

The Correlation Between Pregnant Women's Self-perception Level and Identification of Motherhood Role and Preparation for Labor: A Cross-Sectional Study

Gebelerin Kendini Algılama Düzeyi ile Annelik Rolünün Kabulü ve Doğuma Hazır Oluş Arasındaki İlişki

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ABSTRACT

Objective: This study was conducted to examine the relationship between pregnant women's self-perception level and identification of motherhood role and preparation for labor.

Materials and Methods: The population of the cross-sectional study consisted of pregnant women who applied to the Obstetrics and Gynecology Polyclinic of a State Hospital between 18 July and 30 December 2020. The sample of the study consisted of a total of 546 pregnant women selected by random sampling method, one of the non-probability sampling methods. As a data collection form, "Personal Information Form", "Pregnant Self Perception Scale", "Readiness for Delivery and Acceptance of the Role of Motherhood" scales were collected. In the analysis of the data, t test, ANOVA and correlation tests were used in independent groups.

Results: Pregnant women had a total score of 31.80 ± 4.78 on the Self-Perception Scale of Pregnancy, 25.83 ± 3.10 in the Pregnancy Perception of Maternity sub-dimension, 9.74 ± 4.06 in the Pregnancy Body Perception sub-dimension; Acceptance of the Maternal Role mean score was 25.38 ± 6.08 and the mean score of Readiness for Birth was 20.04 ± 5.36 detected. A correlation was found between the Pregnancy Perception of Maternity, Acceptance of the Maternal Role and the Sub-dimensions of the Pregnancy Readiness Scale of the pregnant women ($p < 0.05$). A correlation was found between Pregnancy Body Perception and Acceptance of the Maternal Role Scale sub-dimensions ($p < 0.05$).

Conclusion: It has been determined that as the perception of motherhood increases, the acceptance of the maternal role and their readiness for birth are affected positively, and as the body perception of pregnancy decreases, the acceptance of the maternal role is affected positively.

Keywords: Pregnant women, self-perception of pregnant, motherhood role, preparation for childbirth.

ÖZET

Amaç: Bu çalışma, gebelerin kendini algılama düzeyi ile annelik rolünün kabulü ve doğuma hazır oluş arasındaki ilişkiyi incelemek amacıyla yapılmıştır.

Gereç ve Yöntem: Kesitsel tipteki çalışmanın evrenini bir Devlet Hastanesinin Kadın Doğum Polikliniğine 18 Temmuz-30 Aralık 2020 tarihleri arasında başvuran gebeler oluşturmuştur. Çalışmanın örneklemini olasılıksız örnekleme yöntemlerinden gelişmiş güzel örnekleme yöntemiyle seçilen toplam 546 gebe oluşturmuştur. Veri toplama formu olarak "Kişisel Bilgi Formu", "Gebelerin Kendini Algılama Ölçeği", "Doğuma Hazır Oluş ve Annelik Rolünün Kabulü" ölçekleriyle toplanmıştır. Verilerin analizinde bağımsız gruplarda t testi, ANOVA ve korelasyon testleri kullanılmıştır.

Bulgular: Gebe kadınların, Gebelerin Kendini Algılama Ölçeği toplam puan ortalamasının 31.80 ± 4.78 , Gebeliğe Ait Annelik Algısı alt boyutu puanı 25.83 ± 3.10 , Gebeliğe Ait Beden Algısı alt boyutu puanı 9.74 ± 4.06 ; Annelik Rolünün Kabulü puan ortalaması 25.38 ± 6.08 ve Doğuma Hazır Oluş puan ortalaması 20.04 ± 5.36 olduğu saptanmıştır. Gebe kadınların, Gebeliğe Ait Annelik Algısı ile Annelik Rolünün Kabulü ve Doğuma Hazır Oluş ölçek alt boyutları arasında korelasyon bulunmuştur.

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($p<0.05$). Gebeliğe Ait Beden Algısı ile Annelik Rolünün Kabulü ölçek alt boyutları arasında korelasyon saptanmıştır ($p<0.05$).

Sonuç: Gebelerin annelik algıları arttıkça annelik rolünün kabulü ve doğuma hazır oluşlarının olumlu yönde etkilendiği, gebeliğe ait beden algısı azaldıkça annelik rolünün kabulünün olumlu yönde etkilendiği belirlenmiştir.

Anahtar Sözcükler: Gebeler, gebenin benlik algısı, annelik rolü, doğuma hazırlık.

INTRODUCTION

Pregnancy is an important process when physiological, psychological, and social changes are experienced. Process of adaptation to pregnancy varies based on past experiences of women (Kök, vd. 2018: 209). Adaptation to pregnancy can vary depending on cultural characteristics of women and their families, their pregnancies, emotional status and attitudes toward health requirements (Pinar, vd.2018: 582).

