#### Araştırma Makalesi/Research Article

### The Effect of Perceived Social Support on Prenatal Breastfeeding Self-Efficacy in Pregnants in Turkey: A Web-Based Cross-Sectional Study

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Türkiye'deki Gebelerde Algılanan Sosyal Desteğin Prenatal Emzirme Öz-Yeterliğine Etkisi: Web Tabanlı Kesitsel Bir Çalısma

#### ÖΖ

Amaç: Bu çalışmada, gebelerde algılanan sosyal desteğin prenatal emzirme öz-yeterliliğe etkisinin incelenmesi amaçlanmıştır.

**Gereç-Yöntem:** Kesitsel özellikte yürütülen bu çalışma 10 Mayıs - 20 Temmuz 2022 tarihleri arasında, web yolu ile sosyal medya (facebook, instagram gibi) forum veya grup sayfalarında paylaşılarak araştırmaya katılmaya gönüllü 572 gebe kadın üzerinde çalışma yürütülmüştür. Çalışmaya katılmaya gönüllü gebelerden literatür incelenerek hazırlanan Bilgi Formu, Çok Boyutlu Algılanan Sosyal Destek Ölçeği ve Prenatal Emzirme Öz-Yeterlilik Ölçeği'ni içeren e-anket ile toplanmıştır.

**Bulgular:** Çalışmaya katılan gebelerin yaş ortalaması 30,89±5,74 ve gebelik haftası ortalaması 26,59±7,70'dir. Gebelerin %78,6'sının isteyerek evlendiği, %71,4'ünün eşleriyle uyumlu olduğunu düşündüğü ve %78,0'ının gebeliğe karşı olumlu duygular beslediği belirlenmiştir. Gebelerin Prenatal Emzirme Öz-Yeterlilik Ölçeği (PEÖYÖ) toplam puan ortalaması 75,98±30,42, Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ) toplam puan ortalaması 21,69±8,51, arkadaşlar alt boyut puan ortalaması 21,53±8,62 ve özel ilişkiler alt boyut puan ortalaması 21,68±8,54 olarak bulunmuştur. Gebelerin PEÖYÖ ile ÇBASDÖ ölçeği toplam ve alt boyut puan ortalamaları arasında istatistiksel olarak pozitif yönde anlamlı bir ilişki saptanmıştır (p<0,001).

**Sonuç:** Gebelerin, gebelik sürecinde aileleri, arkadaşları ile özel ilişki kurdukları bireyler tarafından algıladıkları sosyal desteğin artmasıyla birlikte prenatal emzirme öz-yeterliliği de artmaktadır.

Anahtar Kelimeler: Gebe, algılanan sosyal destek, prenatal, emzirme, öz-yeterlilik.

#### ABSTRACT

Purpose: This study aimed to assess the effect of perceived social support on prenatal breastfeeding self-efficacy in pregnant women.

**Methods:** This cross-sectional study was conducted on 572 pregnant women who volunteered to participate in the research by sharing them on social media (such as Facebook, Instagram) forums or group pages between 10 May and 20 July 2022. The Information Form prepared by examining the literature from the pregnant women who volunteered to participate in the study was collected with an e-questionnaire including the Multidimensional Scale of Perceived Social Support (MSPSS) and the Prenatal Breastfeeding Self-Efficacy Scale (PBSES).

**Results:** The mean age of the pregnant women participating in the study was  $30.89\pm5.74$  and week of gestation was  $26.59\pm7.70$ . It was determined that 78.6% of the pregnant women got married voluntarily, 71.4% thought they were compatible with their spouses, and 78.0% had positive feelings towards pregnancy. PBSES total score average of pregnant is  $75.98\pm30.42$ , MSPSS total score average is  $64.90\pm25.62$ , MSPSS mean family sub-dimension score is  $21.69\pm8.51$ , friends sub-dimension mean score was  $21.53\pm8.62$ , and significant other sub-dimension mean score was  $21.68\pm8.54$ . A statistically positive and significant correlation was found between the PBSES and MSPSS scale total and sub-dimension mean scores of the pregnant women (p<0.001).

**Conclusions:** All pregnant women must be evaluated for breastfeeding self-efficacy and support systems, and it must be routine of the control when visiting hospital for prenatal examination by health care practitioners.

Keywords: Pregnant, perceived social support, prenatal, breastfeeding, self-efficacy.

