adaptation of the revised birth satisfaction scale form to the Turkish society. Unpublished Master's Thesis, Department of Nursing, Institute of Health Sciences, Ordu University.
- Güven Olgun, E. (2019). Factors Associated with Birth Satisfaction in Women Who Have Given Birth Vaginally: A Hospital-Based Study. Unpublished Master's Thesis, Department of Nursing, Institute of Health Sciences, Karabük University.
- Güngör I., and Beji, N.K. (2007). Effects of Fathers' Attendance to Labour and Delivery on the Experience of Childbirth in Turkey. *Western Journal of Nursing Research*. 29(2):213-31.
- Hamm, R.F., Srinivas, S.K., and Levine, L.D. (2019). Risk factors and racial disparities related to low maternal birth satisfaction with labor induction: A prospective, cohort study. *BMC Pregnancy and Childbirth*, 19(1), 1–9. <https://doi.org/10.1186/s12884-019-2658-z>
- Hollins Martin, C.J., and Martin, C.R. (2014). Development and psychometric properties of the Birth Satisfaction Scale-Revised (BSS-R). *Midwifery*, 30(6), 610–619. <https://doi.org/10.1016/j.midw.2013.10.006>
- Holopainen, A., Verhage, M.L., and Oosterman, M. (2020). Childbirth experience associated with maternal and paternal stress during the first year, but not child attachment. *Frontiers in Psychiatry*, 11, 1–10. <https://doi.org/10.3389/fpsy.2020.562394>
- Jafari, E., Mohebbi, P., and Mazloomzadeh, S. (2017). Factors related to women's childbirth satisfaction in physiologic and routine childbirth groups. *Iranian Journal of Nursing and Midwifery Research*, 22(3), 219–224. <https://doi.org/10.4103/1735-9066.208161>
- Karakayalı Ay, Ç., Özşahin, Z., and Karataş Okyay, E. (2023). The Moderating Effect of Birth Satisfaction on the Correlation Between Mother-Infant Bonding and Psychological Resilience. *Journal of General Medicine* 33(4), 377–383. <https://doi.org/10.54005/genel TIP.1188971>
- Perriman, N., and Davis, D. (2016). Measuring maternal satisfaction with maternity care: A systematic integrative review. What is the most appropriate, reliable and valid tool that can be used to measure maternal satisfaction with continuity of maternity care? *Women and Birth*, 29(3), 293–299. <https://doi.org/10.1016/j.wombi.2015.12.004>
- Sarıboğa, Y., and Zeyneloğlu, S. (2021). Determining the perceptions of women who have given birth vaginally regarding labor and nursing care. *Journal of Nursing, Health Sciences University*, 3(3), 127–134. <https://doi.org/10.48071/sbuhemsirelik.930110>
- Takayama, T., Phongluxa, K., Nonaka, D., Sato, C., Gregorio, E.R., Inthavong, N., Pongvongsa, T., Kounnavong, S., and Kobayashi, J. (2019). Is the place of birth related to the mother's satisfaction with childbirth? A cross-sectional study in a rural district of the Lao People's Democratic Republic (Lao PDR). *BMC Pregnancy and Childbirth*, 19(1), 1–12. <https://doi.org/10.1186/s12884-019-2483-4>
- Yalnız Dilcen, H., and Genç, R. (2019). The role of the midwife in preventing traumatic birth. *NWSA Academic Journals*, 14(3), 64–73. <https://doi.org/10.12739/nwsa.2019.14.3.4b0026>
- Yılmaz, E., and Nazik, F. (2018). The relationship between mothers' perception of birth and their perception of nursing care. *The Journal of Gynecology - Obstetrics and Neonatology*, 15(2), 52–56.
- Yılmaz Güleş, G. (2019). Perceptions of Labor and Birth Method Preferences in Primiparous Women Giving Birth in a Private Hospital. Unpublished Master's Thesis, Department of Nursing, Institute of Health Sciences, Trakya University.