Body images of pregnant women who are trying to adapt to different situations which occur during pregnancy may also change. (Çırak-Özdemir, 2015: 214 ; Taşkın, 2016: 534) While this situation is accepted positively by some women, these changes cause negative body image in other women (Çırak- Özdemir, 2015: 214; Plante, vd. 2020: 137; Roomruangwong, vd.2020: 103; Taşkın, 2016: 534). As body perception can be a source of depression and anxiety before, during, and after pregnancy, it may cause women to have negative attitudes and behaviors (Kök, vd.2018: 209; Przybyła-Basista, vd. 2020: 9436). Since perceiving body differently during pregnancy may have a negative effect on the mental and physical health of the pregnant women, this may prevent this period from proceeding in a healthy way. It has been found out that women, who have difficulties in accepting pregnancy, have difficulty in adapting to pregnancy and motherhood and experience more fear about childbirth (Demirbaş-Kadioğlu, 2014: 200). In the literature, it is stated that weights pregnant women gain during pregnancy, their negative feelings about body image and physical and emotional problems regarding pregnancy lead them to have a decreased self-acceptance and self-esteem, negatively affect their mental health, and damage the relationship with the environment and the postpartum mother-infant attachment. (Fahami, 2018: 167; Silveira, vd. 2015: 409; Şişman-Kutlu, 2016: 25).

While an expectant mother eagerly awaits the moment of birth, she also experiences many new emotions together. During pregnancy, women may experience feelings such as happiness, maturity, self-realization, and satisfaction as well as anxious and nervous waiting. Pregnant women are thinking about how to give birth in the last trimester and may feel uneasy (Demirbaş-Kadioğlu, 2014: 200; Şişman-Kutlu, 2016: 25). In a study, it was determined that 6-10% of the pregnant women experienced mental instability in their daily lives due to the fear of birth, and the fear levels of primiparous pregnant women were higher than multiparous ones. The presence of several obstacles such as inability to cope with labor and fear makes it difficult to keep this process completely under control. Women are in search because they want to cope with these situations they encounter during delivery. Today, women want to manage their own labors, cope with labor pain with non-

pharmacological methods, and share this process with their partners, thus having a good labor experience (Bülbül, vd. 2016: 126).

Among the roles undertaken by women in the world, the most accepted role is the motherhood role. Generally, in all societies, social pressure is put on women to undertake the pregnancy and motherhood role (Koyun-Demir, 2013: 460). The motherhood role is perceived positively by many women and is a developmental and interactional process in which maternal behaviors are learned (Bilgin-Alpar, 2018: 126). The role of motherhood is an important key in a child's upbringing, care and mother-child relationship (Newman, vd. 2015: 28647). A woman who reaches the motherhood role also develops a maternal identity. Factors affecting attachment in pregnancy and postpartum period also affect the motherhood role (Bilgin- Alpar, 2018: 6).

Acquisition of the motherhood role is a combination of social roles and developmental attitudes and behaviors that start in the prenatal period and continue in the postpartum period and are completed with the development of maternal identity (Koç, vd. 2016: 143). Establishing a maternal identity contributes to a pregnant woman's psychosocial development (Rafii, vd. 2020: 304). Preparing the pregnant woman for labor and the motherhood role is one of the objectives of the care given during the prenatal period. Therefore, women who receive adequate and correct prenatal care perceive themselves more positively, accept pregnancy in a shorter time, are more ready for labor and adapt more easily to the motherhood role (Dönmez vd. 2018: 1; Şişman-Kutlu, 2016: 25). This study was conducted to examine the relationship between self-perception levels of pregnant women and identification of the role of mother and being ready for birth. For this purpose, answers to the following questions were sought.

MATERIAL AND METHODS

Population and sample of the study

The population of this cross-sectional study consisted of pregnant women who applied to Gynecology and Obstetrics Outpatient Clinic of a State Hospital between 18 July and 30 December 2020. The sample of the study consisted of a total of 546 pregnant women who applied to the outpatient clinic between the same dates and were selected by using random sampling method, one of the improbable sampling methods.

Inclusion criteria: Pregnant women, who were voluntary to participate in the study, had no communication problems, and had no psychiatric disease, were included in the study.



Data collection tools

Personal Information Form: This form consists of a total of 9 questions including socio-demographic characteristics and some features related to pregnancy. The data were collected by the researchers using face-to-face interview method and data collection lasted for approximately 10 minutes

Self-Perception Scale for Pregnant Women (SPSP): It is a 4-point Likert (4=Always, 3=Most of the time, 2=Sometimes, 1=Never) type scale, which consists of a total of 12 items developed by Kumcağız et al., (Kumcağız, vd. 2017: 691). The scale has two subscales: *Perception of Motherhood During Pregnancy* (7 items) and *Perception of Body During Pregnancy* (5 items), and each subscale is evaluated separately. Minimum and maximum scores are 7 and 28 points for the subscale of perception of motherhood during pregnancy. While high scores obtained from the perception of motherhood during pregnancy subscale indicate that the level of perception of motherhood during pregnancy is high, low scores signify low level of perception of motherhood during pregnancy. Minimum and maximum scores are 5 and 20 points for the subscale of perception of body during pregnancy. While high scores from the perception of body during pregnancy subscale indicate negative body image of pregnancy, low scores indicate positive body image of pregnancy. The Cronbach's alpha coefficients of the subscales of the scale were determined as 0.86 for the perception of motherhood during pregnancy and 0.75 for the perception of body during pregnancy (Kumcağız, vd. 2017: 691). In this study, Cronbach's alpha coefficients of the subscales were calculated as 0.83 for the perception of motherhood during pregnancy and 0.86 for the perception of body during pregnancy.