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#### GENİŞLETİLMİŞ ÖZET

Giris: Gebelik dönemi kadınlarda fizyolojik, psikolojik ve sosyal değişimlerin olduğu, uyum sağlanması gereken bir dönemdir. Gebelik kadın için mutluluk, olgunluk, kendini gerceklestirme kaynağı olabilirken aynı zamanda umutsuzluk, endise ve kaygı da yaratabilir. Bu açıdan kadının yaşantısı ve ruhsal durumu gebelik sürecini etkilediği gibi; gebeliğin kendisi de kadının yaşantısı üzerinde etkili olmaktadır. Literatürde gebeliğin stres verici yaşam olayları arasında olduğu, yetersiz sosyal destek, stresli hayat sartları, anksiyete ve esler arasındaki uyumsuzluğun doğumdan sonra görülebilecek psikiyatrik bozuklukların önemli nedenleri arasında olduğu yapılan çalışmalarda bildirilmiştir. Ailenin stresle başetme tecrübeleri, risk durumu ortaya çıkmadan önceki ilişkileri, profesyonel yardım alıp almamaları risk durumunun sonucunu etkilemektedir. Algılanan sosyal destek düzeyinin artması ile stresli yaşam olaylarının yarattığı psikolojik sorunların azaldığı belirlenmiştir. Sosyal destek; kişiye yakınları ve çevresi tarafından sağlanan maddi ve manevi yardım olarak tanımlanmaktadır. Gebe kadınların önemli destek kaynaklarını yakın aile üyeleri, özellikle de eşleri oluşturmaktadır. Gebelerin eşlerinden aldıkları sosyal destekle bu dönemde anneyle bebek arasında en önemli evlem olan emzirmeyi de olumlu etkilemektedir. Emzirme için öz yeterlilik beklentileri, annenin bebeğini başarılı bir şekilde emzirmesini sağlayacak davranışlarını gerçekleştirme yeteneğine olan güvenini icerir. Emzirme öz-yeterlilik algısı, emzirme konusunda annenin emzirmeyi secip bunun seçmeyeceğini, için ne kadar caba harcayacağını, zorluklarla nasıl baş edebileceğini belirlemektedir. Bu çalışmada ki amacımız; gebelerde algılanan sosyal desteğin prenatal emzirme özveterliliğe etkisini incelemektir.

**Yöntem:** Bu çalışma kesitsel tipte olup, 10 Mayıs – 20 Temmuz 2022 tarihleri arasında web yolu ile sosyal medya (facebook, instagram) forum sayfalarında eanket linki paylaşılarak uygulanmıştır. Araştırmada, "Bilgi Formu", "Çok Boyutlu Algılanan Sosyal Destek Ölçeği" ve "Prenatal Emzirme Öz-Yeterlilik Ölçeği"ni içeren e-anket kullanılmıştır. Verilere ilişkin tanımlayıcı istatistikler (ortalama, standart sapma, sayı, yüzde) hesaplanmış olup, istatistiksel karşılaştırmalarda değişkenlerin kategori sayıları ve ölçek skorlarının dağılım özellikleri dikkate alınarak Ki-kare testi, Mann Whitney U testi, Kruskal Wallis testi kullanılırken, ölçekler arası korelasyon için Spearman korelasyon analizi kullanılmıştır.

**Bulgular:** Çalışmaya katılan gebelerin yaş ortalaması  $30,89\pm5,74$  ve gebelik haftası ortalaması  $26,59\pm7,70$ 'dir. Gebelerin %78,6'sının isteyerek evlendiği, %71,4'ünün eşleriyle uyumlu olduğunu düşündüğü ve %78,0'ının gebeliğe karşı olumlu duygular beslediği saptanmıştır. Gebelerin Prenatal Emzirme Öz-

Yeterlilik Ölçeği (PEÖYÖ) toplam puan ortalaması 75,98  $\pm$  30,42, Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ) toplam puan ortalaması 64,90  $\pm$ 25,62, ÇBASDÖ'nün aile alt boyut puan ortalaması 21,69  $\pm$  8,51, arkadaşlar alt boyut puan ortalaması 21,53  $\pm$  8,62 ve özel ilişkiler alt boyut puan ortalaması 21,68  $\pm$  8,54 olarak bulunmuştur. Gebelerin PEÖYÖ ile ÇBASDÖ ölçeği toplam ve alt boyut puan ortalamaları arasında istatistiksel olarak pozitif yönde anlamlı bir ilişki bulunmuştur (p<0,001).

**Sonuç:** Gebelerin, gebelik sürecinde aileleri, arkadaşları ile özel ilişki kurdukları bireyler tarafından algıladıkları sosyal desteğin artmasıyla birlikte prenatal emzirme öz-yeterliliği de artmaktadır.

Öneriler: Hemşire ve ebeler tarafından gebelere, gebelik sürecinde çok boyutlu olarak algılanan sosyal desteğin ve prenatal emzirme öz-yeterliliğin olumlu etkilenmesi adına doğuma hazırlık eğitimlerin aktif olarak verilmesi ve eğitimlere sosyal destek sağlayıcılarında etkin olarak katılımının sağlanması önerilmektedir.

#### INTRODUCTION

Breast milk is the most important source of nutrients for the newborn's healthy development. The World Health Organization (WHO) advises that women breastfeed their newborns exclusively for at least six months since breast milk has a significant impact in extending a baby's life and improving their quality of life (WHO, 2022). It is known that breastfeeding not only fills the baby's stomach, but it is also important for the spiritual attachment of mother and baby. But some situations, such as the mother's thinking that her milk is insufficient and the baby is not full, the baby does not suckle effectively due to the wrong breastfeeding technique, problems related to the breast and nipple, the mother's unwillingness, lack of breastfeeding knowledge, and breastfeeding selfefficacy, social, economic, health policies, insufficient social support, etc., may result in discontinuation of breastfeeding (Azimi et al., 2018; Mirghafourvand et al., 2018). In short, the physical, psychological, and social factors of the mother affect breastfeeding. In the literature, studies show that breastfeeding self-efficacy is one of the most important modifiable and the strongest predictors of breastfeeding outcomes (Hicyilmaz & Acikgoz, 2017; Karbandi et al. 2017).