Prenatal self-evaluation Questionnaire (PSEQ): It was developed by Lederman and Lederman (Lederman-Lederman, 1979: 94). to evaluate the adaptation of prenatal women to motherhood. Its Turkish validity and reliability were conducted by Beydağ and Mete (Beydağ-Mete,

2008:16). The 4-point Likert-type scale with 79 items has 7 subscales (concern for the well-being of self and baby, acceptance of pregnancy, identification of a motherhood role, preparation for labor, prenatal fear of helplessness and loss of control in labor, relationship with her mother and relationship with her husband). Each subscale is known to be used separately. Low scores signify high adaptation to pregnancy. The *Identification of a motherhood role* subscale consists of 15 items and its minimum and maximum scores are 15 and 60 points, respectively. The Cronbach's alpha coefficient of the identification of a motherhood role subscale was found to be 0.76. The *Preparation for labor* subscale consists of 10 items and its minimum and maximum scores are 10 and 40 points, respectively. The Cronbach's alpha coefficient of the preparation for labor subscale was found to be 0.72 (Beydağ & Mete, 2008: 16). In this study, the Cronbach's alpha coefficients of the subscales were calculated as 0.73 for the identification of a motherhood role and 0.76 for preparation for labor.

Data analysis

SPSS 24.0 package program was used to analyze the findings obtained in the study. Percentage, frequency, mean, standard deviation, minimum-maximum values from descriptive statistical methods were utilized to assess the data of the study and Kolmogorov-Smirnov test was used to examine normal distribution. Independent samples t test, ANOVA and correlation tests were used for statistical calculations.

Ethical Considerations

In order to conduct the study, permission from the institution where the data would be collected and approval from the ethics committee (Ethics Committee No: 2019/14/01) were obtained. Before data collection, the pregnant women were informed about the purpose of the study and their verbal and written consents were obtained.

RESULTS

Table 1. Comparison of the socio-demographic characteristics and some pregnancy-related properties of the pregnant women with their mean scores of the subscales of SPSP, Identification of A Motherhood Role and Preparation for labor (n=546)

	n (%)	SPSPSEQ			
		Perception of motherhood during pregnancy	Perception of body during pregnancy	Identification of a motherhood role	Preparation for labor
		$\bar{X} \pm SD$	$\bar{X} \pm SD$	$\bar{X} \pm SD$	$\bar{X} \pm SD$
Age					
Between 18-25 years	148 (27.1)	26.06 \pm 2.82	9.35 \pm 4.04	25.32 \pm 6.06	20.59 \pm 5.30
Between 26-35 years	30.2 (55.3)	25.71 \pm 3.23	10.01 \pm 4.10	25.34 \pm 6.08	19.95 \pm 5.32
Between 36-47 years	96 (17.6)	25.83 \pm 3.13	9.52 \pm 3.97	25.58 \pm 6.15	19.47 \pm 5.60
Significance		F=0.602 p=0.548	F=1.474 p=0.230	F=0.064 p=0.938	F=1.350 p=0.260