Self-efficacy is an individual's confidence or conviction in his or her own capacity to successfully meet, manage, or control tasks. When confronted with difficult tasks or situations, those with high selfefficacy are more comfortable and confident (Cankaya & Atas, 2022; Konukoglu & Pasinlioglu, 2021). In studies focused on self-efficacy related to breastfeeding, it is reported that perceived social support from pregnant women is an important component of breastfeeding self-efficacy (MalekiSaghooni et al., 2020; Razurel et al., 2017). Social support includes details that allow a person to feel that he or she is liked, approved, and appreciated by family and friends. Emotional, physical, informational, and cognitive support are the four forms of social support resources. The family context is where most people first discover social support. Peers, friends, spouses, cousins, neighbors, employers etc. are other forms of social support (Razurel et al., 2017; Wang et al. 2022; Yanik & Ozcanarslan, 2019). Studies have shown that mothers with high social support have higher breastfeeding success (Barona-Vilar et al., 2009; Maleki-Saghooni et al., 2020). According to Faridvand et al. (2017), social support has a substantial impact on prenatal breastfeeding self-efficacy (Faridvand et al., 2017). In a study by Maleki Pirbazari et al., it was determined that the social support provided by the family increases positive perceptions, provides information support and increases the selfefficacy of women (Maleki Pirbazari et al., 2011). On the other hand, Morgado et al. (2013) has been stated that the more social support is provided to mothers during breastfeeding, the greater the success of breastfeeding and the continuity of breastfeeding.

In the literature, studies have been carried out, addressing the level of social support with different dimensions and prenatal breastfeeding self-efficacy. However, studies investigating the relationship between the two variables are insufficient. So, there is a need for studies that will provide theoretical evidence to the clinic and practical applications.

#### METHOD

The purpose of this study was to assess the effect of perceived social support on prenatal breastfeeding self-efficacy in pregnant women in Turkey.

In the study, responses to the following questions were sought:

- What are the perceived levels of social support and prenatal breastfeeding self-efficacy among pregnant women?
- What variables contribute pregnant women's levels of prenatal breastfeeding self-efficacy and perceived social support?
- What is the effect of perceived social support on prenatal breastfeeding self-efficacy levels of pregnant women?

#### Sample and design

This study is cross-sectional and was conducted using a web-based online survey between May and July 2022 on pregnant women who use social media applications such as Facebook, Instagram, Telegram or Whatsapp and are members of pregnancy groups. G power analysis was used to determine the sample size. The sample size without a known target population was calculated as 572 pregnant women were required to be included in the study in order to determine the scale score of the "Prenatal Breastfeeding Self-Efficacy Scale" score with 1.21 standard deviation value, 99% confidence level and 1% margin of error in a study by Konukoglu and Pasinlioglu (2021).

#### Inclusion criteria

The study was conducted on 572 pregnant women who were over the age of 18, could read and write, had technological equipment such as computers or phones, were members of pregnancy groups via web applications (Facebook, Instagram, Telegram or Whatsapp), were willing to participate in an online survey.

#### Data collection

Pregnant women in prenatal groups who used Facebook, Instagram, Telegram, and Whatsapp were asked to take part in the study via an online survey link. The initial page of the online survey sent to pregnant women; the study's aim contained information about the study and a question assessing pregnant women's desire to engage in the study freely. The survey was divided into four sections: the first included questions about sociodemographic characteristics, the second included questions about obstetrics characteristics, the third included 12 items from the multidimensional perceived social support scale (MSPSS) for evaluating perceived social support, and the fourth included 20 items from the prenatal breastfeeding self-efficacy scale (PBSES) for evaluating prenatal breastfeeding self-efficacy.

The first section of the survey involves an assessment of sociodemographic and obstetrical variables: Sociodemographic and obstetrics data included age, marriage age, education level, working position throughout pregnancy, gestational week, existence of a chronic condition, frequent physical activity, pregnant smoking, place of residence, education level of spouse, employment status of spouse, status of being related to spouse, status of marrying voluntarily, status of being compatible with spouse (Aydin & Pasinlioglu, 2018; Konukoglu & Pasinlioglu, 2021; Yanik & Ozcanarslan, 2019).

The second section of the survey: significance values regarding the demographic and obstetrics characteristics: The obstetrics characteristics data included number of pregnancies, number of living children, status of planned pregnancy (yes or no), mood related to pregnancy (positive, negative, uncertain), status of going for control during pregnancy (yes or no), breastfeeding experience (yes or no), education about breastfeeding (yes or no) (Aydin & Pasinlioglu, 2018; Konukoglu & Pasinlioglu, 2021; Yanik & Ozcanarslan, 2019)

The third section of the survey is an assessment of perceived social support: The MSPSS has already been validated and consists of 12 items and three subscales (family, friends, and significant other) (Eker et al., 2001; Zimet et al., 1988). In the current study, it was utilized to assess pregnant women's perceived social support. The measures are graded on a 5-point Likert scale (1 = Definitely No, 5 = Definitely Yes). Summing the subscale questions yielded ratings for family, friends, and significant others. The lower the score, the less social support is seen. The MSPSS's Cronbach's alpha coefficient was determined to be 0.99, suggesting high reliability.