Education level					
Literate	29 (5.3)	24.62±3.85	12.24±3.97	26.27±6.18	21.31±5.33
Elementary school	268 (49.1)	25.66±3.32	10.19±4.51	25.23±6.02	19.79±5.39
High school	135 (24.7)	26.01±2.98	9.58±3.92	25.74±6.50	20.31±5.04
≥ University	114 (20.9)	26.30±2.32	9.37±3.85	25.07±5.67	19.99±5.68
Significance		F=2.789 p=0.040	F=5.025 p=0.002	F=0.523 p=0.667	F=0.839 p=0.473
Working status					
Yes	61 (11.2)	26.29±2.45	9.98±4.68	23.80±5.28	18.18±5.46
No	485 (88.8)	25.77±3.17	9.71±3.98	25.58±6.14	20.28±5.31
Significance		t=1.237 p=0.217	t=0.477 p=0.633	t=-2.160 p=0.031	t=-2.898 p=0.004
Pregnancy trimester					
1 st Trimester	19 (3.5)	25.00±3.26	7.78±2.97	27.10±6.04	20.10±3.78
2 nd Trimester	53 (9.7)	25.22±3.45	10.35±4.22	27.39±6.87	20.52±5.74
3 rd Trimester	474 (86.8)	25.93±3.05	9.75±4.07	25.08±5.94	19.98±5.38
Significance		F=1.942 p=0.144	F=2.819 p=0.061	F=4.274 p=0.014	F=0.241 p=0.786
Gravidity					
1-2	242 (44.3)	26.30±2.48	9.98±4.22	25.32±5.92	19.76±5.09
3-4	232 (42.5)	25.68±3.28	9.48±4.04	25.48±6.21	20.27±5.65
≥ 5	72 (13.2)	24.70±3.99	9.80±3.56	25.26±6.22	20.26±5.34
Significance		F=7.978 p=0.001	F=0.889 p=0.412	F=0.057 p=0.945	F=0.596 p=0.552
Number of living children					
First pregnancy or none	146 (26.7)	26.59±2.28	9.93±4.30	25.26±6.24	20.09±5.35
1 child	159 (29.1)	25.81±2.80	9.40±4.03	24.87±5.51	20.04±5.45
2 children	141 (25.8)	25.68±3.18	10.00±4.01	25.90±6.52	20.24±5.28
≥ 3 children	100 (18.39)	24.96±4.11	9.65±3.85	25.63±6.06	19.70±5.44
Significance		F=5.831 p=0.001	F=0.684 p=0.562	F=0.795 p=0.497	F=0.204 p=0.894
History of miscarriage					
Yes	189 (34.6)	25.98±2.99	9.91±4.17	25.52±6.04	20.32±5.57
No	357 (65.4)	25.55±3.30	9.66±4.01	25.10±6.15	19.89±5.26
Significance		t=-1.541 p=0.124	t=0.672 p=0.502	t=-0.774 p=0.439	t=0.877 p=0.381
Pregnancy intention					
Yes	517 (94.7)	25.97±2.88	9.74±4.01	25.31±6.02	22.17±6.15
No	29 (5.3)	23.24±5.24	9.75±5.02	26.51±6.95	19.92±5.30
Significance		t=4.701 p=0.001	t=-0.013 p=0.990	t=-1.033 p=0.302	t=-2.199 p=0.028
Presence of Disease during pregnancy					
Yes**	476 (87.2)	25.47±3.95	9.80±4.10	25.46±6.13	20.60±5.96
No	70 (12.8)	25.88±3.95	9.35±3.83	24.81±5.67	19.96±5.27
Significance		t=1.038 p=0.300	t=0.863 p=0.388	t=0.838 p=0.403	t=-0.925 p=0.356

* p<0.05, F= ANOVA test, t=independent samples t test. SPSP= Self-Perception Scale for Pregnant Women.

**Those saying yes to the presence of disease during pregnancy; anemia (6), preeclampsia (9), diabetes (40), hepatitis (1), thyroid (13), oligohydramnios (1)

Age average of the pregnant women was 29.45±5.58. Out of pregnant women, 55.3% were in the age range of 26-35 years, 49.1% were elementary school graduates, 11.2% were employed, 86.8% were in the third trimester of pregnancy, 44.3% had a gravidity of 1-2, 29.1% had one living child, 34.6% had a miscarriage history, 5.3% did not want their current pregnancy and 87.2% had no disease during pregnancy (Table 1).

A statistically significant difference was found between the mean scores of the perception of motherhood during

pregnancy according to the pregnant women's education level, gravidity, number of living children and status of intending the current pregnancy (p<0.05). A statistically significant difference was found between the mean scores of perception of body during pregnancy of the pregnant women according to their education level (p<0.05). There was a statistically significant difference between the mean scores of the identification of a motherhood role in terms of working status and pregnancy trimester status of the pregnant women (p<0.05). A statistically significant difference was determined between the preparation for



labor mean scores of the women in terms of their working status and intention of current pregnancy ($p < 0.05$) (Table 1).

Table 2. Mean scores, Minimum-Maximum values of SPSP, Identification of a Motherhood Role and Preparation for Labor subscales (n=546)

	\bar{X}	SD	Minimum-Maximum	*Minimum-Maximum
SPSP				
Perception of motherhood during pregnancy	25.83	3.10	7-28	7-28
Perception of body during pregnancy	9.74	4.06	5-20	5-20
PSEQ				
Identification a motherhood role	25.38	6.08	15-44	15-60
Preparation for labor	20.04	5.36	10-35	10-40

*Minimum-Maximum values to be obtained from scales. SPSP = Self-Perception Scale for Pregnant Women, PSEQ = Prenatal Self-Evaluation Questionnaire.

The mean scores of the subscales of SPSP were determined as 25.83 ± 3.10 for the perception of motherhood during pregnancy and 9.74 ± 4.06 for the perception of body during

pregnancy. The mean score of identification of a motherhood role was 25.38 ± 6.08 and the mean score of preparation for labor was 20.04 ± 5.36 (Table 2).

Table 3. Correlation Distribution of Scores of the Subscales of SPSP, Identification of a Motherhood Role and Preparation for Labor

	1	2	3	4
(1) Perception of motherhood during pregnancy				
r^*				
p				
(2) Perception of body during pregnancy				
r^*	-0.050			
p	0.248			
(3) Identification of motherhood role				
r^*	0.367	-0.369		
p	0.001	0.001		
(4) Preparation for labor*				
r^*	0.313	-0.068	0.243	
p	0.001	0.111	0.001	

* $p < 0.05$, Correlation t test. SPSP= Self-Perception Scale for Pregnant Women.

There was a positive correlation between the identification of a motherhood role and the perception of motherhood during pregnancy ($r = 0.367$, $p = 0.001$). There was a negative correlation ($r = -0.369$, $p = 0.001$) between the identification of a motherhood role and perception of body during pregnancy. There was a positive correlation between the motherhood perception and the preparation for labor ($r = 0.313$, $p = 0.001$). There was a positive correlation between the identification of a motherhood role and preparation for labor ($r = 0.243$, $p = 0.001$) (Table 3).

DISCUSSION

In this study, it was determined that age did not affect the perception of body during pregnancy. In the studies it was found that age did not affect body perception in pregnant

women (Cevik-Yanikkerem, 2020: 1159 ; Meireles, vd. 2015: 2091; Özkan, vd. 2020: 108). This result is compatible with the result of the present study. Socio-cultural and environmental characteristics, intention for pregnancy, spouse support, and prenatal care may be effective on this result. In this study, it was determined that as the education level increased, perception of body levels of pregnant women decreased. In the study conducted by Kumcağız , it was found that the body perception levels of pregnant women with high education levels were low (Kumcağız, 2012: 691), In their study, Meireles et al., found that body perception of pregnant women with low education levels was negatively affected (Meireles, vd. 2015: 2091) This finding is similar to the literature. In different studies, it was determined that maternal education level did not affect the motherhood perception and body perception of pregnant women (Coşkun, vd. 2020: 1 ; Kök, vd. 2018: 209). The

difference may be associated with the importance attached by the person to the body image and the fact that mothers with a high education level obtain more information about the changes in the body during pregnancy.

In the study, it was determined that there was no difference between mean scores of perception of body during pregnancy according to pregnancy trimester, gravidity, and intention of pregnancy. In their study, Koç et al., stated that there was no difference between body perception mean scores in terms of pregnancy trimester, gravidity, and intention of pregnancy (Koç, vd. 2016: 143). The findings are similar to our study. In the study of Bahaadinbeigy et al., it was determined that women who had an unplanned pregnancy had low (Bahaadinbeigy, vd. 2014: 530). This difference can be associated with the pregnant women's readiness for motherhood, the attitudes of family members towards pregnancy, sociocultural differences and social support systems.

In this study, it was determined that the perception of motherhood mean scores of the women who intentionally conceived was significantly high. In their study, Coşkun et al., found that having an intended pregnancy positively affects the perception of motherhood (Coşkun, vd. 2020: 1). In the study of Przybyła-Basista et al., it was determined that women who had a planned pregnancy had lower levels of prenatal depression and were less dissatisfied with their appearance during pregnancy, positive attitudes towards pregnancy and motherhood are an important protective factor for depression in pregnant women (Przybyła-Basista et al., vd. 2020: 9436). Women planning a pregnancy have more positive attitudes towards pregnancy and are more aware of the changes motherhood can bring (Ilska -Przybyła-Basista, 2014: 176; Przybyła-Basista et al., vd. 2020: 9436). The finding of the present study is compatible with the literature. Intended pregnancy has a positive effect on the perception of motherhood since it increases the self-care agency of an expectant mother and thus her adaptation to pregnancy. Women with high self-care agency pay more attention to themselves during pregnancy and adapt to pregnancy more easily (Demirbaş-Kadioğlu, 2014: 200) that employed pregnant women had higher level of identification of a motherhood role. In their study, Demirbaş and Kadioğlu determined that employed pregnant women accepted the role of motherhood more easily (Demirbaş- Kadioğlu, 2014: 200). This result is similar to the result of this study. It can be thought that the increased employment and so increased self-confidence of women positively affects the role of motherhood. Working and income status, which are among the main factors determining the social position of a woman, are important factors affecting her adaptation to pregnancy and then to the role of motherhood in the next period (Demirbaş-Kadioğlu, 2014: 200).

In the study, it was determined that the expectant mothers' gravidity, number of living children and the status of intended pregnancy did not affect the identification the motherhood role. In their study, Koç et al., found that gravidity, number of living children and the intended pregnancies affected the identification of the motherhood

role (Koç, vd. 2020: 143). In the study of Ngai et al., it was stated that not giving birth was related to the role of motherhood (Ngai, vd. 2012: 30). In another study, it was determined that the status of intended pregnancy affected the acquisition of the motherhood role (Özkan-Polat, 2011: 108). These results are different from the results of the present study. It is thought that the fertility characteristics, family structure and socioeconomic status of the region where the study was conducted as well as readiness for motherhood, support systems and mother's adaptation to the postpartum period may be the reason for this difference.