The fourth section of the survey is an assessment of prenatal breastfeeding self-efficacy: The PBSES includes 20 items and has already been verified (Aydin & Pasinlioglu, 2018; Wells et al., 2006). In the current study, it was utilized to assess the mother's perceived capacity to breastfeed. The measures are graded on a 5-point Likert scale (1 = Not Sure, 5 =Completely Sure). Overall, the ratings ranged between 20 to 100. Higher ratings suggest better selfefficacy in nursing. The PBSES's Cronbach's alpha coefficient was determined to be 0.99, suggesting high reliability.

#### **Ethical statement**

The study was carried out in accordance with the principles of the Declaration of Helsinki. Prior to the study, permission was obtained from the researchers who validated the scales used in the study, and the Trakya University Scientific Research Ethics Committee (2022-256) approved the present study. An electronic informed consent was presented on the first page of the online survey. The participants were electronically informed on the first page of the survey that they were volunteering to participate and that they could withdraw from the survey at any time.

#### **Data Analyses**

The Shapiro-Wilk test was used to evaluate the normality of the distribution of numerical values. Numerical data that was regularly distributed was presented as mean standard deviation, whereas data that was not normally distributed was presented as median (min-max). Additionally, categorical variables are shown as percentages and figures. The

associations of non-normally distributed data were examined using the non-parametric Mann-Whitney U (z) and Kruskal-Wallis H tests. Power analysis post hoc was also carried out. The link between PBSES and MSPSS scores was examined using Spearman correlation analysis. Correlations between factors and subscales were found using a linear regression analysis. The scales' internal consistency coefficient was determined using Cronbach's alpha. Utilizing IBM SPSS Statistics for Windows, Version 23.0, statistical analysis was carried out (IBM Corp). Statistical significance was defined as p < 0.05.

#### RESULTS

## Participants' demographic and obstetrical variables

Table 1 shows demographic and obstetric characteristics. The pregnant women's mean age was  $30.89\pm5.74$  (range, 18-45 years), and their mean week of gestation was  $26.59\pm7.70$ .

In total, 74.3% of the participants reported that they were planned pregnancy, while 78.1% reported that they was positive mood related to pregnancy. Nearly all of the pregnant women (89.7%) stated that they attended prenatal follow-up appointments, whereas 45.6% stated that they had breastfed. Moreover, 86.9% of the participants reported that they had education about the breastfeeding (Table 1).

## Perceived social support and prenatal breastfeeding self-efficacy in pregnant women

The average PBSES score of the participants was  $75.98\pm30.42$ , the average MSPSS score was  $64.90\pm25.62$ , the average family subscale of MSPSS score was  $21.69\pm8.51$ , the average friend subscale of MSPSS score was  $21.53\pm8.62$ , and their average significant other subscale of MSPSS score was  $21.68\pm8.54$  (Table 2).

# The correlation between pregnant women's prenatal breastfeeding self-efficacy and perceived social support

The total score of the PBSES and the total score of the MSPSS scale were found to be strongly positively correlated (r = 0.955, p < 0.001), and statistically significant strong positive correlations were observed between the average score of the "Family" subscale (r = 0.954, p < 0.001), the average score of the "Friend" subscale (r = 0.953, p < 0.001), and the average score of the "Significant other" subscale (r = 0.955, p < 0.001) of the MSPSS scale (Table 3).

Variables	<i>N</i> = 572
Age, years, mean±SD	30.89±5.74
Marriage age, years, mean±SD	$22.78 \pm 2.98$
Gestational week, mean±SD	26.59±7.70
Number of pregnancies, mean±SD	$1.94{\pm}1.23$
Number of living children, mean±SD	$0.75{\pm}0.97$
Education, years, n (%)	
<9	33 (5.8)
>9	539 (94 2)
	559 (91.2)
Vor Vor	163 (28 5)
No.	257 (65 A)
NO Matamity lagua	52 (0 1)
Materinity leave	32 (9.1)
Chronic liness, n (%)	56 (0.9)
Yes	56 (9.8)
No	516 (90.2)
Regular physical activity, (walking or pregnancy	
exercise), n (%)	
Yes	317 (55.4)
No	255 (44.6)
Smoking during pregnancy, n (%)	
Yes	65 (11.4)
No	507 (88.6)
Place of residence, n (%)	
Province	474 (82.9)
District	98 (17.1)
Family type	
Nucleus	537 (93.9)
Expend	35 (6 1)
Education of spouse years n (%)	35 (0.1)
	143 (25.0)
>0	429 (75 0)
$\sim$ Working status of spouse $n(9/)$	429 (75:0)
Vos	566 (00 0)
les No	500(99.0)
	0(1.0)
Status of marrying willingly, n (%)	
Yes	450 (78.6)
No	122 (21.4)
Status of being compatible with spouse, n (%)	
Yes	408 (71.4)
No	164 (28.6)
Status of planned pregnancy, n (%)	
Yes	425 (74.3)
No	147 (25.7)
Mood related to pregnancy, n (%)	
Positive	447 (78.1)
Negative	54 (9.4)
Uncertain	71 (12.4)
Status of going for control during pregnancy, n (%)	
Yes	513 (89.7)
No	59 (10.3)
Breastfeeding experience, n (%)	()
Yes	261 (45.6)
No	311 (54 4)
Education about breastfeeding n (%)	511 (57.7)
Vas	407 (86 0)
No	75(12.1)
INO	/3 (13.1)

Table 1. Demographic and Obstetrics Characteristics of The Pregnant Women

Efficacy in Pregnant Women

Scale and Subdimension	Mean ± SD	Median (Min–Max)	
PBSES	$75.98\pm30.42$	100 (20-100)	
MSPSS	$64.90\pm25.62$	84 (12-84)	
Family	$21.69\pm8.51$	28 (4-28)	
Friends	$21.53\pm8.62$	28 (4-28)	
Significant other	$21.68\pm8.54$	28 (4-28)	

Table 2. Perceived Social Support and Prenatal Breastfeeding Self-Efficacy in Pregnant Women

Abbreviations: MSPSS, multidimensional scale of perceived social support; PBSES, prenatal breastfeeding self-efficacy scale

Table 3. The Relationship Between the Perceived Social Support and Prenatal Breastfeeding Self-

Variables		1	2	3	4	5	
PBSES (1)	r	1					
	р						
MSPSS (2)	r	0.955*	1				
	р	<0.001					
Family (3)	r	0.954*	0.999*	1			
• • •	р	<0.001	<0.001				
Friends (4)	r	0.953*	0.998*	0.996*	1		
	р	<0.001	<0.001	<0.001			
Significant other (5)	r	0.955*	0.999*	0.999*	0.997*	1	
	р	<0.001	<0.001	<0.001	<0.001		

Note: \*Correlation is significant at the 0.05 level (Spearman correlation test).

Abbreviations: MSPSS, multidimensional scale of perceived social support; PBSES, prenatal breastfeeding self-efficacy scale

#### The degrees of perceived social support and prenatal breastfeeding self-efficacy based on characteristic variables

A statistically significant difference was determined between the educational status and the score of the family, friends, and significant other subscale of the MSPSS Scale, MSPSS and PBSES total scores (p < 0.001). A statistically significant difference was determined between

the working status during pregnancy and the score of the family, friends, and significant other subscale of the MSPSS Scale, MSPSS and PBSES total scores (p < 0.001). There were statistically significant differences between the breastfeeding experience and education about breastfeeding and the score of the family, friends, and significant other subscale of the MSPSS Scale, MSPSS and PBSES total scores (p < 0.001) (Table 4)

Variables	Multidimensional	Prenatal breastfeeding			
	Family	Friends	Significant other	Total score (mean	self-efficacy scale
	(mean ± SD)	(mean ± SD)	(mean ± SD)	± SD)	(mean ± SD)
Education, years					
$<9 (n = 248)^{a}$	$4.79\pm3.15$	$4.85\pm3.39$	$4.79\pm3.15$	$14.42\pm9.69$	$22.06\pm8.24$
$\geq 9 (n = 321)^{b}$	$22.76\pm7.57$	$22.59\pm7.74$	$22.75 \pm 7.61$	$68.10\pm22.87$	$79.42\pm28.04$
p(z)	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
	b > a	b > a	b > a	b > a	b > a
Working status during pregnancy					
Yes $(n = 163)^{a}$	$27.72\pm1.52$	$27.74 \pm 1.49$	$27.73 \pm 1.52$	$83.19 \pm 4.52$	$98.31\pm 6.93$
No $(n = 357)^{b}$	$18.27\pm9.01$	$18.09 \pm 9.06$	$18.26 \pm 9.04$	$54.52\pm27.06$	$63.13 \pm 31.35$
Maternity leave (52) <sup>c</sup>	$26.58\pm3.49$	$26.12 \pm 4.78$	$26.62 \pm 3.45$	$79.31 \pm 11.65$	$95.62 \pm 13.59$
p (KW)	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
	a, c > b	a, c > b	a, c > b	a, c > b	a, c > b
Breastfeeding experience					
Yes $(n = 261)$	$25.99\pm 6.53$	$25.99\pm 6.53$	$25.99\pm 6.53$	$77.98 \pm 19.59$	$92.68 \pm 22.60$
No $(n = 311)$	$16.62 \pm 7.74$	$16.30\pm7.80$	$16.62\pm7.80$	$49.54\pm23.23$	$56.37\pm26.46$
p(z)	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
	a > b	a > b	a > b	a > b	a > b
Education about breastfeeding					
Yes (n = 497)	$24.11 \pm 6.01$	$23.93\pm 6.28$	$24.12\pm6.04$	$72.16\pm18.26$	$83.80\pm24.12$
No $(n = 75)$	$5.87 \pm 4.66$	5.89 ±4.66	$5.81 \pm 4.64$	$17.57\pm13.95$	$25.15 \pm 14.06$
p(z)	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
• • •	a > b	a > b	a > b	a > b	a > b

Table 4. Significance Values Regarding the Demographic and Obstetrics Characteristics of the Pregnant Women

*Note:* Significance difference for \*0.05. (Significant differences are indicated in bold).

z = Mann–Whitney U test coefficient; KW = Kruskal–Wallis test coefficient

The effect of PBSES scale and its subscales on MSPSS as seen in Table 5. The degree of perceived social support is a crucial predictor of prenatal breastfeeding selfefficacy. The disclosure rate with these skills was 91% ( $F_{(1)} = 5810.364$ , p < 0.001). Kadın Sağlığı Hemşireliği Dergisi (KASHED)

Moreover, it was determined that family, friends, and significant other of the perceived social support skills explained 91% of the prenatal breastfeeding self-efficacy levels ( $F_{(5)}$  = 1930.494, p < 0.001) (Table5).