In this study, it was determined that the pregnant women's scores in perception of motherhood during pregnancy subscale (25.83 ± 3.10) and the perception of body during pregnancy subscale (9.74 ± 4.06) of the Self-Perception Scale for Pregnant Women were at moderate level. In their study, Coşkun et al., found that scores of the perception of motherhood during pregnancy subscale (25.82 ± 2.8) and perception of body during pregnancy subscale (9.41 ± 3.67) were at moderate level (Coşkun, vd. 2020: 1). In their study, Dikmen et al., found that the motherhood perception mean scores of the women in the experimental and control groups before the application were 27.47 ± 1.31 for the experimental group and 26.24 ± 2.24 for the control group, and the body perception mean scores were at moderate level (Dikmen, vd. 2019: 186). In the study of Fahami et al., it was determined that most of the participants considered the changes in their body appearance as part of the pregnancy process and as the wisdom of Allah, and were satisfied with their physical appearance. Self-acceptance during pregnancy can result in body image satisfaction (Fahami, vd. 2018: 167). These results are compatible with the results of the present study.

It was founding the study that the pregnant women's mean score for acceptance identification of a motherhood role was 25.38 ± 6.08 . In their study Demirbaş and Kadioğlu determined that the mean score of identification of a motherhood role was 25.95 ± 5.91 (Demirbaş-Kadioğlu, 2014: 200). In their study, Mete et al., stated that the mean score of preparation for labor was 20.63 ± 10.68 (Mete, vd. 2017: 201). These results are compatible with results of the present study. The preparation for labor mean score of the pregnant women was determined as 20.04 ± 5.36 in the study. In the study by Demirbaş and Kadioğlu, preparation for labor mean score was reported as 19.14 ± 4.59 , which is different from the present study (Demirbaş-Kadioğlu, 2014: 200). This difference may be associated with the reasons the age of the pregnant woman, health status of the pregnant woman, her preparation for labor, her knowledge about labor, previous birth experiences, socio-cultural and regional differences, relationship with equals and social support systems. The age of the mother, her physical and mental health, her relationship with her husband, the socioeconomic status of the family, the various social supports available, the preparations made during pregnancy, the birth experiences, the attitude towards raising a child, the attractiveness and appearance of the baby's role are among the factors that affect the acquisition of the role of motherhood (Azmoud,



vd. 2014: 7; Fouquier, vd. 2011: 145; Khandan, vd. 2018: 289; Kordi, vd. 2017:6).

In the present study, it was determined that as the body perception of the pregnant women decreased, their identification of the motherhood role was positively affected, and as their perception of motherhood and their identification of the motherhood role increased, their levels of preparation for labor increased. Better pregnancy adaptation of pregnant women with positive body perception during pregnancy may cause them to accept the role of motherhood more easily. It can be thought that the intention of pregnancy, previous birth experiences, personality traits, spouse support, status of receiving health care, support of healthcare professionals, and adaptation to the postpartum process affect the perception of motherhood, therefore they have an effect on the identification of the motherhood role and preparation for labor. Studies have shown that one of the features of taking the role of motherhood is to support the pregnant woman socially and that professional support is effective (Lee, vd. 2009: 326; Liu, vd. 2012: 908; Spinelliet, vd. 2016: 184).

CONCLUSION

In this study, it was determined that the increased perception of motherhood of pregnant women had a positive effect on preparation for childbirth and determining the role of motherhood, and as the body image decreased in pregnant women, the definition of the role of motherhood was positively affected. The pregnant women's perception of motherhood was high, their body perceptions were moderate, and their identification of motherhood role and preparation for labor were above the moderate level.

In line with these results, it can be recommended to plan necessary trainings and give realistic information in antenatal care or birth preparation programs in order for pregnant women to be ready for the motherhood role and labor and adapt to the changes in their own body.

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Conflict of Interest

There is no conflict of interest.

Code availability

Not applicable

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REFERENCES

- Azmoud E., Jaafarnejad, F., & Mazloun, S. (2014). Effect of self-efficacy-based training on maternal sense of competency of primiparous women in the infants care. *Evidence Based Care*, 4 (3), 7-14. https://doi.org/10.4103/jehp.jehp_113_15
- Bahaadinbeigy, K., Garrusi, B., Etminan, A., & Nematallahee, V.R. (2014). Contributing factors affecting body satisfaction among pregnant women with an emphasis on self-esteem and depression. *Int J Caring Sci*, 7:530-7.
- Beydağ, K.D.T., & Mete, S. (2008). Prenatal Kendini Değerlendirme Ölçeği'nin geçerlik ve güvenilirlik çalışması. *Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 11(1), 16-24.
- Bilgin, Z., & Alpar, Ş.E. (2018). Kadınların maternal bağlanma algısı ve anneliğe ilişkin görüşleri. *Arc Health Sci Res*, 5(1), 6-15. <https://doi.org/10.17681/hsp.296664>.
- Bülbül, T., Özen, B., Çopur, A., & Kayacık, F. (2016). Gebelerin doğum korkusu ve doğum şekline karar verme durumlarının incelenmesi. *Sağlık Bilimleri Dergisi*, 25 (3), 126-130.
- Cevik, E., & Yanikkerem, E. (2020). The factor saffecting self-esteem, depression and body image of pregnant women in a state hospital in Turkey. *J Pak Med Assoc*, 70(7), 1159-1164. <https://doi.org/10.5455/JPMA.19892>.
- Çırak, R., & Özdemir, F. (2015). Adölesan gebelerde beden imajı algısının belirlenmesi. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*, 18 (3), 214-221.
- Coşkun, A.N., Arslan, S., & Okcu, G. (2020). Gebe kadınlarda gebelik algısının stres, demografik ve obstetrik özellikler açısından incelenmesi. *Koç Üniversitesi Hemşirelikte Eğitim ve Araştırma Dergisi*, 17(1), 1-8 <https://doi.org/10.5222/HEAD.2020.001>
- Demirbaş, H., & Kadioğlu, H. (2014). Prenatal dönemdeki kadınların gebeliğe uyumu ve ilişkili faktörler. *Marmara Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 4(4), 200-6. <https://doi.org/10.5455 / musbed.20140902023654>
- Dikmen, H.A., & Şanlı, Y. (2019). Progresif kas gevşeme egzersizlerinin gebelerin distres düzeyi ve gebelik algısına etkisi. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi*, 12 (3), 186-198.
- Dönmez, A., Er, M., & Karaçam, Z. (2018). Examination of pregnant's physical health problems related to pregnant participated to pregnancy school. *Life Sciences (NWSALS)*, 13(1), 1-10. <https://doi.org/10.12739/NWSA.2018.13.1.4C0015>.
- Fahami, F., Amini-Abchuyeh, M., & Aghaei, A. (2018). The relationship between psychological well being and body image in pregnant women. *Iran J Nurs Midwifery Res*, 23(3), 167-171. https://doi.org/10.4103/ijnmr.IJNMR_178_16.
- Fouquier KF. (2011). The concept of motherhood among three generations of African American women. *J Nurs Scholarsh*, 43, 145-53.