**Table 5.** Linear Regression Analysis Related to Prediction of the PBSES by the MSPSS Scale and its

 Subscales

Variables	ß	Std. error	β	t	p	
Fixed	3.837	0.864		4.442	< 0.001	
The MSPSS total	0.804	0.011	0.954	76.226	< 0.001	
$R=0.95, R^2=0.91, F=5810.364, p < 0.001$						
Fixed	2.445	1.053		2.321	0.021	
Family	0.900	0.654	0.253	1.377	0.169	
Friends	1.338	0.619	0.374	2.162	0.031	
Significant other	1.161	0.421	0.329	2.757	0.006	
$R=0.95, R^2=0.91, F=1930.494, p < 0.001$						

*Note:* Dependent variable: PBSES, significance variable for \*0.05.

Abbreviations: MSPSS, multidimensional scale of perceived social support; PBSES, prenatal breastfeeding self-efficacy scale

#### DISCUSSION

A strong positive correlation was identified between social support and prenatal breastfeeding self-efficacy in this study, which investigated the influence of perceived social support on prenatal breastfeeding self-efficacy in pregnant women. This shows that prenatal breastfeeding self-efficacy increased with the increase in the social support perceived by the individuals with whom they have special relations with their families and friends during pregnancy.

In the literature, similar studies on this topic showed that the prenatal breastfeeding self-efficacy of the pregnant women was increased along with the perceived social support of their family, spouse, and friends (Cankaya & Atas, 2022; Hicyilmaz & Acikgoz, 2017). In this study, being supported by their family and significant other was found higher than a friend. Pregnant women may have thought of their husbands as a "significant other" because this term has a special meaning in Turkey culturally. Turkish people are also attached to their family ties and traditions. For example, they do not leave the pregnant woman alone for the last 1 month and 40 days after delivery. That's why it has been reported that the amount of support received from the family is high in this study. In similar studies, the investigators reported that family support was the most important source of social support and being a family member is like having unlimited access to a support network (Azimi et al., 2018; Kanig & Eroglu, 2019; Yuksel et al., 2019). On the other hand, social support can be in the form of financial, emotional, and cognitive support and can be a powerful resource in the solution, prevention, and treatment of sociological and psychological problems in pregnant women (Maleki-Saghooni et al., 2020; Mirghafourvand et al., 2018). In fact, there must be adequate social support in order to satisfy the expectations of pregnant women, whatever the source and sort. (Konukoglu & Pasinlioglu, 2021).

There is also a theoretical link between social support and breastfeeding self-efficacy in Bandura's Social Cognitive Theory (Bandura, 1997). As a result, informative support from social support resources provides a change in the expectation of the expectant mother in her perception of self-efficacy (Hicyilmaz & Acikgoz, 2017). Social support can improve a self-esteem and self-confidence mother's bv increasing her self-efficacy and capacity to breastfeed. Our study results support this theory. According to the results of an experimental study aimed to improve prenatal care among pregnant women, it has been shown that the health program applied to improve perceived self-efficacy has a significant effect on prenatal care as well as social support (Izadirad et al., 2017). In another study, it was determined that services such as education and counseling provided to pregnant women by health professionals increase perceived social support (Okanli et al., 2003). Similarly, a systematic review study showed that support from health care professionals like nurses and midwives is effective in successful breastfeeding. Also, it is emphasized in the review that involving husbands in breastfeeding programs enhances breastfeeding outcomes (Abbass-Dick et al., 2019). In the same way, Safa'ah (2021) also stated that husbands play the most important role in giving emotional support, while neighbors, friends, and health care professionals provide informational support.

Some factors, such as educational level, working during pregnancy, breastfeeding experience, and breastfeeding education, were found to influence prenatal breastfeeding self-efficacy and pregnant women's perceptions of social support. In this study, higher academic level was revealed to be a predictor of prenatal breastfeeding self-efficacy and perceived social support ratings. Similarly, earlier research has revealed that high academic levels are connected with high prenatal breastfeeding self-efficacy (Alyousefi et al., 2022; Hamid & Zaidi, 2020). In a study conducted by Yuksel et al. (2019) was reported that a positive correlation between higher education levels and perceived social support scores (Yuksel et al., 2019). The results that were obtained have indicated a similarity with our study. Our study stated that there was a significant positive relationship between being employed during pregnancy and prenatal breastfeeding self-efficacy and perceived social support. In contrast to our study, it was observed that employment status was not an effective variable on prenatal breastfeeding self-efficacy and perceived social support in the studies performed by Alyousefi et al. (2022), and Hicyilmaz and Acikgoz (2017). This difference may be due to cultura or sample size. On the other hand, studies by Hamid and Zaidi (2020), Kanig and Eroglu (2019), and Azimi et al. (2018) reported that employment had a beneficial influence

on prenatal breastfeeding self-efficacy and perceived social support level. Their results are consistent with ours.

This study showed that experience and education about breastfeeding predict a higher level of breastfeeding self-efficacy as reported in the literature. A previous study showed that breastfeeding selfefficacy is higher among multiparous who had experience and high knowkedge level about breastfeeding (Alvousefi et al., 2022; Otsuka et al. 2014). The findings of a different research made by Zhu et al. (2014) showed that training and prior breastfeeding experience are influences on the development of breastfeeding self-efficacy. The results that were obtained have indicated a similarity with our study. In this study, a statistically significant determined relationship was between having experience and education about breastfeeding and the perceived social support among pregnant women. Similarly, in a study by Yuksel et al. (2019) that examined social support in pregnant women reported that the having birth knowledge and the number of pregnancy or delivery were higher in terms of perceived social support. In another study, it was reported that pregnant women's experiences and attracting their husbands' support led to a more friendly social relationship (Izadirad et al., 2017) In contrast to our study, that of Baharvand et al. (2022) reported no significant difference in the perceived social support among pregnant women with parity and those who received prenatal care. This discrepancy may be due to a difference in cultural structure, sample size, geographical location, or target population.

#### CONCLUSION AND SUGGESTIONS

According to the present study, there was a strong positive association between social support and prenatal breastfeeding self-efficacy among pregnant women. In addition, there was also a strong positive correlation found between prenatal breastfeeding selfefficacy and the "family", "friends," and "significant other" subscales of the social support. Therefore, to increase positive breastfeeding self-efficacy, it is critical to equip expectant moms with the appropriate assistance to achieve nursing determination and confidence. Given these findings, we recommend that all pregnant women be evaluated for breastfeeding self-efficacy and support systems, and it must be a routine part of the control when visiting a hospital for prenatal examination by health care practitioners. Also, behavioral and social activities are advised to educate and motivate families, friends, relatives, and others to give optimal social support to pregnant women.

#### Limitations of the Research

The current study contains a number of limitations. The cross-sectional design type is one of the restrictions. Compared to cross-sectional designs, determining the causes of correlations between variables is more challenging with longitudinal designs. The potential for selection bias associated with voluntary research participation is still another limitation. The study was conducted on the web as part of the COVID 19 measures, and only pregnant women in Turkey were included. As a result of societal variations, the study's findings may not be generalizable.

#### **Implications for Practice**

Prenatal breastfeeding self-efficacy increases with the increase in the social support perceived by the individuals with whom they have special relations with their families and friends during pregnancy.

These results provide evidence for strategies to increase breast feeding self-efficacy, such as providing breast feeding education in a familycentered method and adequate social support for pregnant women.

**Ethics CommitteeApproval:** The study was carried out in accordance with the principles of the Declaration of Helsinki. Prior to the study, permission was obtained from the researchers who validated the scales used in the study, and the Trakya University Scientific Research Ethics Committee (2022-256) approved the present study.

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#### REFERENCES

Abbass-Dick, J., Brown, H. K., Jackson, K. T., Rempel, L., & Dennis, C. L. (2019). Perinatal breastfeeding interventions including fathers/partners: A systematic review of the literature. Midwifery, 75, 41-51. http://dx.doi.org/10.1016/i.midw.2019.04.001

http://dx.doi.org/10.1016/j.midw.2019.04.001

- Alyousefi, N., Alemam, A., Altwaijri, D., Alarifi, S., & Alessa, H. (2022). Predictors of prenatal breastfeeding self-efficacy in expectant mothers with gestational diabetes mellitus. International Journal of Environmental Research and Public Health, 19(7), 4115. http://dx.doi.org/10.3390/ijerph19074115
- Aydın, A., & Pasinlioğlu, T. (2018). Reliability and validity of a Turkish version of the Prenatal Breastfeeding Self Efficacy Scale. Midwifery, 64, 11-6.
- Azimi, M., Fahami, F., & Mohamadirizi, S. (2018). The relationship between perceived social support in the first pregnancy and fear of childbirth. Iranian Journal of Nursing and Midwifery Research, 23(3), 235–9.
- Baharvand, P., Anbari, K., & Hamidi, H. (2022). Perceived social support in pregnant women with gestational diabetes attending hospitals in western Iran compared to healthy controls and its relationship with perceived anxiety. Journal of Diabetes & Metabolic Disorders, 21, 1549-55. <u>https://doi.org/10.1007/s40200-022-01100-5</u>
- Barona-Vilar, C., Escribá-Agüir, V., & Ferrero-Gandía, R. (2009). A qualitative approach to social support and breast-feeding decisions. Midwifery, 25(2), 187–94.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W.H. Freeman and Company.
- Cankaya, S., & Atas, A. (2022). The relationship of breastfeeding self-efficacy with relationship satisfaction and family function in mothers during the first year postpartum. Early Child Development and Care.