- Ilska, M., & Przybyła-Basista, H. (2014). Measurement of women's prenatal attitudes towards maternity and pregnancy and analysis of their predictors. *Health Psychol. Rep*, 2, 176–188. <https://doi.org/10.5114/hpr.2014.45300>.
- Khandan, S., Riaz, H., Akbari, S.A.A., Nasiri, M., & Montazeri, A. (2018). Adaptation to maternal role and infant development: A cross sectional study. *Journal of Reproductive and Infant Psychology*, 36(3), 289–301. <https://doi.org/10.108002646838.2018.1437895>.
- Koç, Ö., Özkan, H., & Bekmezci, H. (2016). Annelik rolü ve ebeveynlik davranışı arasındaki ilişkinin değerlendirilmesi. *İzmir Dr. Behçet Uz Çocuk Hastanesi Dergisi*, 6(2), 143–150. <https://doi.org/10.5222/buchd.2016.143>.
- Kordi, M., Fasanghari, M., Asgharipour, N., & Esmaily, H. (2016). The effect of maternal role training program on role attainment and maternal role satisfaction in nulliparous women with unplanned pregnancy. *J Educ Health Promot*, 6, 61. https://doi.org/10.4103/jehp.jehp_113_15
- Koyun, A., & Demir, Ş. (2013). Fetüsün cinsiyetinin annelik rolüne ve gebeliğe ilişkin düşüncelere etkisi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*, 2(4), 460–9.
- Kök, G., Güvenç, G., Bilsel, H., & Güvener, E. (2018). Gebelik döneminde kadınların beden algısı farklılık gösterir mi? *Hemşirelikte Eğitim ve Araştırma Dergisi*, 15(4), 209–214. <https://doi.org/10.5222/HEAD.2018.209>.
- Kumcağız, H. (2012). Gebe kadınlarda beden algısı ve benlik saygısının bazı değişkenlere göre incelenmesi. *International Journal of Human Sciences*, 9(2), 691–703.
- Kumcağız, H., Ersanlı, E., & Murat, N. (2017). Gebelerin Kendilerini Algılama Ölçeği'nin Geliştirilmesi ve Psikometrik Özellikleri. *Psikiyatri Hemşireliği Dergisi*, 8(1), 23–3. <https://doi.org/10.14744/phd.2017.12599>
- Lederman, R., & Lederman, E. (1979). Relationship of psychological factors in pregnancy to progress in labor. *Nursing Research*, 28 (4), 94–7.
- Lee, S.N., Long, A., & Boore, J. (2009). Taiwanese women's experiences of becoming a mother to a very-low-birth-weight preterm infant: A grounded theory study. *Int J Nurs Stud*, 46, 326–336. <https://doi.org/10.1016/j.ijnurstu.2008.10.004>.
- Liu, C.C., Chen, Y.C., Yeh, Y.P., & Hsieh, Y.S. (2012). Effects of maternal confidence and competence on maternal parenting stress in newborn care. *J Adv Nurs*, 68, 908–18. <https://doi.org/10.1111/j.1365-2648.2011.05796.x>.
- Meireles, J.F., Neves, C.M., De Carvalho, P.H., & Ferreira, M.E. (2015). Body dissatisfaction among pregnant women: An integrative review of the literature. *Cien Saude Colet*, 20, 2091–103. <https://doi.org/10.1590/1413-81232015207.05502014>.
- Mete, S., Çiçek, Ö., Aluş, T. M., Çamlıbel, M., & Uludağ, E. (2017). Doğuma hazırlık sınıflarının doğum korkusu, doğum tercihi ve doğuma hazır oluşluğa etkisi. *Türkiye Klinikleri J Nurs Sci*, 9(3), 201–6. <https://doi.org/10.5336/nurses.2016-53977>.
- Newman, L., Sivaratnam, C., & Komiti, A. (2015). Attachment and early brain development neuro protective interventions in infant-caregiver therapy. *Translational Developmental Psychiatry*, 3, 28647. <https://doi.org/10.3402/tdp.v3.28647>
- Ngai, F.W., & Chan, S.W. (2012). Stress, maternal role competence, and satisfaction among Chinese women in the perinatal period. *Res Nurs Health*, 35, 30–9. <https://doi.org/10.1002/nur.20464>. Epub 2011 Oct 24.
- Özkan, H., & Polat, S. (2011). Maternal identity development education on maternity role attainment and mybaby perception of primiparas. *Asian Nursing Research*, 5, 108–117.
- Özkan, T.K., Küçükkelepçe, D.Ş., & Özkan, S.A. (2020). Gebelikte Prenatal Bağlanma ve Vücut Algısı Arasındaki İlişki ve Etkileyen Faktörler. *Manisa Celal Bayar Üniversitesi Sağlık Bilimleri Dergisi*, 7(1), 49–54. <https://doi.org/10.34087/cbusbed.587467>.
- Pınar, Ş.E., Yıldırım, G., Cesur, B., Éliás, Z., Kayapınar, H.N., & Şekeroglu, S. (2018). Expression of feelings by pregnant women living in two different geographic regions and their adaptation to pregnancy: Hungary and Turkey cases. *Sakarya Medical Journal*, 8(3), 582–592.
- Plante, A., Doyon, A., Savard, C., Groupe ÉquiLibre, Meilleur, D., Achim, J.,... Morisset, A. (2020). Weight changes and body image in pregnant women: A challenge for health care professionals. *Can J Diet Pract Res*, 1, 81(3): 137–141. <https://doi.org/10.3148/cjdpr-2020-007>. Epub 2020 Feb 19
- Przybyła-Basista, H., Kwiecinska, E., & Ilska, M. (2020). Body acceptance by pregnant women and their attitudes toward pregnancy and maternity as predictors of prenatal depression. *Int. J. Environ. Res. Public Health*, 17, 9436. <https://doi.org/10.3390/ijerph17249436>.
- Rafii, F., Alinejad-Naeini, M., & Peyrovi, H. (2020). Maternal role attainment in mothers with termneonate: A hybrid concept analysis. *Iranian J Nursing Midwifery Res*, 25, 304–13. https://doi.org/10.4103/ijnmr.IJNMR_201_19
- Roomruangwong, C., Kanchanatawan, B., Sirivichayakul, S., & Maes, M. (2017). High incidence of body image dissatisfaction in pregnancy and the postnatal period: Associations with depression, anxiety, body mass index and weight gain during pregnancy. *Sexual Reproductive Healthcare*, 13, 103–109. <https://doi.org/10.1016/j.srhc.2017.08.002>
- Silveira, M.L., Ertel, K.A., Dole, N., & Chasan-Taber, L. (2015). The role of body image in prenatal and postpartum depression: A critical review of the literature. *Arch Womens Ment Health*, 18(3), 409–421. <https://doi.org/10.1007/s00737-015-0525-0>.
- Spinelli, M., Frigerio, A., Montali, L., Fasolo, M., Spada, M.S., & Mangili, G. (2016). 'I still have difficulties feeling like a mother': The transition to motherhood of preterm



infants mothers. *Psychol Health*, 31, 184-204. <https://doi.org/10.1080/08870446.2015.1088015>.

Şişman, F.N., & Kutlu, Y. (2016). Development of an assessment scale of adaptation difficulty for the elderly (ASADE) and its psychometric properties. *Journal of Psychiatric Nursing*, 7, 25-33. <https://doi.org/10.5505/phd.2016.82905>

Taşkın, L. (2016). Doğum ve Kadın Sağlığı Hemşireliği: Doğum öncesi bakım. Ankara: Sistem ve Ofset Matbaacılık.