http://dx.doi.org/10.1080/03004430.2022.2042278

- Eker, D., Arkar, H., & Yaldiz, H. (2001). Factorial structure, validity, and reliability of revised form of the multidimensional scale of Perceived Social Support. Turkish Journal of Psychiatry, 12(1), 17-25.
- Faridvand, F., Mirghafourvand, M., Malakouti, J., & Mohammad-Alizadeh-Charandabi, S. (2017).
  Relationship between social support and breastfeeding self-efficacy among women in Tabriz, Iran. British Journal of Midwifery, 25(2), 103-9.
- Hamid, S. B. A., & Zaidi, N. M. (2020). Predictors of prenatal breastfeeding self-efficacy in Malaysian women: A cross-sectional study. Jurnal Gizi dan Pangan, 15(1), 53-62. <u>http://dx.doi.org/10.25182/jgp.2020.15.1.53-62</u>
- Hicyilmaz, B. D., & Acikgoz, I. (2017). The association between breastfeeding self-efficacy, breastfeeding

attitude, social-professional support and breastfeeding control. Journal of Nursing Sciences, 9(2), 133-43.

- Izadirad, H., Niknami, S., Zareban, I., & Hidarnia, A. (2017). effects of social support and self-efficacy on maternal prenatal cares among the first-time pregnant women, Iranshahr, Iran. Journal of Family and Reproductive Health, 11(2), 67-73.
- Kanig, M., & Eroglu, K. (2019). Perceived level of social support among pregnant women and affecting factors. Journal of Education and Research In Nursing, 16(2), 125-33.
- Karbandi, S., Hosseini, S. M., Hosseini, S. A., Sadeghi, F., Hesari, M., & Masoudi, R. (2017). Evaluating the effectiveness of using a progressive muscle relaxation technique on the self-efficacy of breastfeeding in mothers with preterm infants. Journal of Nursing Research, 25(4), 283-8.
- Konukoglu, T., & Pasinlioglu, T. (2021). Breastfeeding self-efficacy in pregnant women and evaluation of affecting factors. Journal of Midwifery and Health Sciences, 4(1), 12-22.
- Maleki-Saghooni, N., Amel Barez, M., & Zahra Karimi, F. (2020). Investigation of the relationship between social support and breastfeeding self-efficacy in primiparous breastfeeding mothers. The Journal of Maternal-Fetal & Neonatal Medicine, 3(18), 3097-102.

http://dx.doi.org/10.1080/14767058.2019.1568986

- Maleki Pirbazari, M., Nouri, R., & Gh, S. (2011). Social support and depression symptoms: the mediating role of self-efficacy. Contemporary Psychology, 6(2), 26–34.
- Mirghafourvand, M., Malakouti, J., Mohammad-Alizadeh-Charandabi, S., & Faridvand, F. (2018). Predictors of breastfeeding self-efficacy in Iranian women: A cross-sectional study. International Journal of Women's Health and Reproduction Sciences, 6(3), 380-85.
- Morgado, C. Md. C., Werneck, G. L., & Hasselmann, M. H. (2013). Social network, social support and feeding habits of infants in their fourth month of life. Ciênc Saúde Coletiva, 18(2), 367–76.
- Okanli, A., Tortumluoğlu, G., & Kirpinar, İ. (2003). The relationship between pregnant women perceived social support from family and problem solving skill. Alpha Psychiatry, 4(2), 98-105.
- Otsuka, K., Taguri, M., Dennis, C. L., Wakutani, K., Awano, M., Yamaguchi, T., & Jimba, M. (2014). Maternal and Child Health Journal, 18(1), 296–306.
- Razurel, C., Kaiser, B., Antonietti, J. P., Epiney, M., & Sellenet, C. (2017). Relationship between perceived perinatal stress and depressive symptoms, anxiety, and parental self-efficacy in primiparous mothers and the role of social support. Women & Health, 57(2), 154-72. http://dx.doi.org/10.1080/03630242.2016.1157125

- Safa'ah, N. (2021). Relationship of social support with breastfeeding self efficacy post-partum mothers in Community Health Center. Aloha International Journal of Health Advancement, 4(6), 126-31. <u>http://dx.doi.org/10.33846/aijha40601</u>
- Wang, S. W., Chen, J. L., Chen, Y. H., & Wang, R. H. (2022). Factors related to psychological distress in multiparous women in the first trimester: A crosssectional study. Journal of Nursing Research, 30(3), e210.

http://dx.doi.org/10.1097/jnr.00000000000485

- Wells, K. J., Thompson, N. J., & Kloeblen-Tarver, A. S. (2006). Development and psychometric testing of the prenatal breast-feeding self-efficacy scale. American Journal of Health Behavior, 30(2), 177-87.
- WHO-World Health Organization. (2022). Breastfeeding. <u>https://www.who.int/health-</u> topics/breastfeeding#tab=tab\_1
- Yanik, D., & Ozcanarslan, F. (2019). The relationship between perceived social support and the level of coping with stress in the risky pregnant. Journal of Midwifery and Health Sciences, 2(3), 96-104.
- Yuksel, A., & Bayrakci, H. (2019). Self-efficacy, psychological well-being and perceived social support levels in pregnant women. International Journal of Caring Sciences, 12(2), 1-10.
- Zhu, J., Chan, W. C. S., Zhou, X., Ye, B., & He, H. G. (2014). Predictors of breast feeding self-efficacy among Chinese mothers: A cross-sectional questionnaire survey. Midwifery, 30(6), 705-711.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. Journal of Personality Assessment, 52(1), 30-41.